

Data File : VV009315.D  
Acq On : 21 Feb 2019 09:54  
Operator : SY/MD  
Sample : VSTDCCC025  
Misc : 5.00G/10ML/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02575

Quant Time: Feb 22 04:51:50 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM022019S.M  
Quant Title : VOC Analysis  
QLast Update : Thu Feb 21 03:53:15 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 142217   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 134428   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 66916    | 25.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 41970    | 22.18    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 88.72% |
| 7) Chloroethane-d5             | 1.58   | 69    | 52818    | 23.60    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 94.40% |
| 10) 1,1-Dichloroethene-d2      | 2.13   | 63    | 104581   | 22.48    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 89.92% |
| 20) 2-Butanone-d5              | 3.95   | 46    | 28279    | 42.71    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 85.42% |
| 24) Chloroform-d               | 4.40   | 84    | 75314    | 22.80    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 91.20% |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 40727    | 22.74    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 90.96% |
| 29) Benzene-d6                 | 5.10   | 84    | 155636   | 23.09    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 92.36% |
| 33) 1,2-Dichloropropane-d6     | 6.12   | 67    | 46151    | 23.26    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 93.04% |
| 37) Toluene-d8                 | 7.36   | 98    | 150222   | 23.41    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 93.64% |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 22836    | 22.41    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 89.64% |
| 39) 2-Hexanone-d5              | 8.14   | 63    | 22390    | 40.57    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 81.14% |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 49407    | 22.77    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 91.08% |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 55857    | 22.73    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 90.92% |

#### Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 38968  | 23.475 ug/L | 97     |
| 3) Chloromethane               | 1.25 | 50  | 47915  | 23.627 ug/L | 98     |
| 5) Vinyl chloride              | 1.32 | 62  | 56808  | 24.702 ug/L | 100    |
| 6) Bromomethane                | 1.53 | 94  | 48049  | 22.451 ug/L | 100    |
| 8) Chloroethane                | 1.60 | 64  | 50669  | 26.102 ug/L | 99     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 102085 | 23.578 ug/L | 100    |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 56528  | 22.830 ug/L | 99     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 48925  | 23.447 ug/L | 97     |
| 13) Acetone                    | 2.21 | 43  | 33923  | 52.407 ug/L | 98     |
| 14) Carbon disulfide           | 2.32 | 76  | 131514 | 23.554 ug/L | 99     |
| 15) Methyl Acetate             | 2.47 | 43  | 21146  | 22.404 ug/L | 98     |
| 16) Methylene chloride         | 2.54 | 84  | 41026  | 19.070 ug/L | 98     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 99445  | 21.516 ug/L | 99     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 41187  | 21.911 ug/L | 96     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 70371  | 22.539 ug/L | 99     |
| 21) 2-Butanone                 | 4.03 | 43  | 35234  | 47.514 ug/L | 99     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 47632  | 23.196 ug/L | 87     |

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Quant Title : VOC Analysis  
QLast Update : Thu Feb 21 03:53:15 2019  
Response via : Initial Calibration

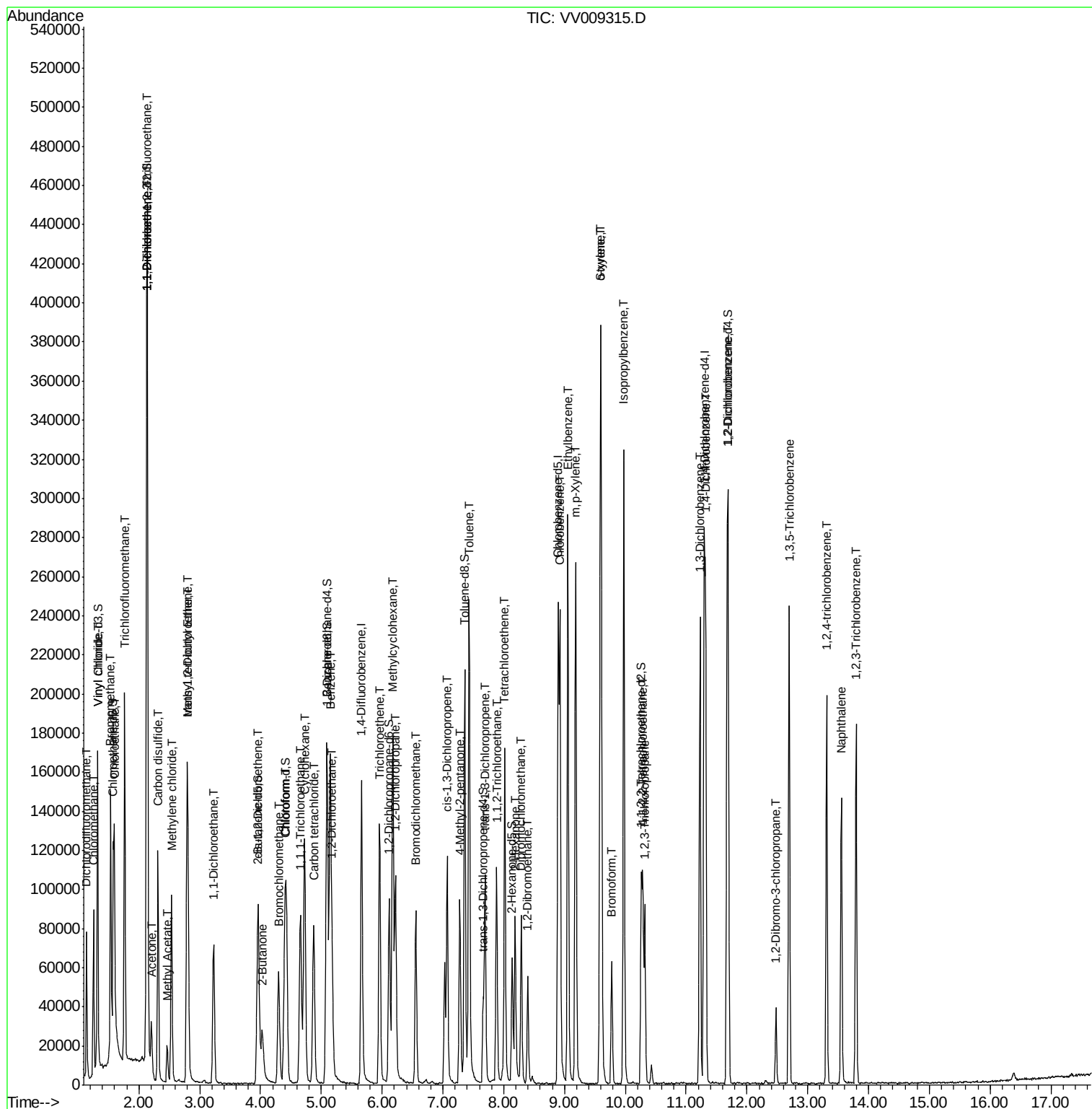
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane         | 4.30  | 128  | 21210    | 22.570 | ug/L  | 97       |
| 25) Chloroform                 | 4.43  | 83   | 74648    | 22.468 | ug/L  | 97       |
| 27) 1,2-Dichloroethane         | 5.18  | 62   | 49429    | 21.971 | ug/L  | 98       |
| 30) Cyclohexane                | 4.72  | 56   | 70346    | 22.575 | ug/L  | 99       |
| 31) 1,1,1-Trichloroethane      | 4.66  | 97   | 68248    | 22.481 | ug/L  | 99       |
| 32) Carbon tetrachloride       | 4.87  | 117  | 57547    | 22.431 | ug/L  | 100      |
| 34) Benzene                    | 5.14  | 78   | 166782   | 22.690 | ug/L  | 100      |
| 35) Trichloroethene            | 5.96  | 95   | 45267    | 22.141 | ug/L  | 99       |
| 36) Methylcyclohexane          | 6.18  | 83   | 78764    | 22.025 | ug/L  | 98       |
| 40) 1,2-Dichloropropane        | 6.22  | 63   | 39023    | 21.874 | ug/L  | 100      |
| 41) Bromodichloromethane       | 6.55  | 83   | 55559    | 21.867 | ug/L  | 96       |
| 42) cis-1,3-Dichloropropene    | 7.07  | 75   | 68868    | 22.747 | ug/L  | 99       |
| 43) 4-Methyl-2-pentanone       | 7.28  | 43   | 64476    | 43.054 | ug/L  | 98       |
| 44) Toluene                    | 7.43  | 91   | 183574   | 22.518 | ug/L  | 98       |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 58234    | 21.966 | ug/L  | 99       |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 34747    | 21.872 | ug/L  | 97       |
| 47) Tetrachloroethene          | 8.02  | 164  | 37562    | 23.507 | ug/L  | 96       |
| 49) 2-Hexanone                 | 8.19  | 43   | 51293    | 44.536 | ug/L  | 96       |
| 50) Dibromochloromethane       | 8.29  | 129  | 42793    | 22.340 | ug/L  | 99       |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 35804    | 22.471 | ug/L  | 97       |
| 52) Chlorobenzene              | 8.93  | 112  | 122914   | 23.155 | ug/L  | 100      |
| 53) Ethylbenzene               | 9.05  | 91   | 209088   | 22.703 | ug/L  | 99       |
| 54) m,p-Xylene                 | 9.18  | 106  | 81379    | 22.646 | ug/L  | 98       |
| 55) o-xylene                   | 9.59  | 106  | 79117    | 23.455 | ug/L  | 98       |
| 56) Styrene                    | 9.60  | 104  | 133196   | 23.011 | ug/L  | 98       |
| 57) Isopropylbenzene           | 9.97  | 105  | 213559   | 22.871 | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 49706    | 22.172 | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 34919    | 21.737 | ug/L  | 99       |
| 62) Bromoform                  | 9.77  | 173  | 27013    | 21.835 | ug/L  | 99       |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 95637    | 22.249 | ug/L  | 98       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 94561    | 22.069 | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 89284    | 22.152 | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 8679     | 19.389 | ug/L  | 88       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 69766    | 22.430 | ug/L  | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 56637    | 22.317 | ug/L  | 99       |
| 69) Naphthalene                | 13.55 | 128  | 114966   | 21.134 | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 51471    | 21.976 | ug/L  | 98       |

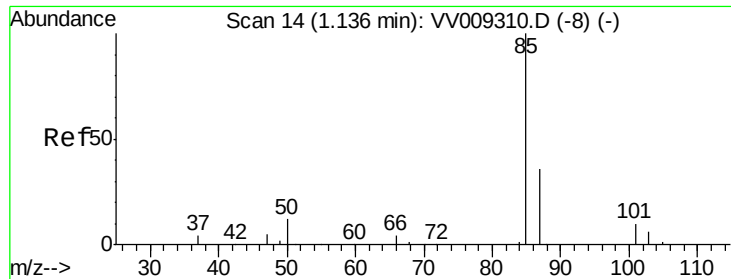
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#2

Dichlorodifluoromethane

Concen: 23.475 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampleId :

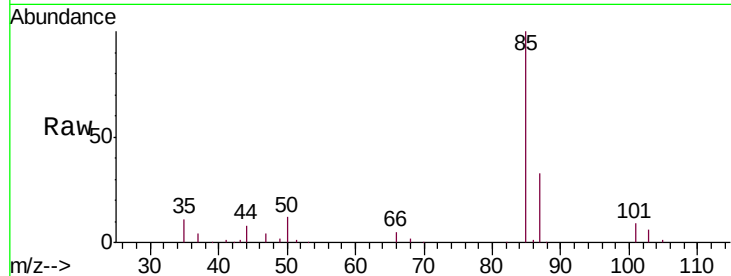
VSTD02575

Tgt Ion: 85 Resp: 38968

Ion Ratio Lower Upper

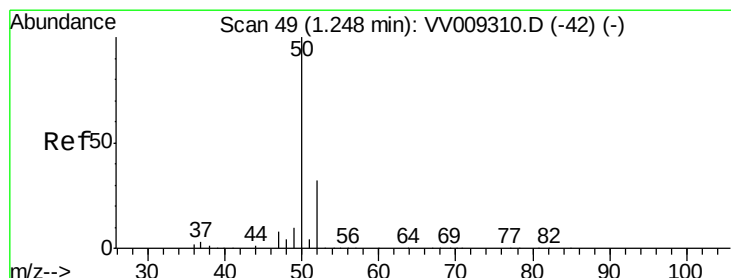
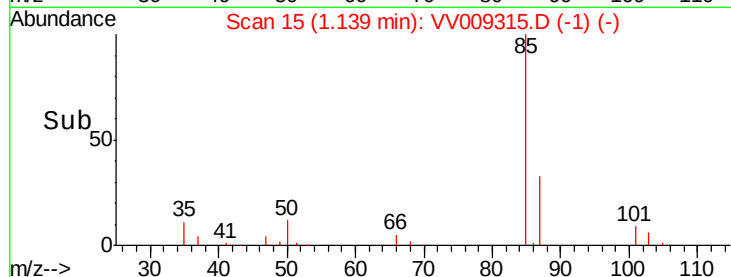
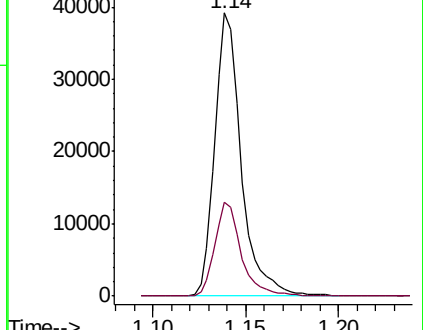
85 100

87 33.1 24.2 45.0



Abundance Ion 85.00 (84.70 to 85.70): VV009315.D (-8) (-)

Ion 87.00 (86.70 to 87.70): VV009315.D (-8) (-)



#3

Chloromethane

Concen: 23.627 ug/L

RT: 1.25 min Scan# 50

Delta R.T. 0.00 min

Lab File: VV009315.D

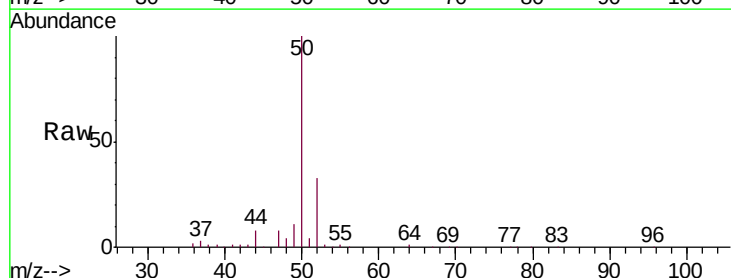
Acq: 21 Feb 2019 09:54

Tgt Ion: 50 Resp: 47915

Ion Ratio Lower Upper

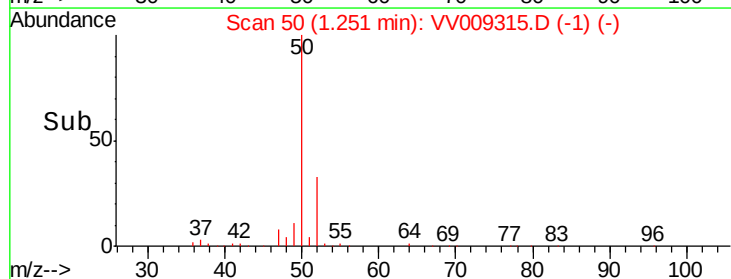
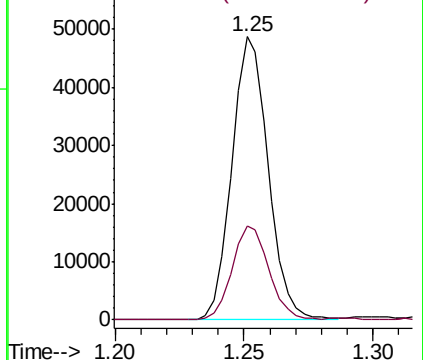
50 100

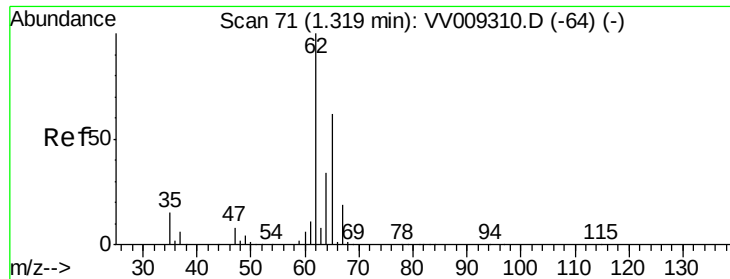
52 33.3 22.3 41.5



Abundance Ion 50.00 (49.70 to 50.70): VV009315.D (-42) (-)

Ion 52.00 (51.70 to 52.70): VV009315.D (-42) (-)





#5

Vinyl chloride

Concen: 24.702 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampleId :

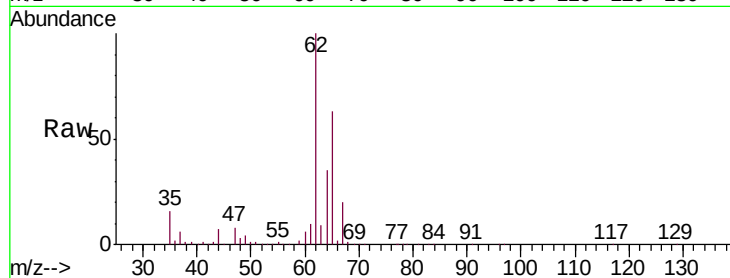
VSTD02575

Tgt Ion: 62 Resp: 56808

Ion Ratio Lower Upper

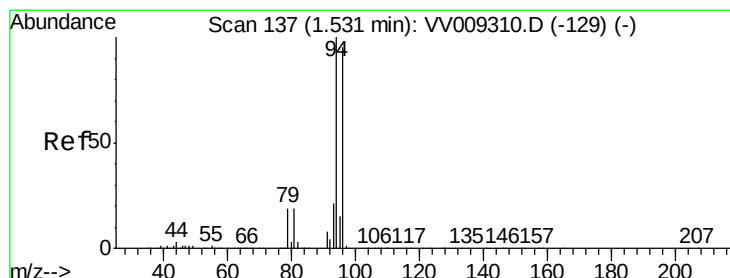
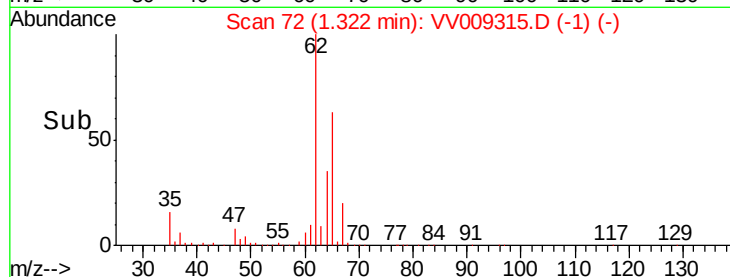
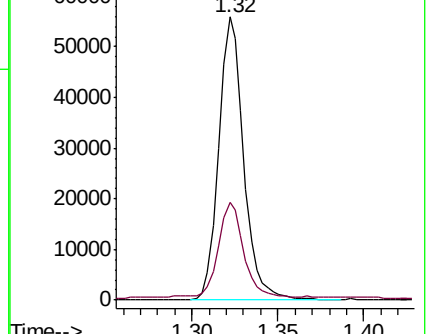
62 100

64 34.7 24.3 45.1



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.00 (63.70 to 64.70): VV0



#6

Bromomethane

Concen: 22.451 ug/L

RT: 1.53 min Scan# 138

Delta R.T. 0.00 min

Lab File: VV009315.D

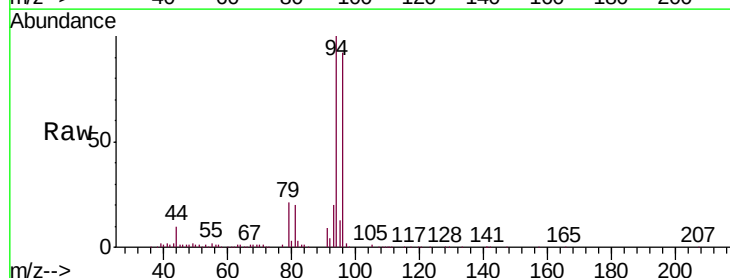
Acq: 21 Feb 2019 09:54

Tgt Ion: 94 Resp: 48049

Ion Ratio Lower Upper

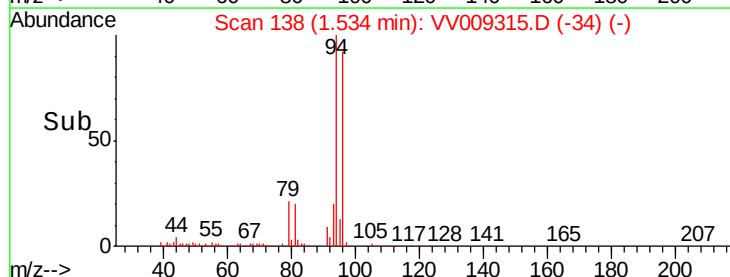
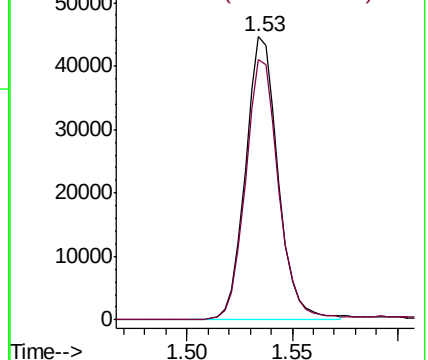
94 100

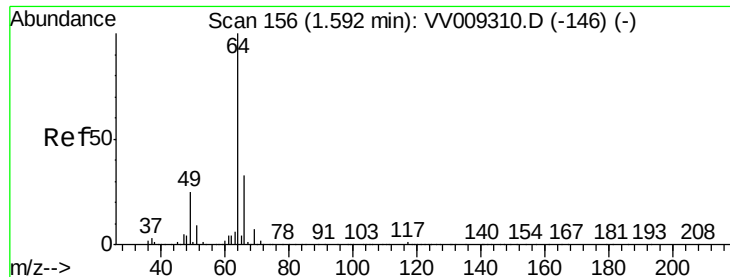
96 94.1 9.4 178.6



Abundance Ion 94.00 (93.70 to 94.70): VV0

Ion 96.00 (95.70 to 96.70): VV0

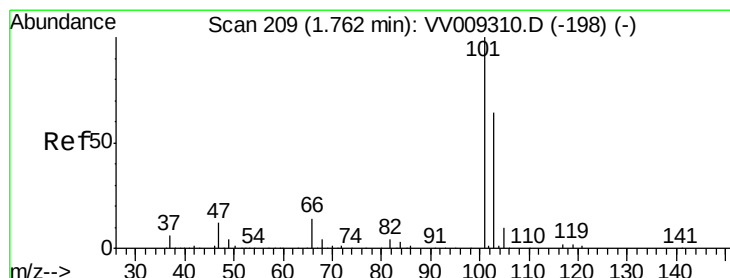
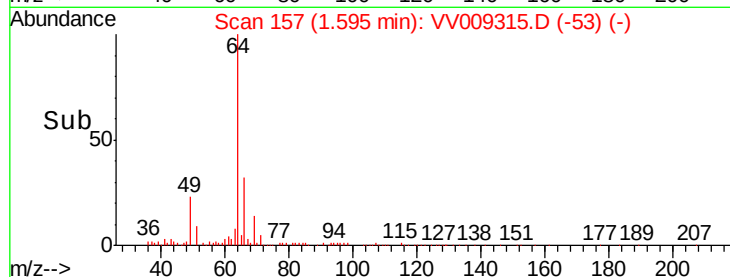
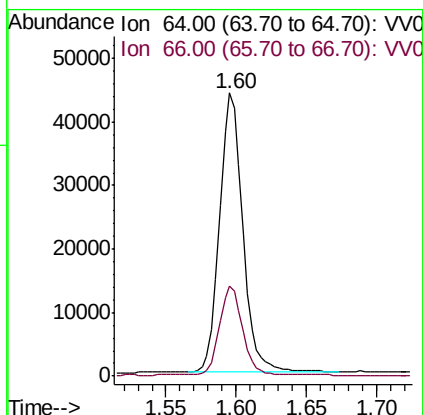
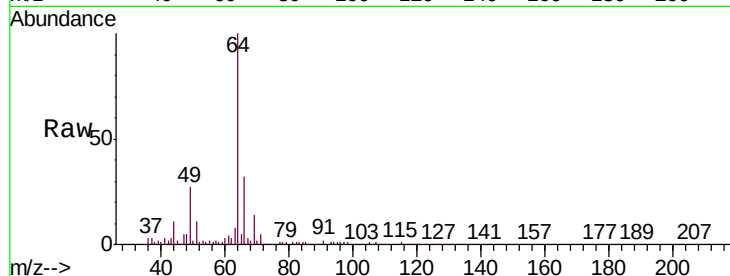




#8  
Chloroethane  
Concen: 26.102 ug/L  
RT: 1.60 min Scan# 157  
Delta R.T. 0.00 min  
Lab File: VV009315.D  
Acq: 21 Feb 2019 09:54

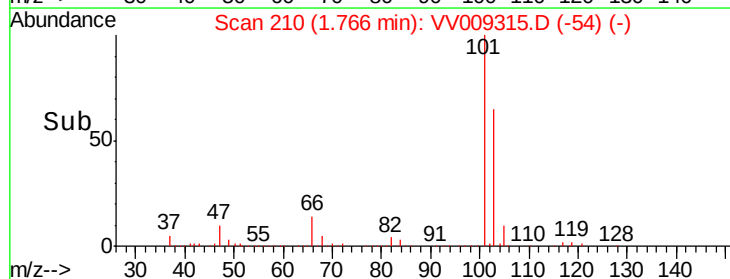
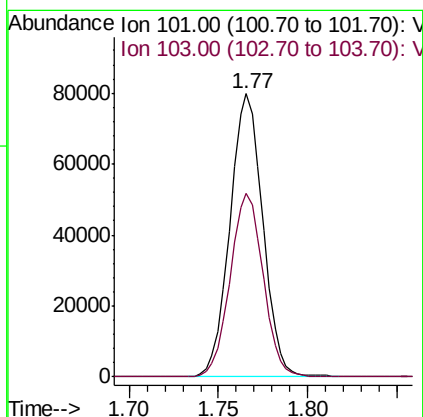
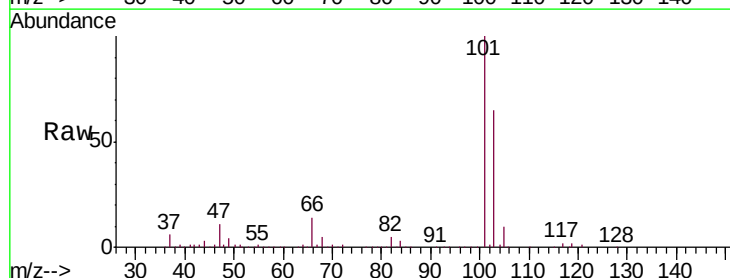
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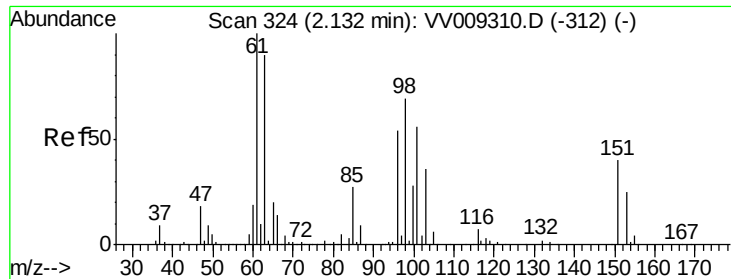
Tgt Ion: 64 Resp: 50669  
Ion Ratio Lower Upper  
64 100  
66 32.0 22.9 42.5



#9  
Trichlorofluoromethane  
Concen: 23.578 ug/L  
RT: 1.77 min Scan# 210  
Delta R.T. 0.00 min  
Lab File: VV009315.D  
Acq: 21 Feb 2019 09:54

Tgt Ion: 101 Resp: 102085  
Ion Ratio Lower Upper  
101 100  
103 64.9 45.4 84.4





#11

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

Concen: 22.830 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02575

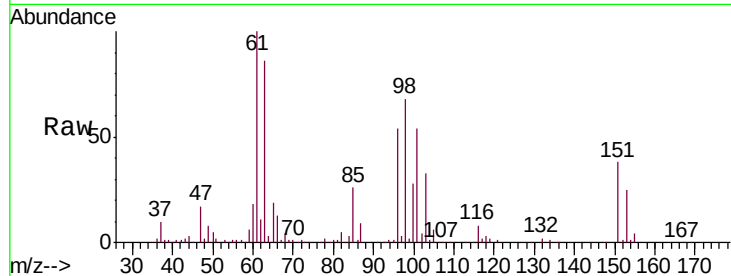
Tgt Ion:101 Resp: 56528

Ion Ratio Lower Upper

101 100

85 49.2 39.1 58.7

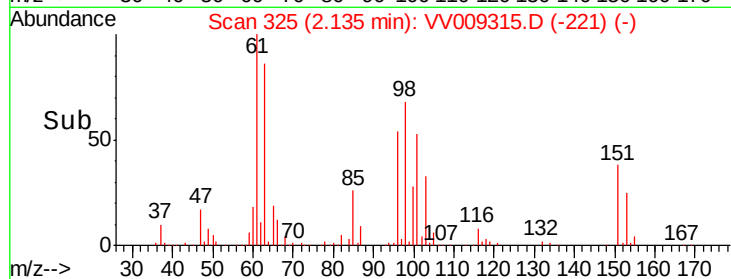
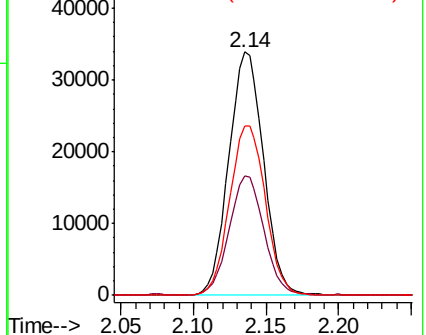
151 71.4 58.5 87.7



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 23.447 ug/L

RT: 2.14 min Scan# 326

Delta R.T. 0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

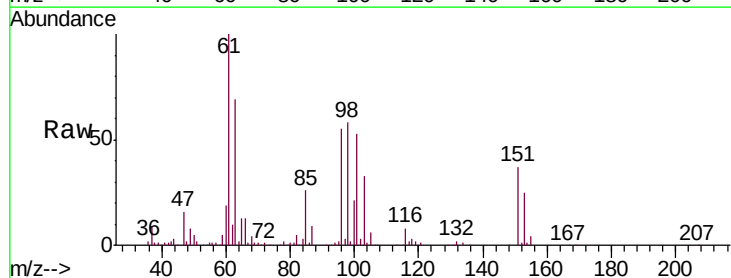
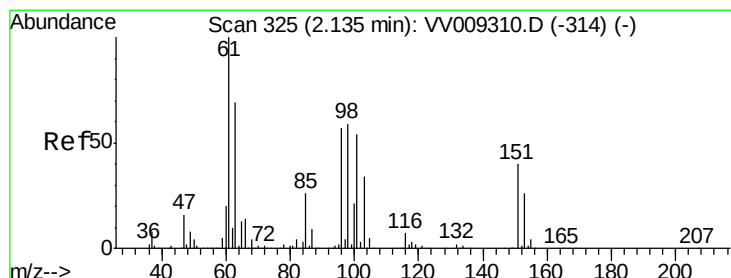
Tgt Ion: 96 Resp: 48925

Ion Ratio Lower Upper

96 100

61 182.3 123.3 228.9

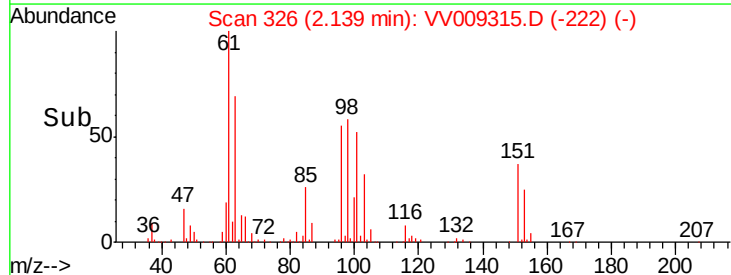
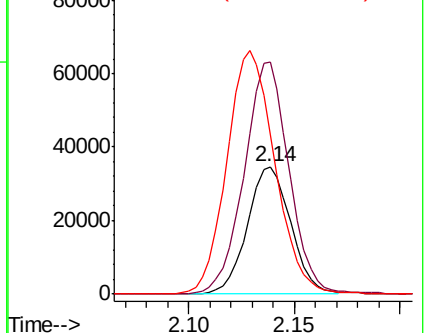
63 125.2 88.4 164.2

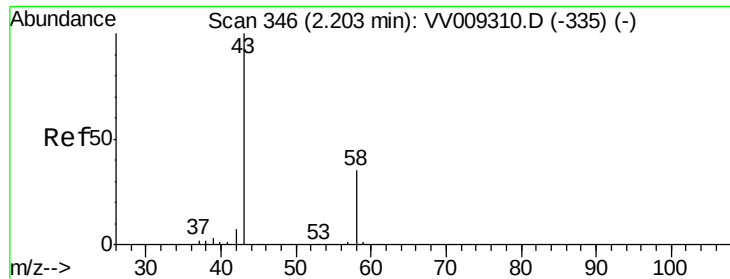


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 52.407 ug/L

RT: 2.21 min Scan# 347

Delta R.T. 0.00 min

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MSVOA\_V

ClientSampleId :

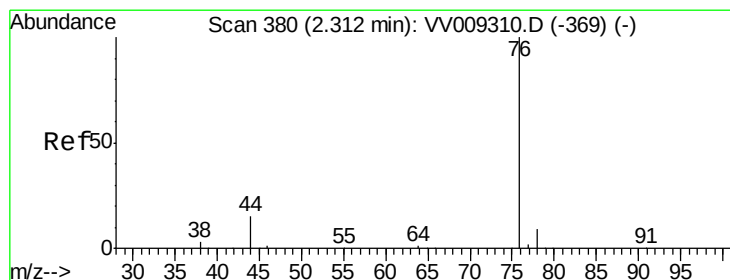
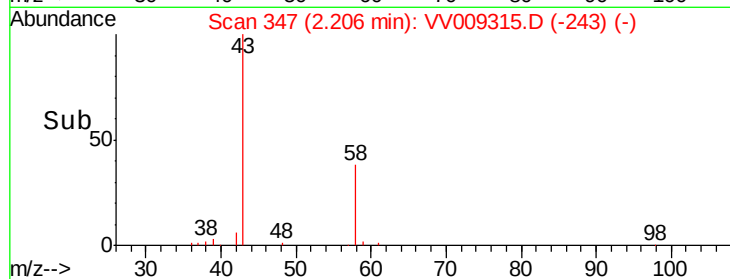
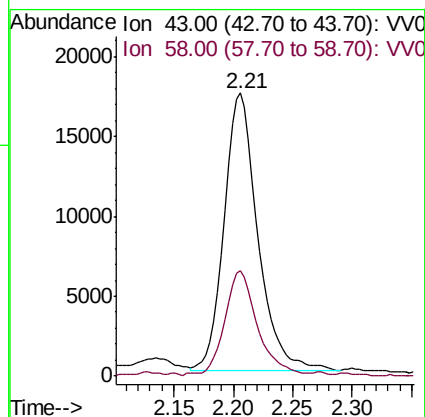
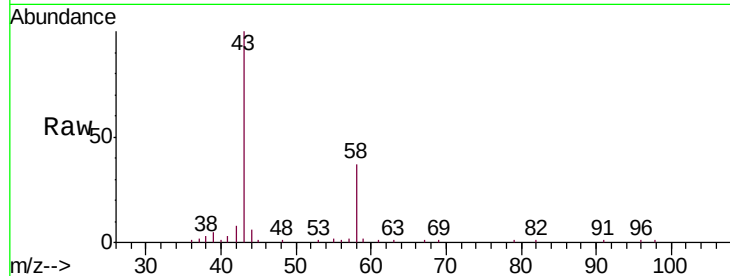
VSTD02575

Tgt Ion: 43 Resp: 33923

Ion Ratio Lower Upper

43 100

58 37.2 0.0 72.0



#14

Carbon disulfide

Concen: 23.554 ug/L

RT: 2.32 min Scan# 381

Delta R.T. 0.00 min

Lab File: VV009315.D

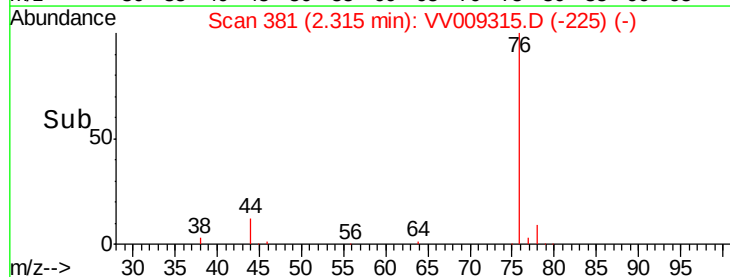
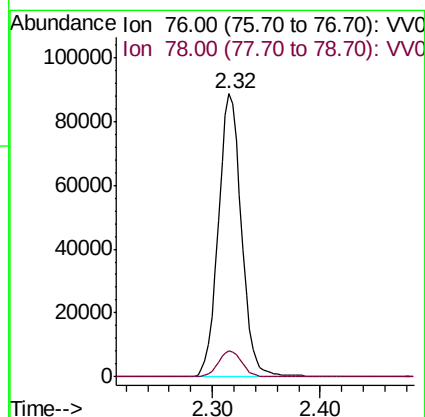
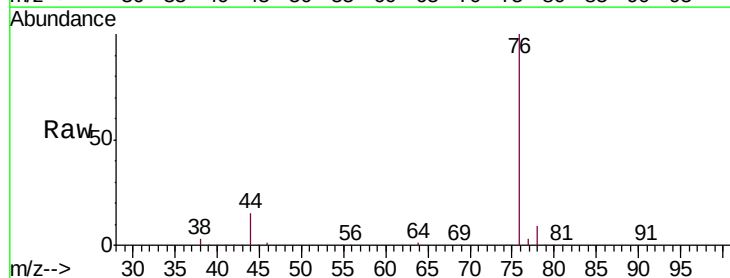
Acq: 21 Feb 2019 09:54

Tgt Ion: 76 Resp: 131514

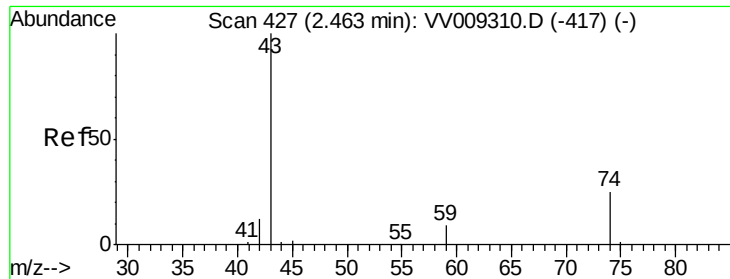
Ion Ratio Lower Upper

76 100

78 9.1 6.9 10.3







#15

Methyl Acetate

Concen: 22.404 ug/L

RT: 2.47 min Scan# 428

Delta R.T. 0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampleId :

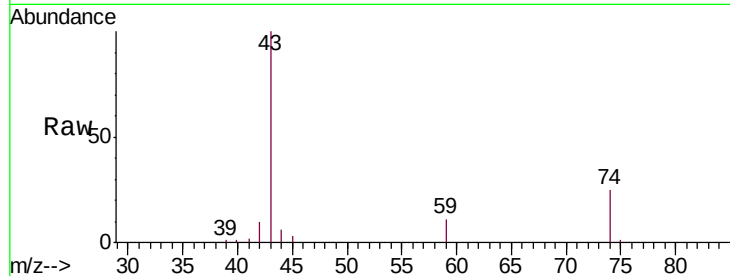
VSTD02575

Tgt Ion: 43 Resp: 21146

Ion Ratio Lower Upper

43 100

74 26.2 21.8 32.6



Abundance Ion 43.00 (42.70 to 43.70): VV009315.D (-324) (-)

Ion 74.00 (73.70 to 74.70): VV009315.D (-324) (-)

2.47

15000

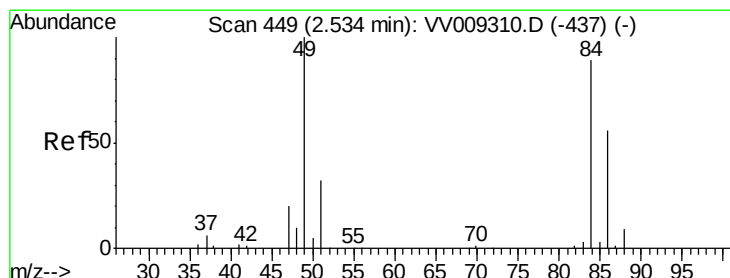
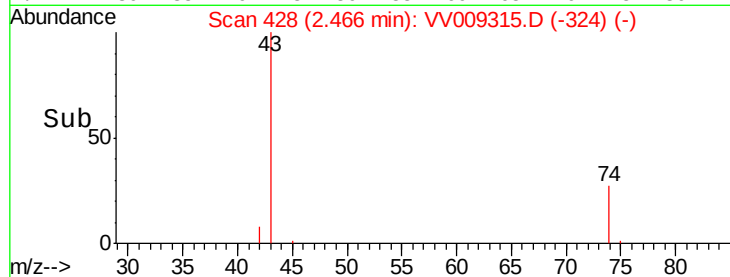
10000

5000

0

Time-->

2.40 2.45 2.50 2.55



#16

Methylene chloride

Concen: 19.070 ug/L

RT: 2.54 min Scan# 450

Delta R.T. 0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

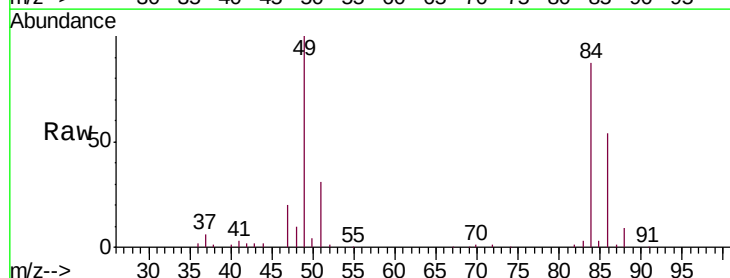
Tgt Ion: 84 Resp: 41026

Ion Ratio Lower Upper

84 100

49 115.1 78.7 146.1

86 61.9 44.0 81.6



Abundance Ion 84.00 (83.70 to 84.70): VV009315.D (-346) (-)

Ion 49.00 (48.70 to 49.70): VV009315.D (-346) (-)

Ion 86.00 (85.70 to 86.70): VV009315.D (-346) (-)

2.54

30000

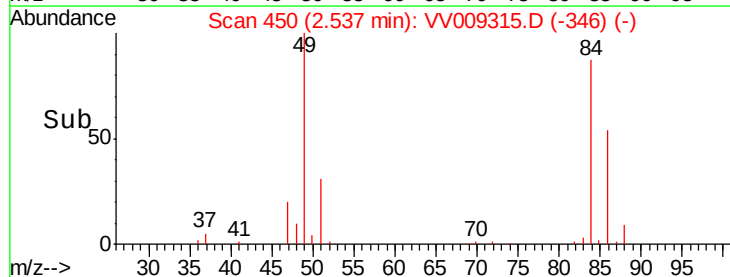
20000

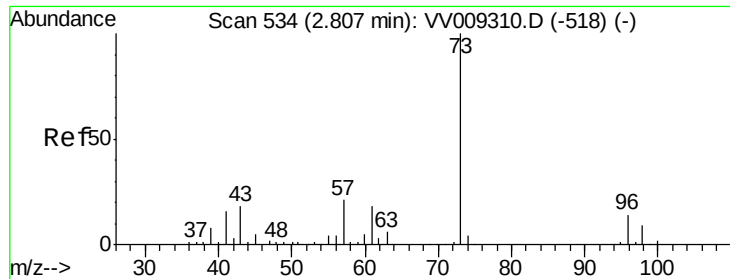
10000

0

Time-->

2.50 2.55 2.60

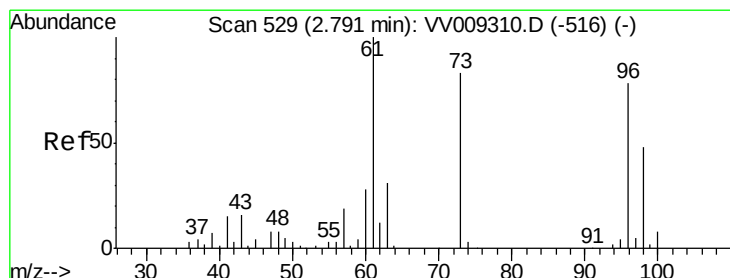
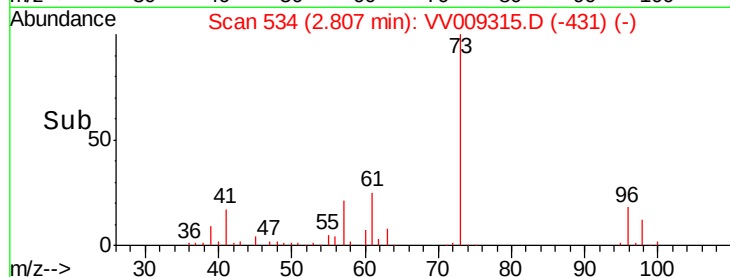
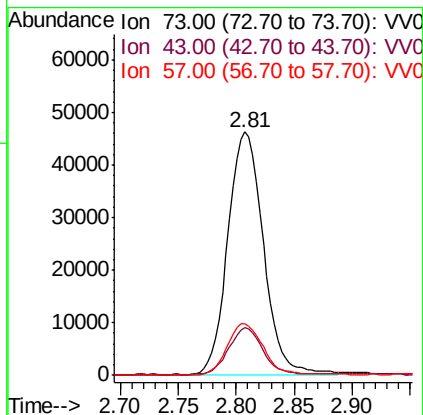
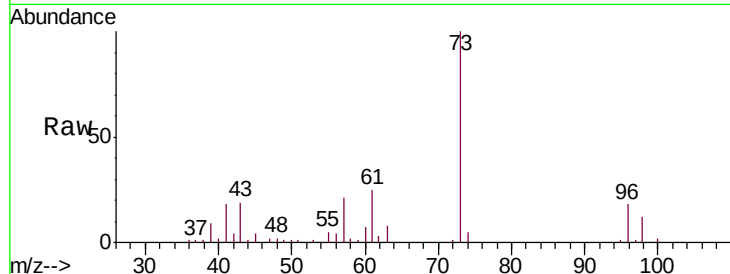




#17  
Methyl tert-butyl Ether  
Concen: 21.516 ug/L  
RT: 2.81 min Scan# 534  
Delta R.T. -0.00 min  
Lab File: VV009315.D  
Acq: 21 Feb 2019 09:54

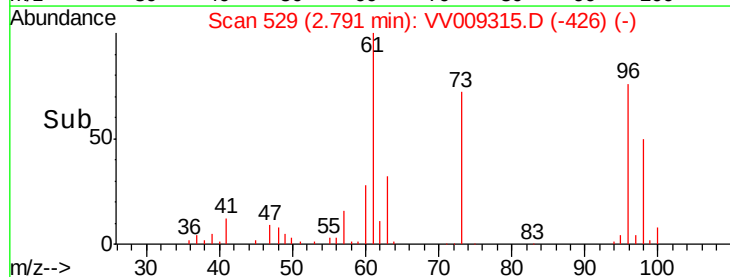
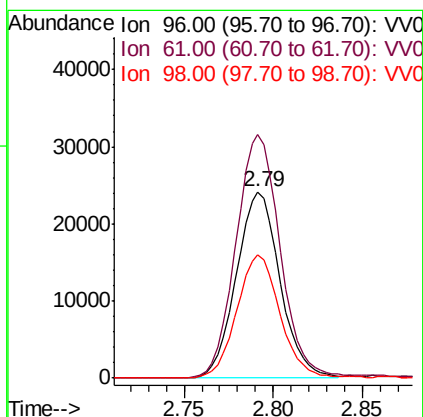
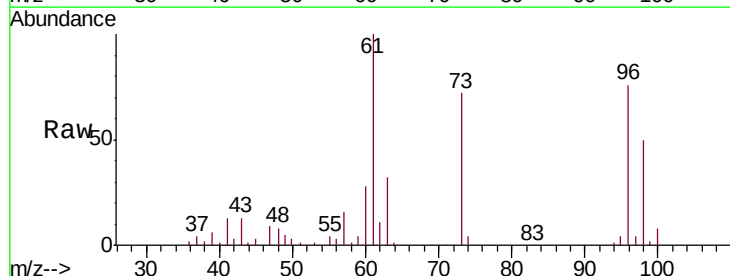
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02575

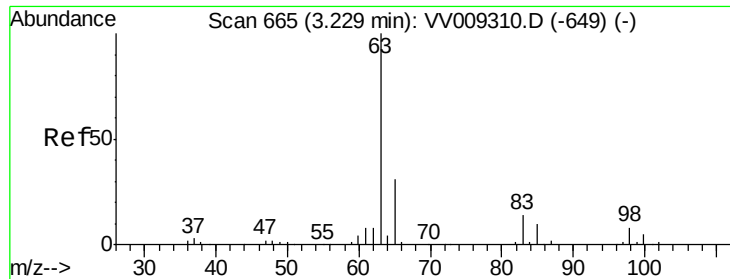
Tgt Ion: 73 Resp: 99445  
Ion Ratio Lower Upper  
73 100  
43 17.9 14.0 21.0  
57 21.4 17.0 25.4



#18  
trans-1,2-Dichloroethene  
Concen: 21.911 ug/L  
RT: 2.79 min Scan# 529  
Delta R.T. -0.00 min  
Lab File: VV009315.D  
Acq: 21 Feb 2019 09:54

Tgt Ion: 96 Resp: 41187  
Ion Ratio Lower Upper  
96 100  
61 130.8 88.8 165.0  
98 65.9 43.0 79.8

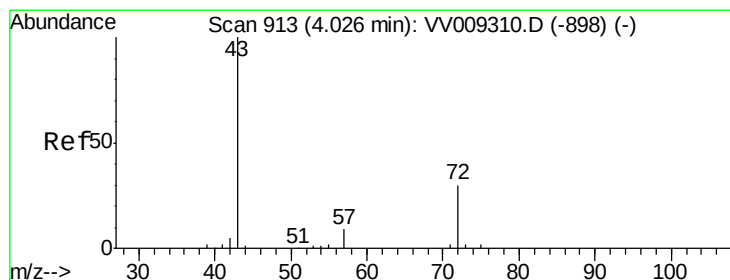
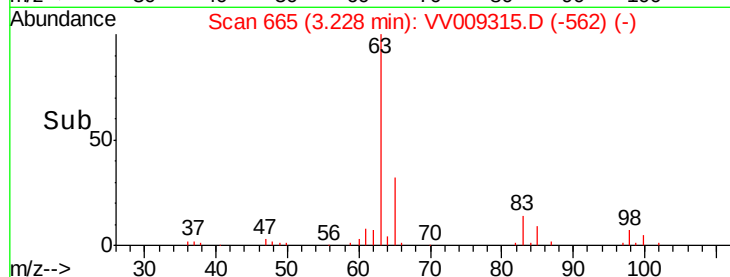
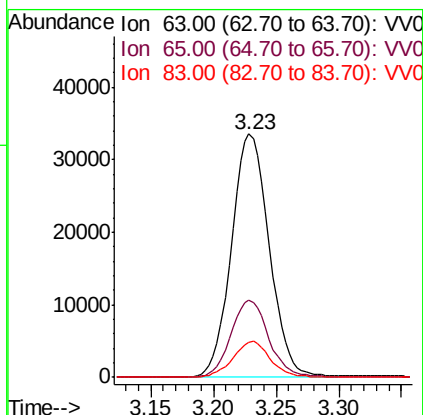
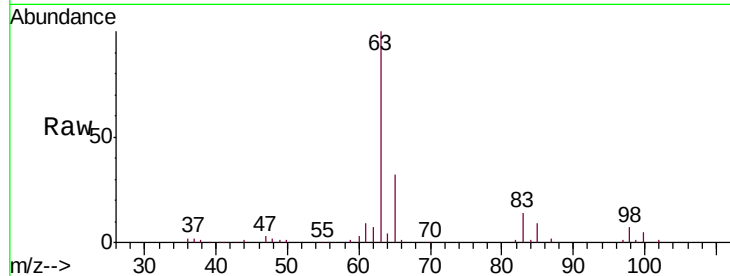




#19  
 1,1-Dichloroethane  
 Concen: 22.539 ug/L  
 RT: 3.23 min Scan# 665  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

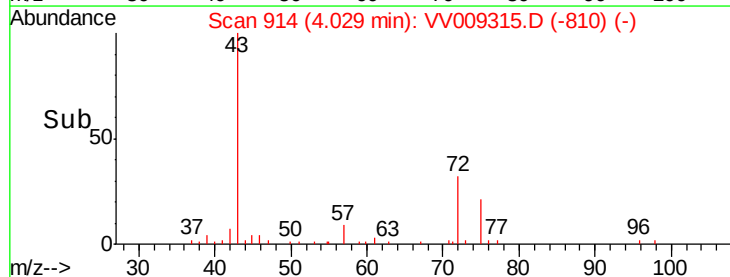
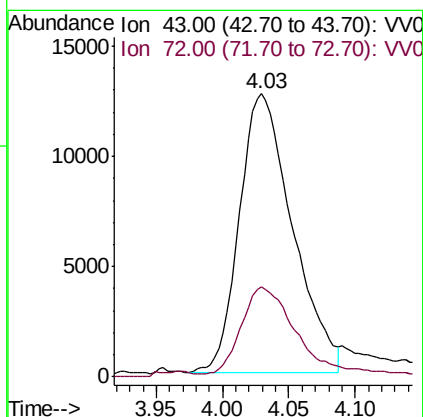
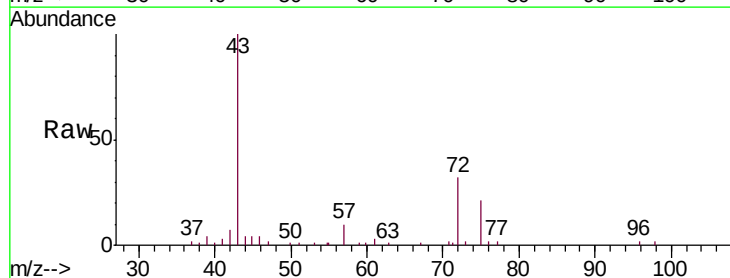
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02575

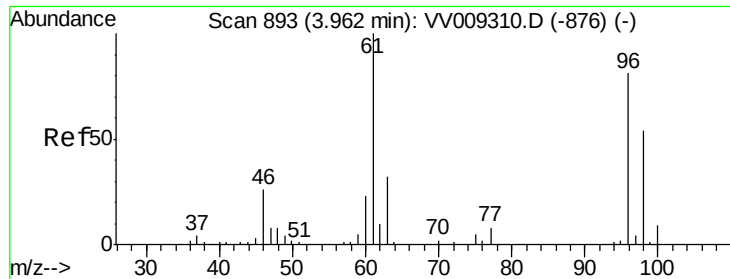
Tgt Ion: 63 Resp: 70371  
 Ion Ratio Lower Upper  
 63 100  
 65 31.7 21.6 40.2  
 83 14.5 10.1 18.9



#21  
 2-Butanone  
 Concen: 47.514 ug/L  
 RT: 4.03 min Scan# 914  
 Delta R.T. 0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

Tgt Ion: 43 Resp: 35234  
 Ion Ratio Lower Upper  
 43 100  
 72 31.4 15.4 46.2



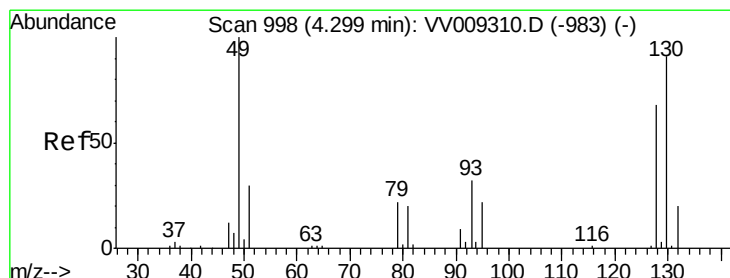
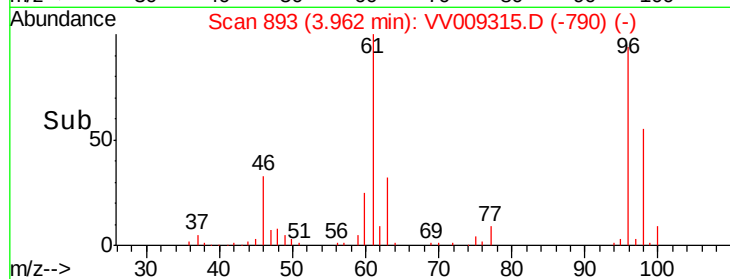
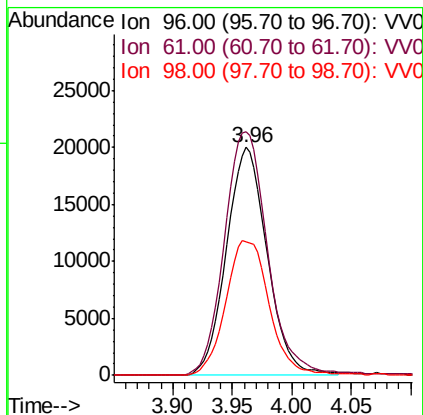
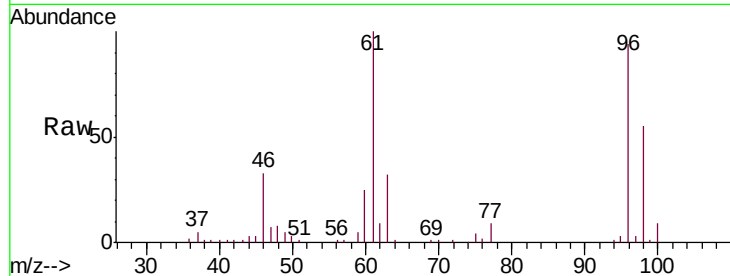


#22

cis-1,2-Dichloroethene  
 Concen: 23.196 ug/L  
 RT: 3.96 min Scan# 893  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

Instrument :  
 MSVOA\_V  
 ClientSampled :  
 VSTD02575

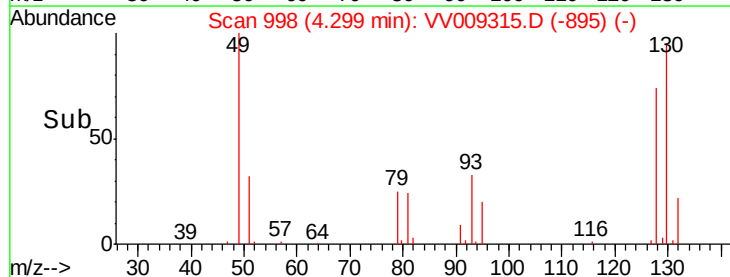
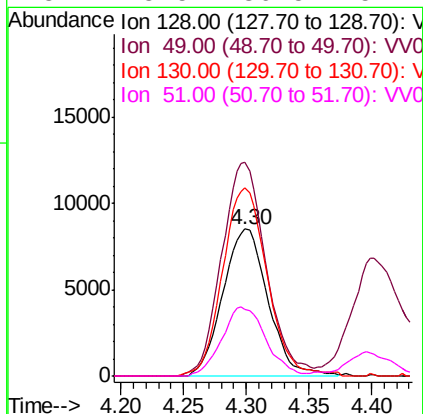
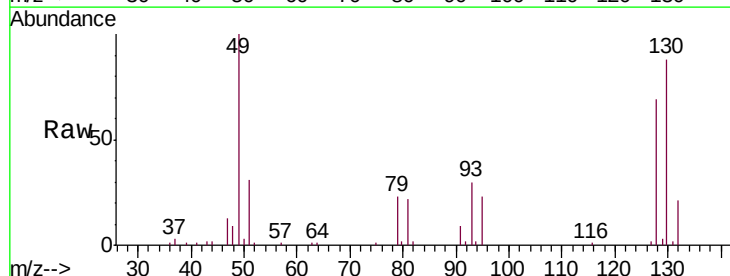
Tgt Ion: 96 Resp: 47632  
 Ion Ratio Lower Upper  
 96 100  
 61 106.9 86.2 160.0  
 98 58.8 46.8 87.0

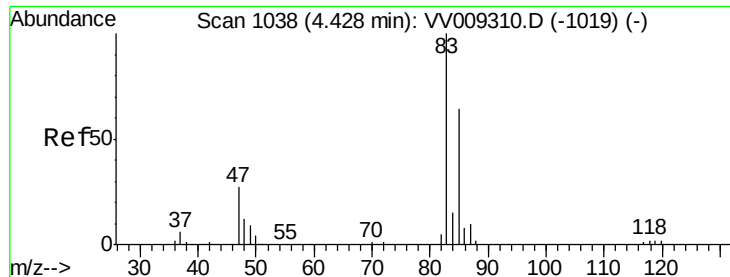


#23

Bromochloromethane  
 Concen: 22.570 ug/L  
 RT: 4.30 min Scan# 998  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

Tgt Ion: 128 Resp: 21210  
 Ion Ratio Lower Upper  
 128 100  
 49 145.3 103.0 191.4  
 130 127.8 93.3 173.3  
 51 45.5 36.5 54.7

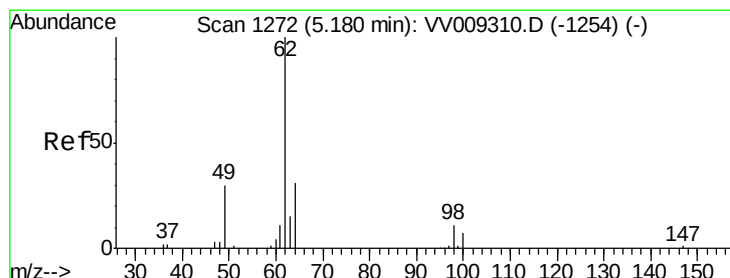
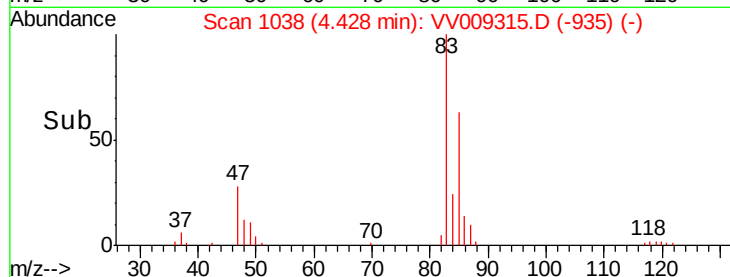
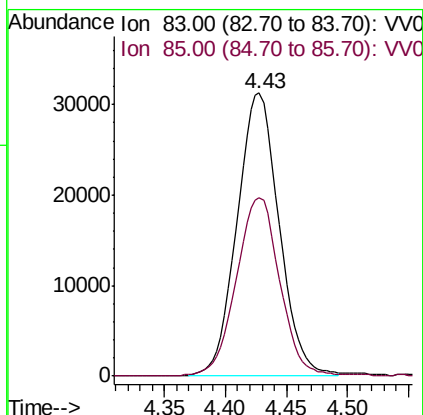
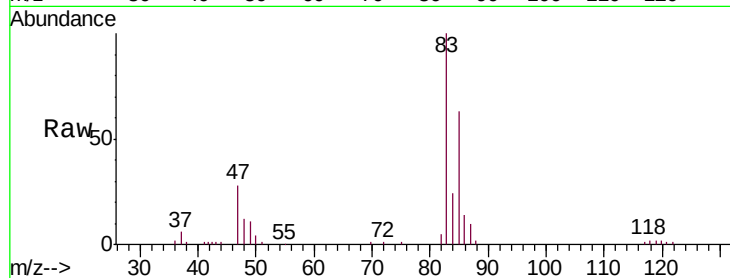




#25  
Chloroform  
Concen: 22.468 ug/L  
RT: 4.43 min Scan# 1038  
Delta R.T. -0.00 min  
Lab File: VV009315.D  
Acq: 21 Feb 2019 09:54

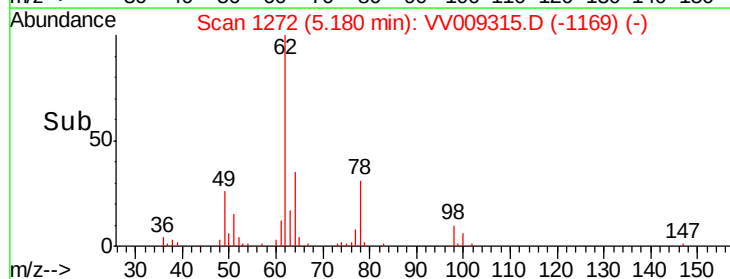
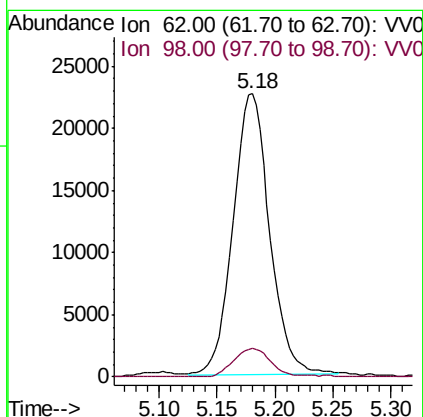
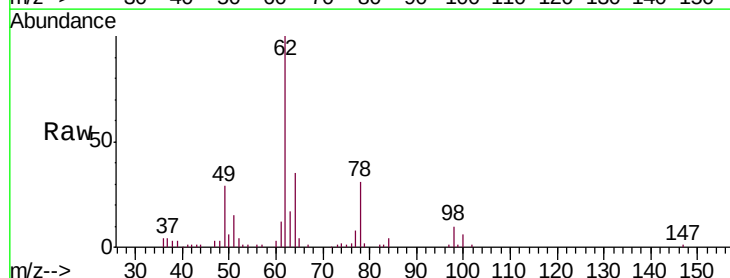
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02575

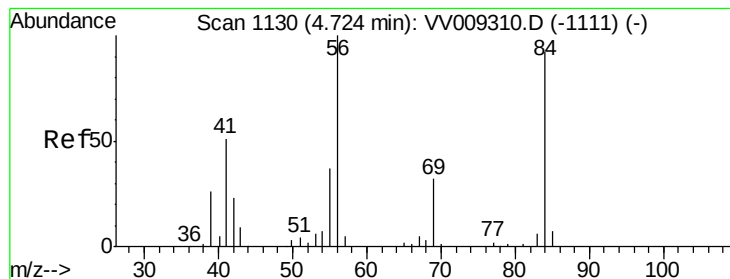
Tgt Ion: 83 Resp: 74648  
Ion Ratio Lower Upper  
83 100  
85 65.1 47.5 88.3



#27  
1,2-Dichloroethane  
Concen: 21.971 ug/L  
RT: 5.18 min Scan# 1272  
Delta R.T. -0.00 min  
Lab File: VV009315.D  
Acq: 21 Feb 2019 09:54

Tgt Ion: 62 Resp: 49429  
Ion Ratio Lower Upper  
62 100  
98 9.9 8.5 12.7





#30

Cyclohexane

Concen: 22.575 ug/L

RT: 4.72 min Scan# 1130

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02575

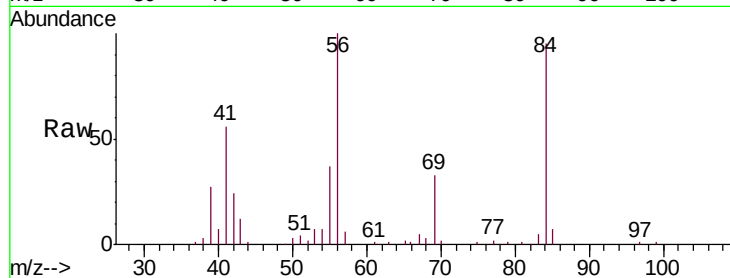
Tgt Ion: 56 Resp: 70346

Ion Ratio Lower Upper

56 100

69 32.4 25.7 38.5

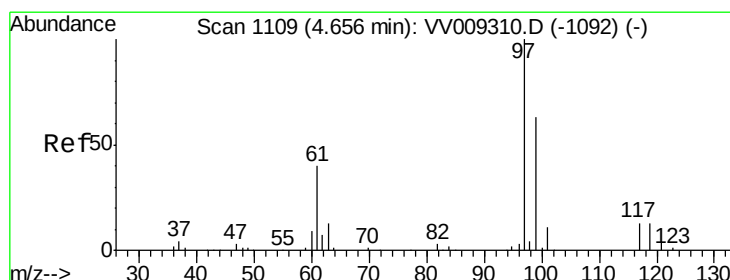
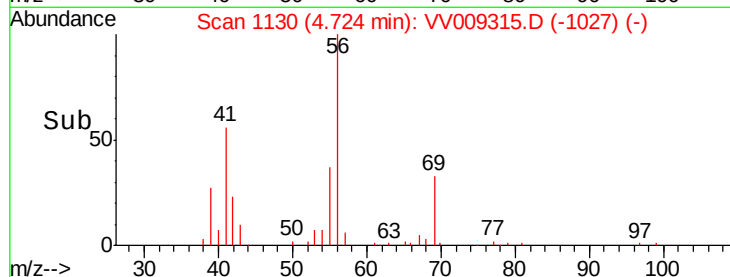
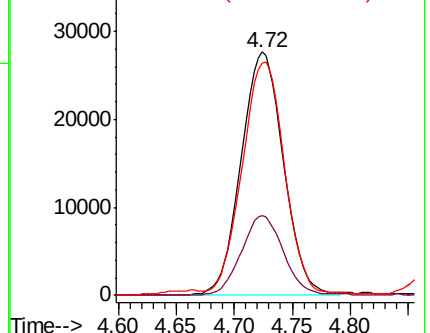
84 94.8 77.2 115.8



Abundance Ion 56.00 (55.70 to 56.70): VV009315.D (-1027) (-)

Ion 69.00 (68.70 to 69.70): VV009315.D (-1027) (-)

Ion 84.00 (83.70 to 84.70): VV009315.D (-1027) (-)



#31

1,1,1-Trichloroethane

Concen: 22.481 ug/L

RT: 4.66 min Scan# 1109

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

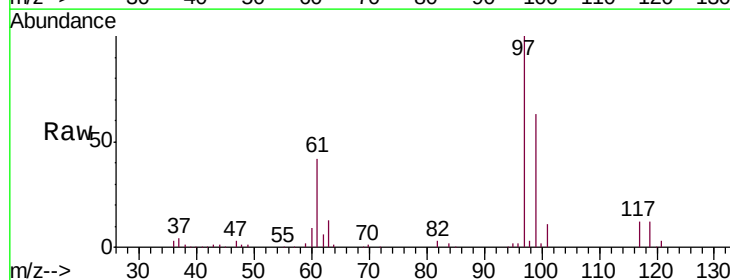
Tgt Ion: 97 Resp: 68248

Ion Ratio Lower Upper

97 100

99 65.0 51.7 77.5

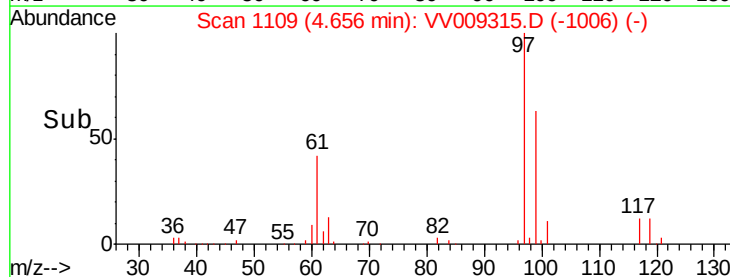
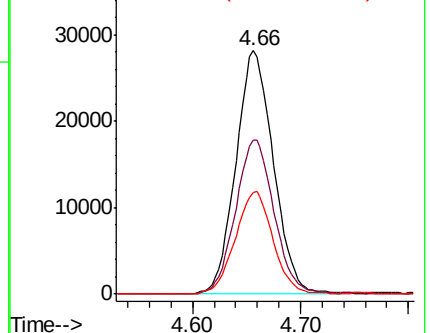
61 42.0 34.0 51.0

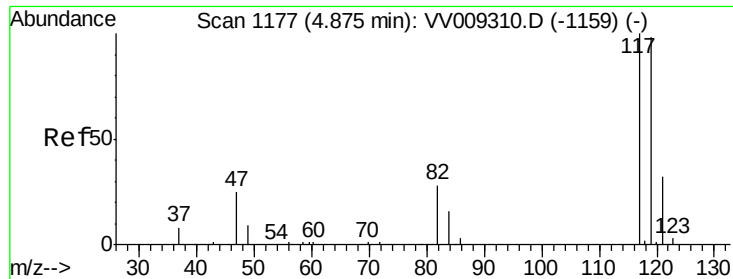


Abundance Ion 97.00 (96.70 to 97.70): VV009315.D (-1006) (-)

Ion 99.00 (98.70 to 99.70): VV009315.D (-1006) (-)

Ion 61.00 (60.70 to 61.70): VV009315.D (-1006) (-)





#32

Carbon tetrachloride

Concen: 22.431 ug/L

RT: 4.87 min Scan# 1177

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampleId :

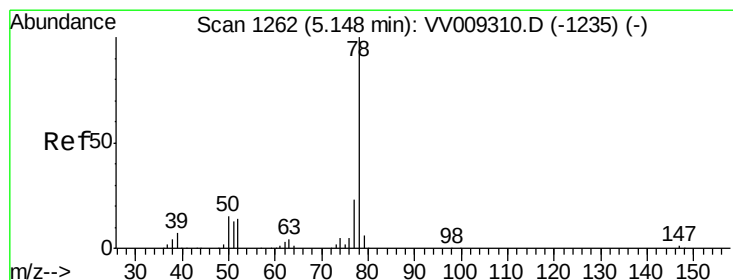
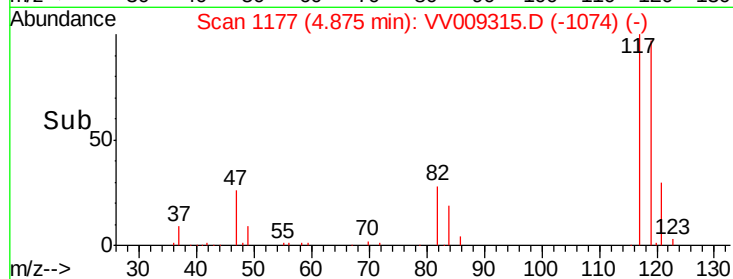
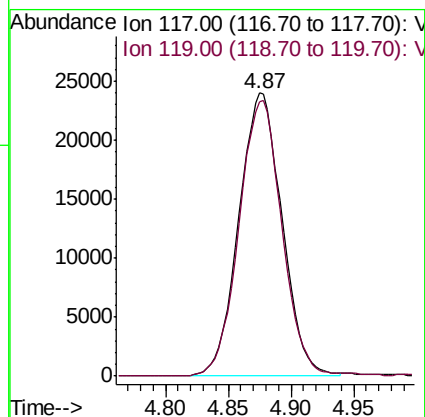
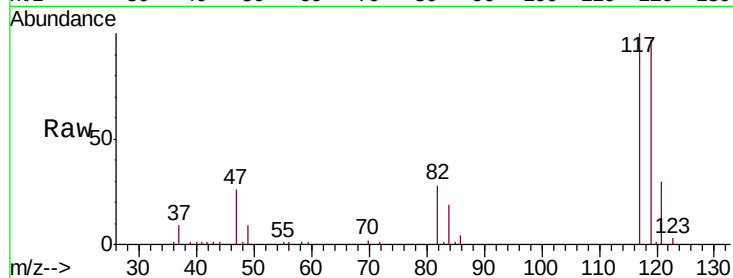
VSTD02575

Tgt Ion:117 Resp: 57547

Ion Ratio Lower Upper

117 100

119 96.2 76.7 115.1



#34

Benzene

Concen: 22.690 ug/L

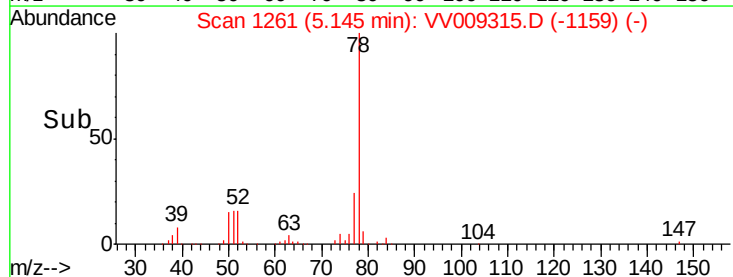
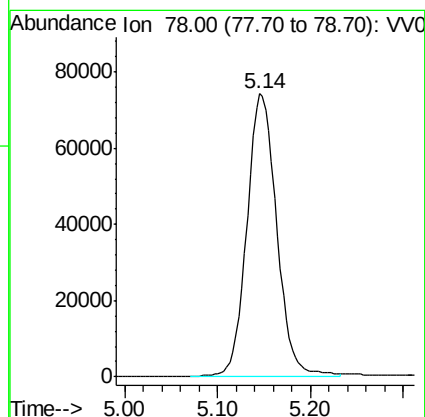
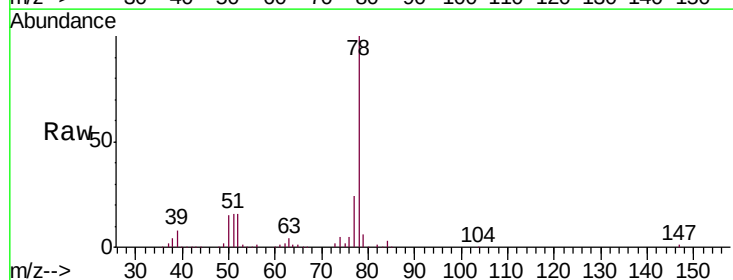
RT: 5.14 min Scan# 1261

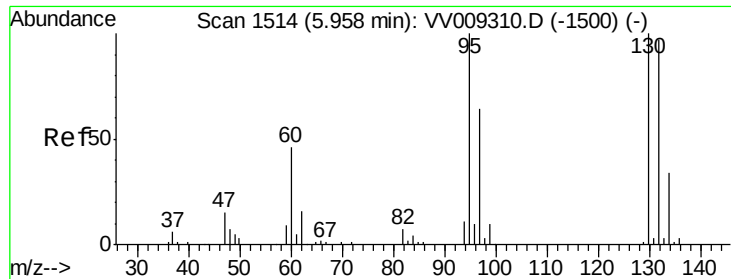
Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Tgt Ion: 78 Resp: 166782

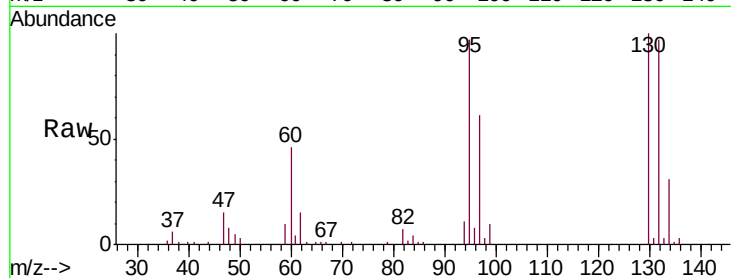




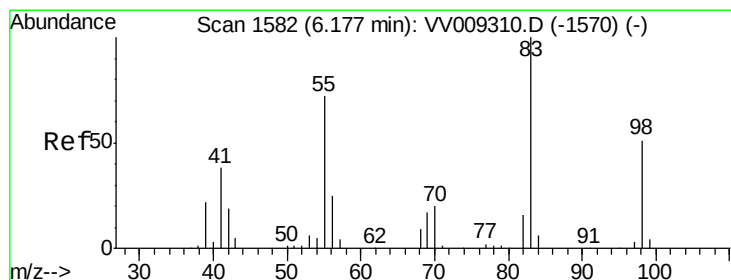
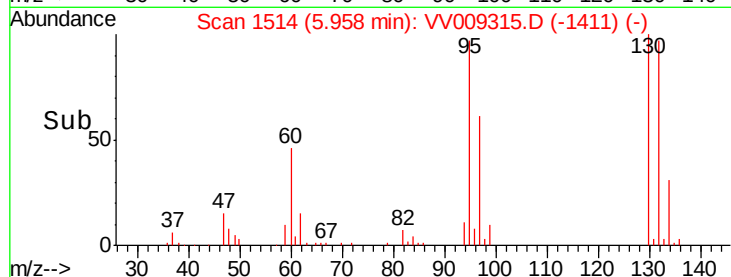
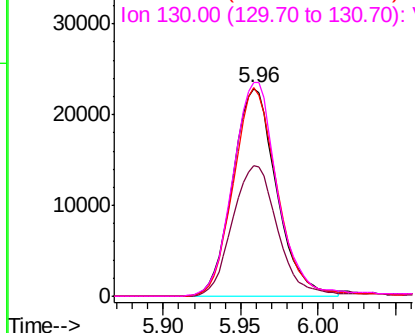
#35  
 Trichloroethene  
 Concen: 22.141 ug/L  
 RT: 5.96 min Scan# 1514  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02575

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 95    | Resp: | 45267 |
| Ion      | Ratio | Lower | Upper |
| 95       | 100   |       |       |
| 97       | 64.7  | 45.0  | 83.6  |
| 132      | 99.7  | 68.7  | 127.5 |
| 130      | 104.8 | 72.2  | 134.0 |

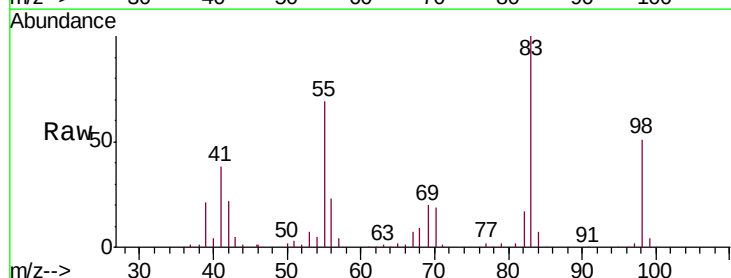


Abundance Ion 95.00 (94.70 to 95.70): VV0  
 Ion 97.00 (96.70 to 97.70): VV0  
 Ion 132.00 (131.70 to 132.70): VV0  
 Ion 130.00 (129.70 to 130.70): VV0

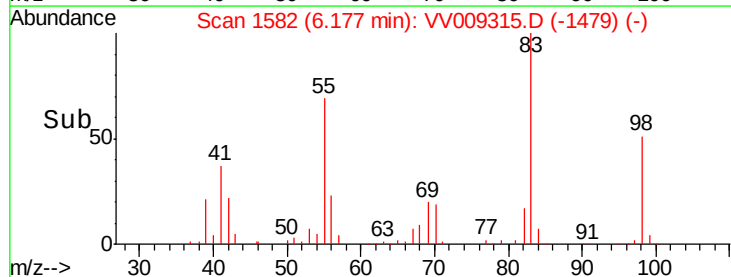
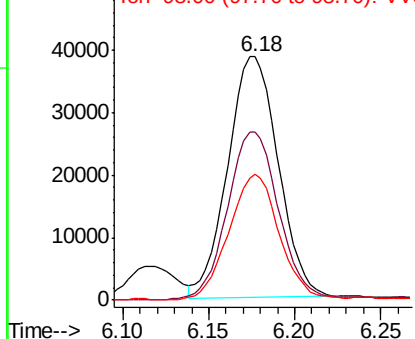


#36  
 Methylcyclohexane  
 Concen: 22.025 ug/L  
 RT: 6.18 min Scan# 1582  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

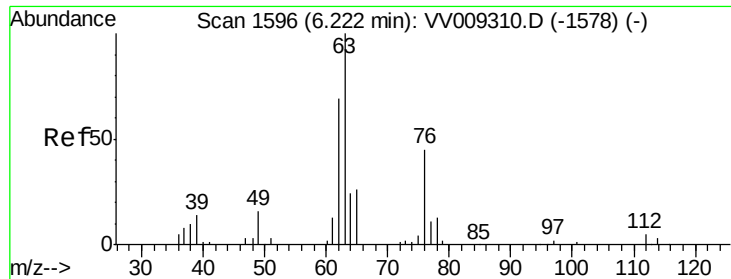
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 78764 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 55       | 70.9  | 55.8  | 83.6  |
| 98       | 52.1  | 40.3  | 60.5  |



Abundance Ion 83.00 (82.70 to 83.70): VV0  
 Ion 55.00 (54.70 to 55.70): VV0  
 Ion 98.00 (97.70 to 98.70): VV0



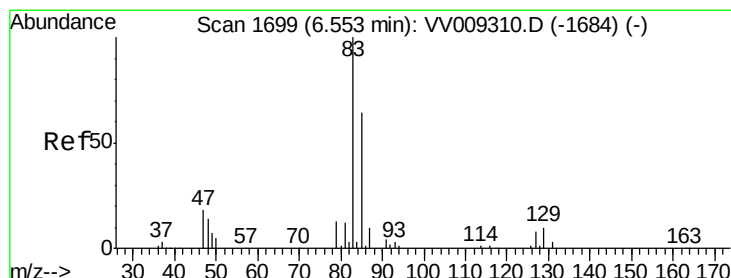
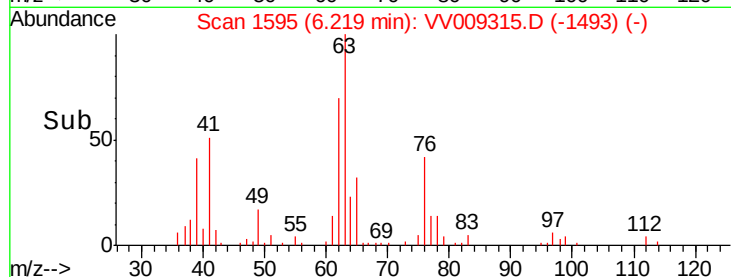
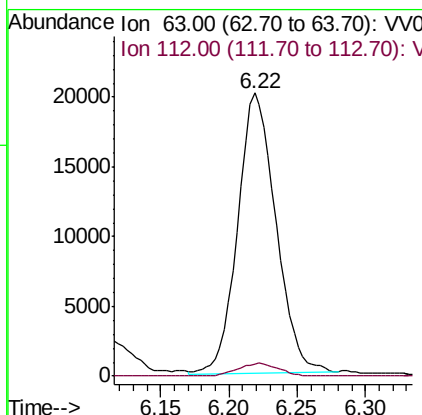
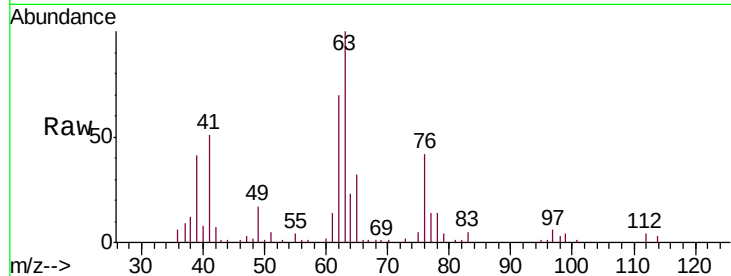




#40  
 1,2-Dichloropropane  
 Concen: 21.874 ug/L  
 RT: 6.22 min Scan# 1595  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

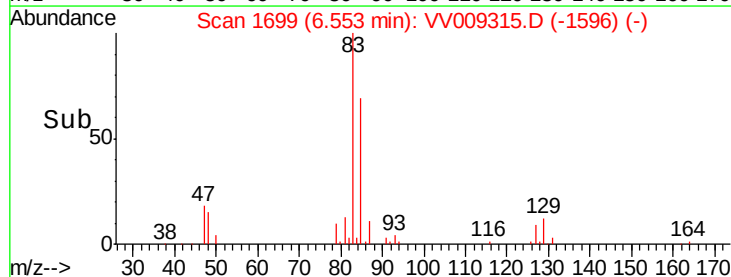
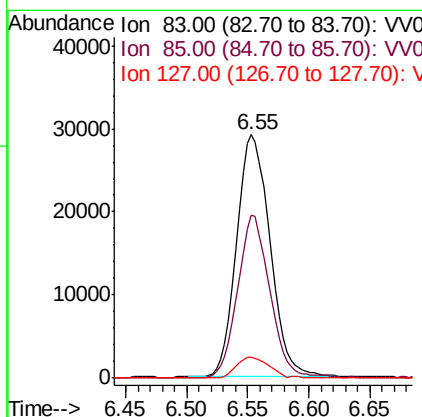
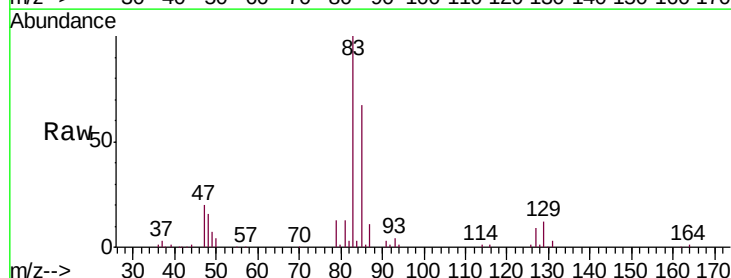
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02575

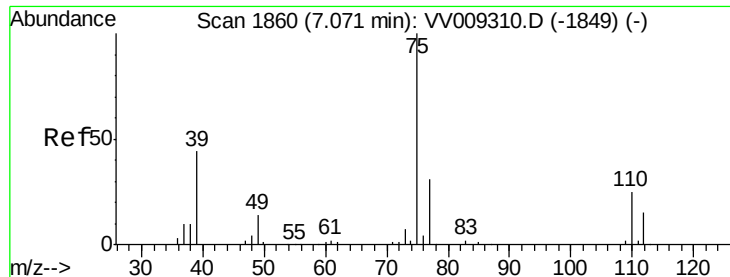
Tgt Ion: 63 Resp: 39023  
 Ion Ratio Lower Upper  
 63 100  
 112 4.8 3.8 5.8



#41  
 Bromodichloromethane  
 Concen: 21.867 ug/L  
 RT: 6.55 min Scan# 1699  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

Tgt Ion: 83 Resp: 55559  
 Ion Ratio Lower Upper  
 83 100  
 85 67.1 44.9 83.5  
 127 8.6 6.3 9.5



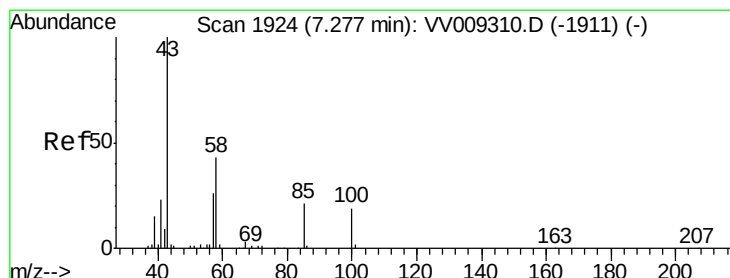
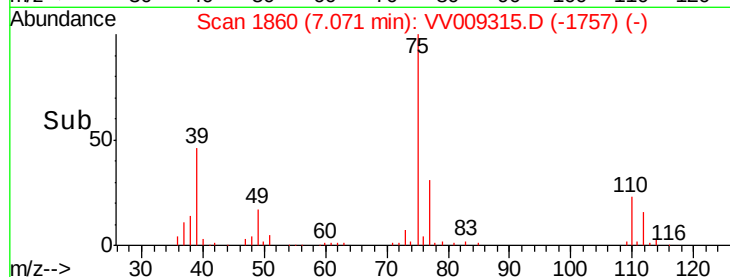
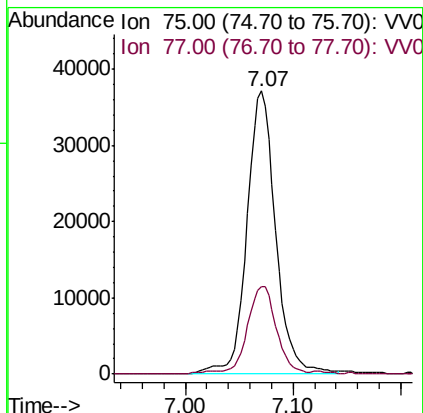
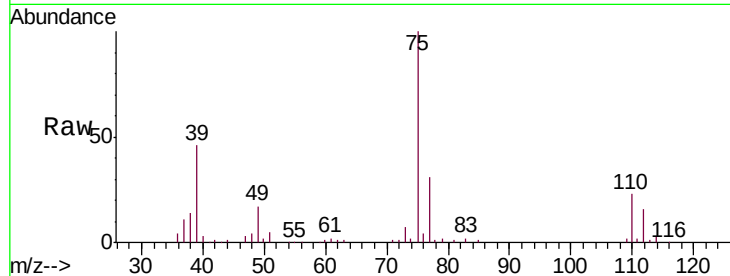


#42

cis-1,3-Dichloropropene  
 Concen: 22.747 ug/L  
 RT: 7.07 min Scan# 1860  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02575

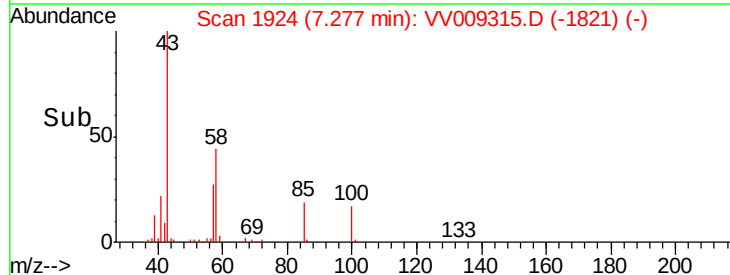
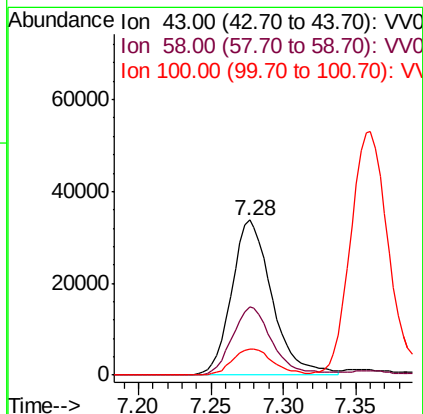
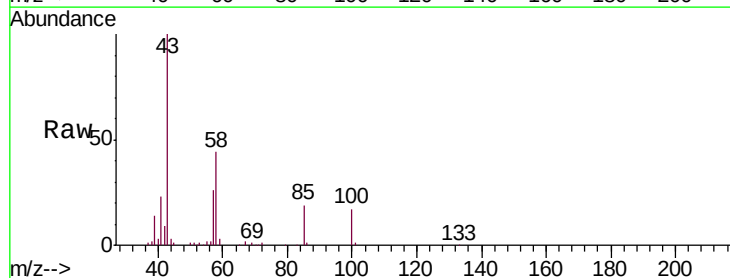
Tgt Ion: 75 Resp: 68868  
 Ion Ratio Lower Upper  
 75 100  
 77 31.1 22.0 40.8

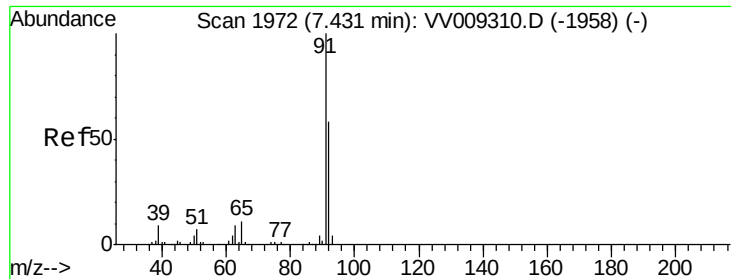


#43

4-Methyl-2-pentanone  
 Concen: 43.054 ug/L  
 RT: 7.28 min Scan# 1924  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

Tgt Ion: 43 Resp: 64476  
 Ion Ratio Lower Upper  
 43 100  
 58 43.7 34.2 51.4  
 100 17.2 15.1 22.7





#44

Toluene

Concen: 22.518 ug/L

RT: 7.43 min Scan# 1972

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampleId :

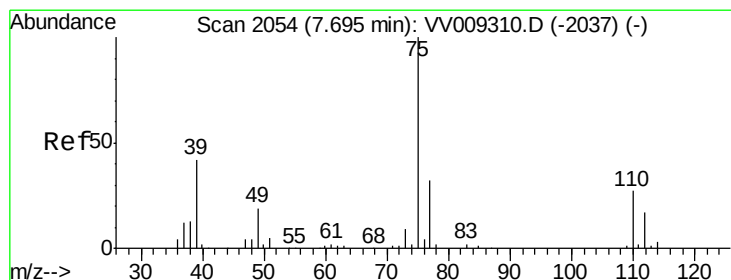
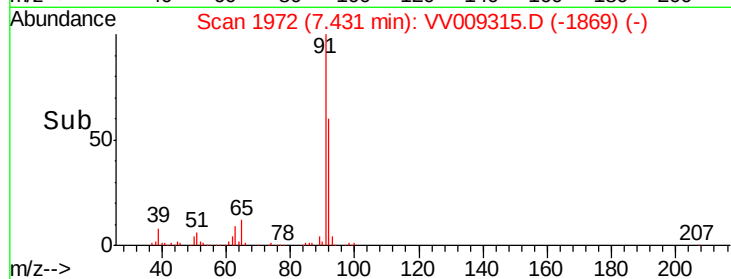
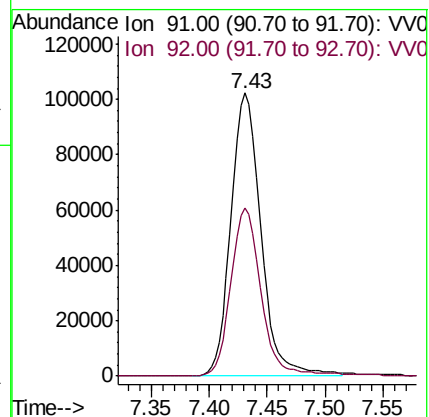
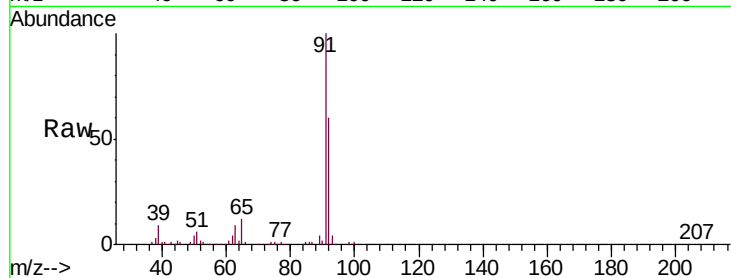
VSTD02575

Tgt Ion: 91 Resp: 183574

Ion Ratio Lower Upper

91 100

92 59.5 40.5 75.3



#45

trans-1,3-Dichloropropene

Concen: 21.966 ug/L

RT: 7.69 min Scan# 2054

Delta R.T. -0.00 min

Lab File: VV009315.D

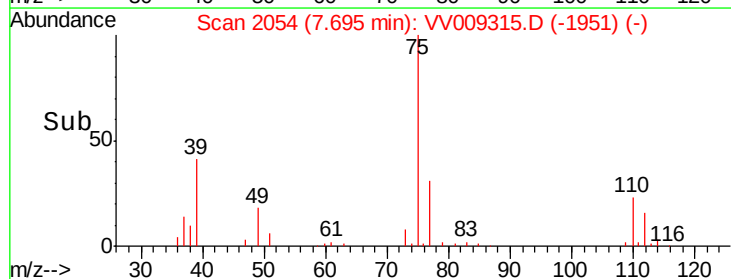
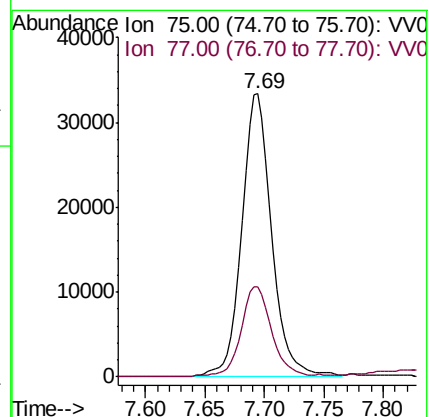
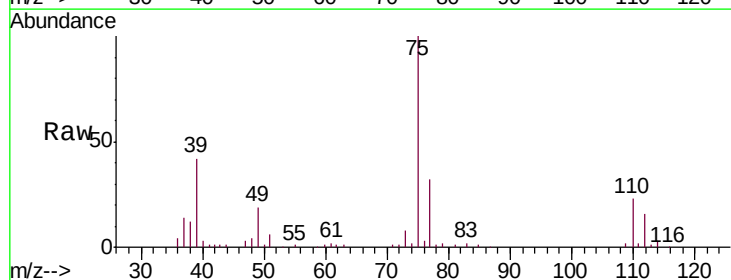
Acq: 21 Feb 2019 09:54

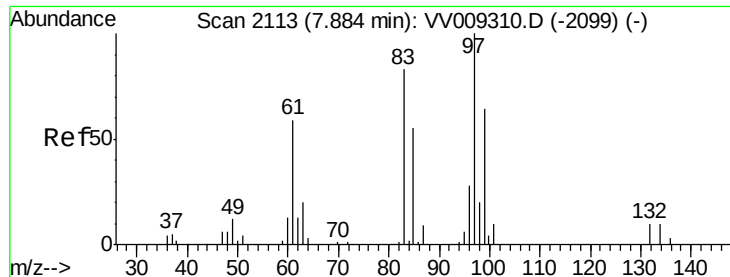
Tgt Ion: 75 Resp: 58234

Ion Ratio Lower Upper

75 100

77 31.7 22.6 42.0

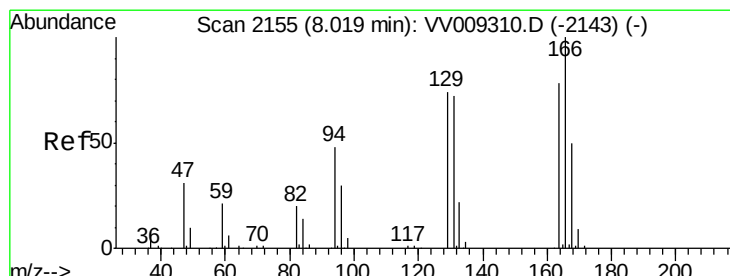
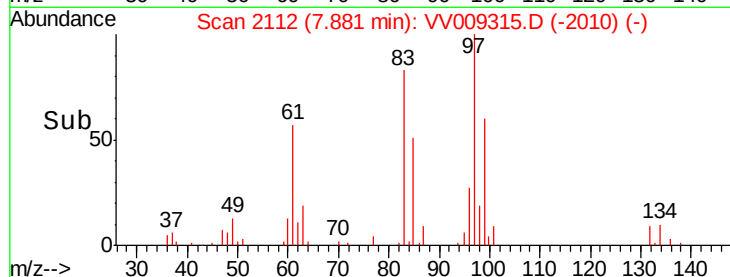
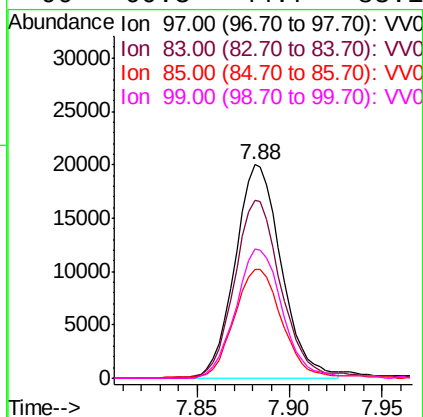
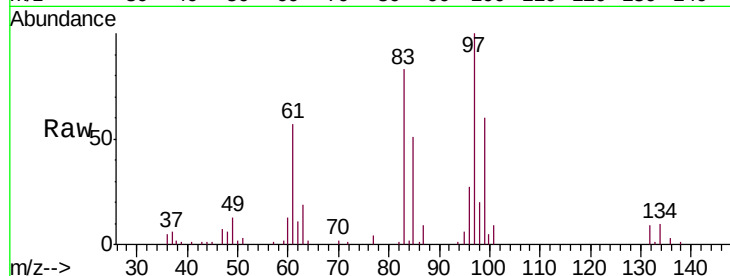




#46  
 1,1,2-Trichloroethane  
 Concen: 21.872 ug/L  
 RT: 7.88 min Scan# 2112  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

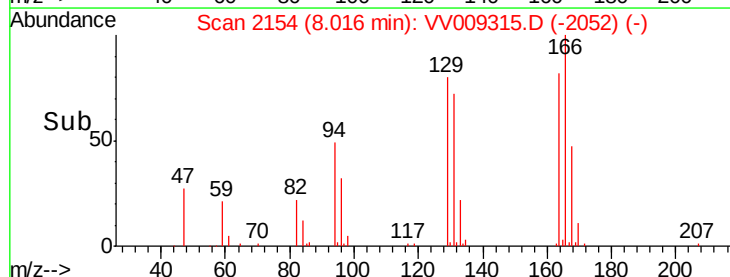
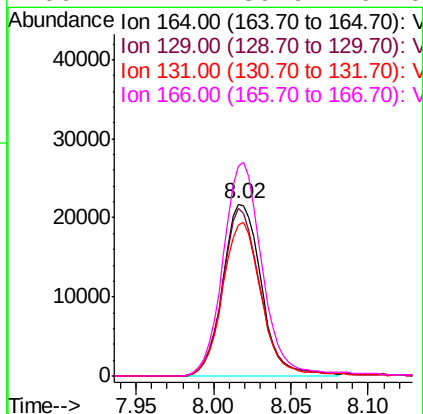
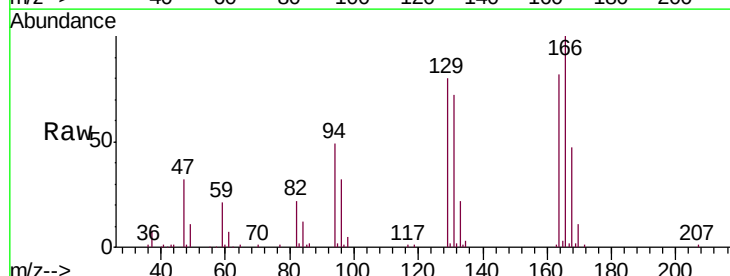
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02575

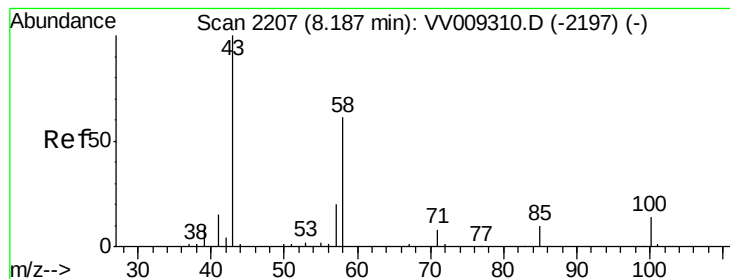
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 34747 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 83       | 83.4  | 58.1  | 107.9 |
| 85       | 51.1  | 38.4  | 71.2  |
| 99       | 60.3  | 44.7  | 83.1  |



#47  
 Tetrachloroethene  
 Concen: 23.507 ug/L  
 RT: 8.02 min Scan# 2154  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 37562 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 97.2  | 67.0  | 124.4 |
| 131      | 87.9  | 65.0  | 120.8 |
| 166      | 122.2 | 89.9  | 167.0 |





#49

2-Hexanone

Concen: 44.536 ug/L

RT: 8.19 min Scan# 2208

Delta R.T. 0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02575

Tgt Ion: 43 Resp: 51293

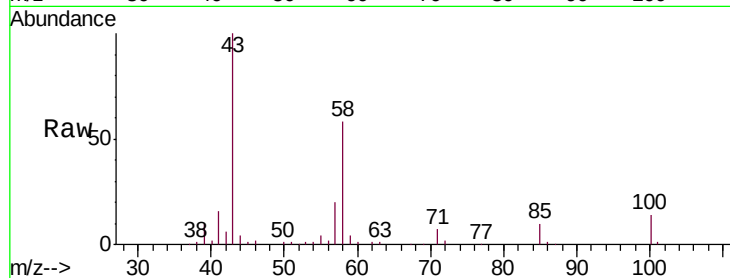
Ion Ratio Lower Upper

43 100

58 60.5 46.8 70.2

57 20.4 14.2 21.2

100 16.2 11.0 16.6

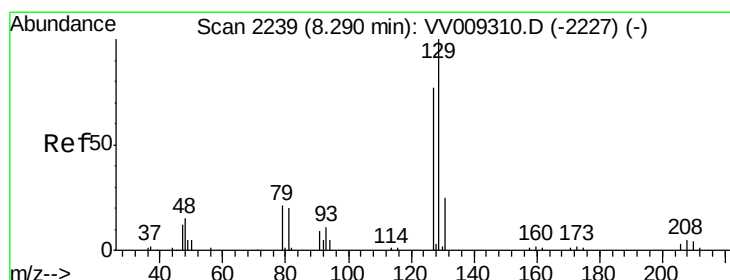
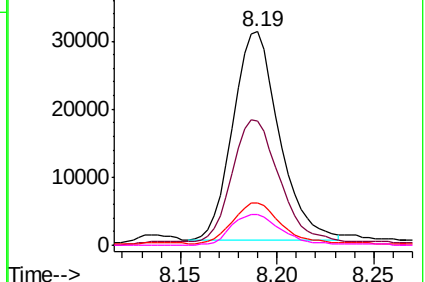
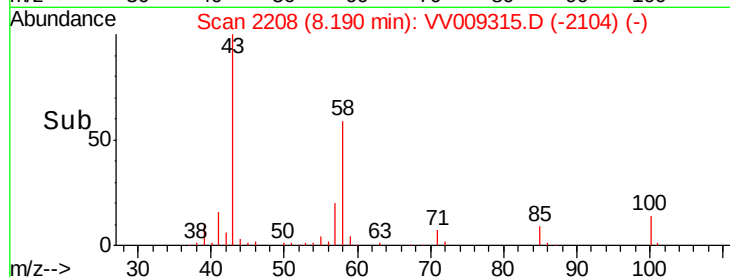


Abundance Ion 43.00 (42.70 to 43.70): VV009315.D (-2197) (-)

Ion 58.00 (57.70 to 58.70): VV009315.D (-2197) (-)

Ion 57.00 (56.70 to 57.70): VV009315.D (-2197) (-)

Ion 100.00 (99.70 to 100.70): VV009315.D (-2197) (-)



#50

Dibromochloromethane

Concen: 22.340 ug/L

RT: 8.29 min Scan# 2239

Delta R.T. -0.00 min

Lab File: VV009315.D

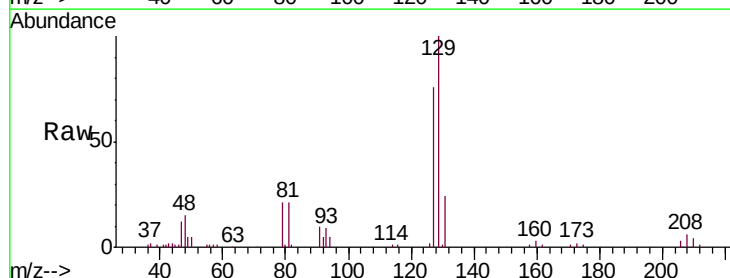
Acq: 21 Feb 2019 09:54

Tgt Ion: 129 Resp: 42793

Ion Ratio Lower Upper

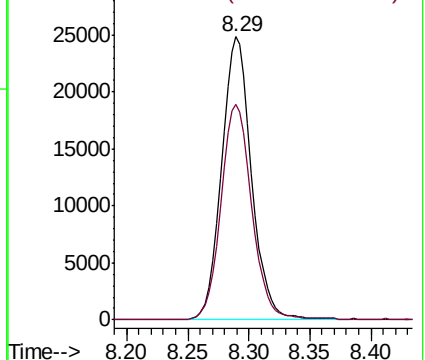
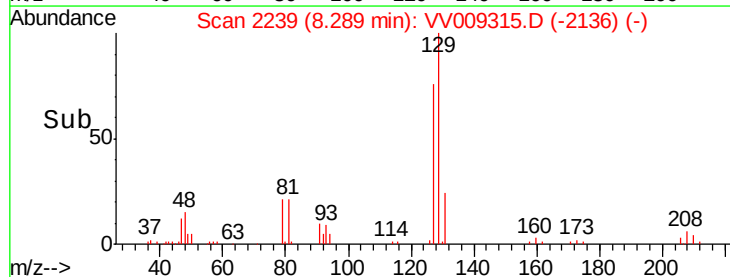
129 100

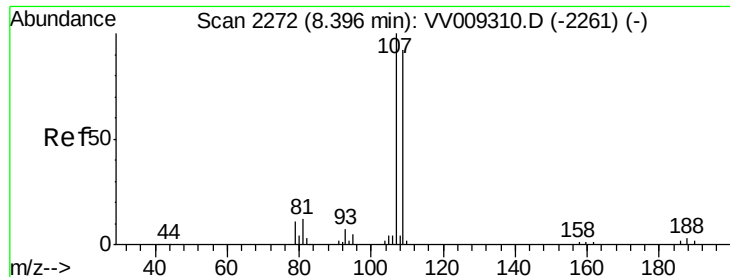
127 76.1 53.6 99.6



Abundance Ion 129.00 (128.70 to 129.70): VV009315.D (-2227) (-)

Ion 127.00 (126.70 to 127.70): VV009315.D (-2227) (-)





#51

1,2-Dibromoethane

Concen: 22.471 ug/L

RT: 8.40 min Scan# 2272

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02575

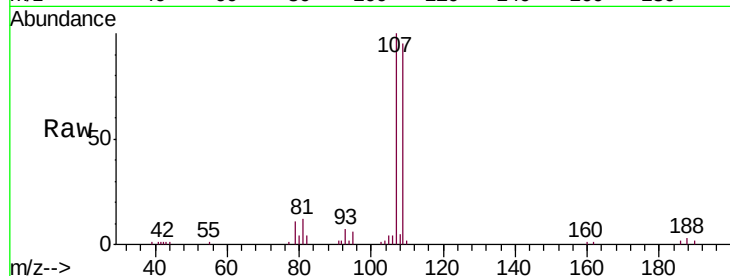
Tgt Ion:107 Resp: 35804

Ion Ratio Lower Upper

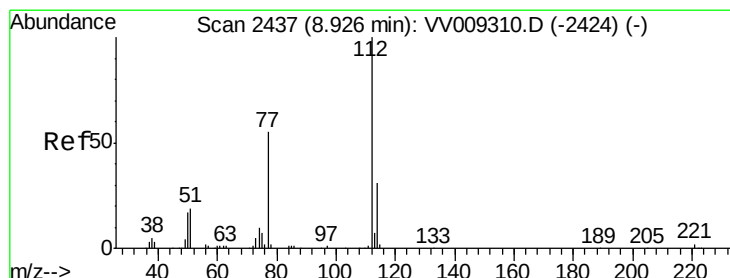
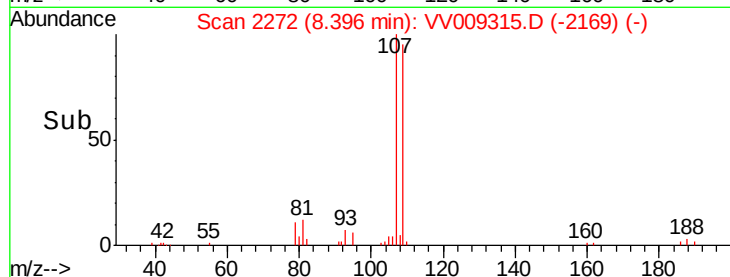
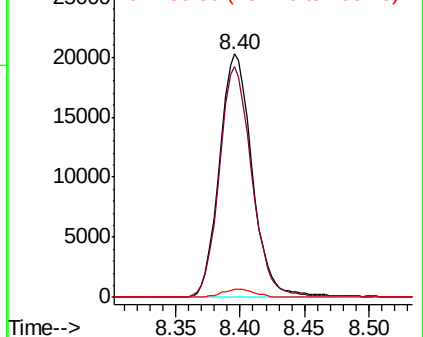
107 100

109 95.0 64.5 119.9

188 3.1 2.8 4.2



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: 23.155 ug/L

RT: 8.93 min Scan# 2437

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

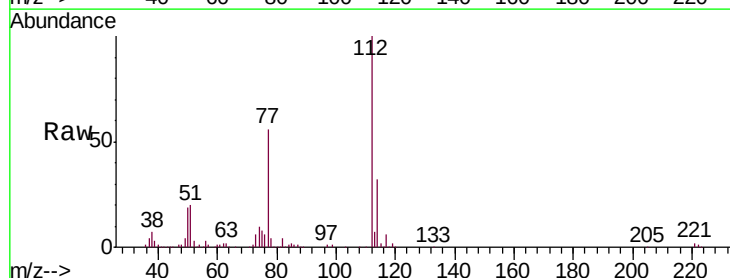
Tgt Ion:112 Resp: 122914

Ion Ratio Lower Upper

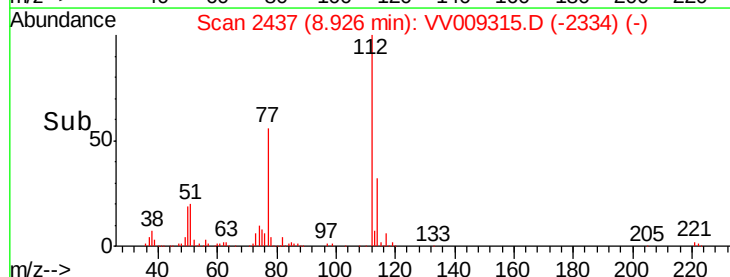
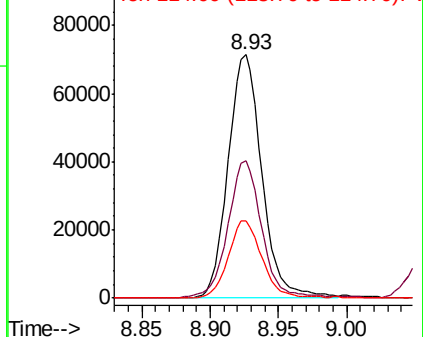
112 100

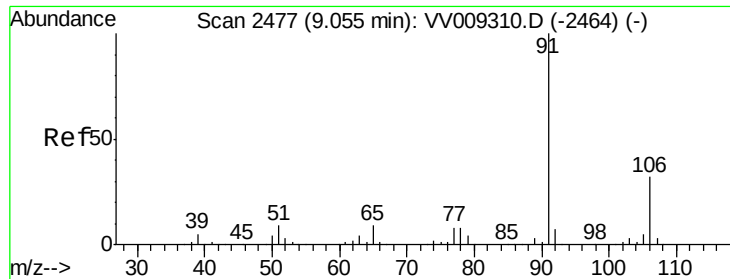
77 56.3 45.0 67.4

114 31.8 22.0 41.0



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: 22.703 ug/L

RT: 9.05 min Scan# 2477

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampleId :

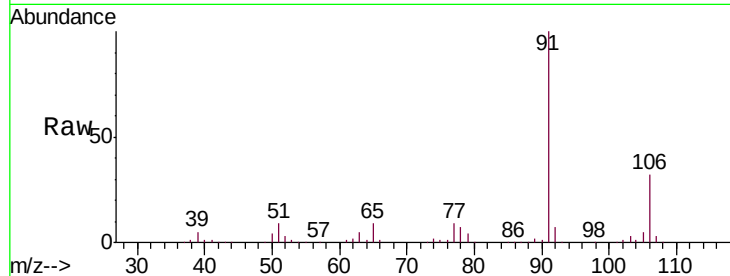
VSTD02575

Tgt Ion: 91 Resp: 209088

Ion Ratio Lower Upper

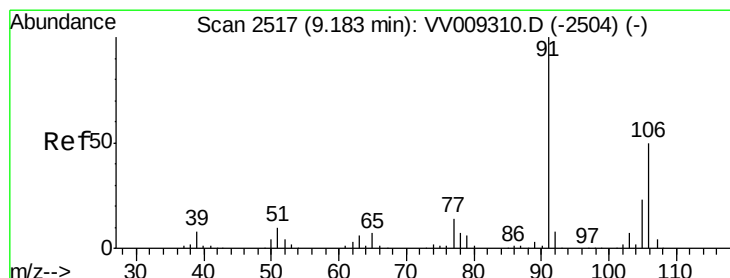
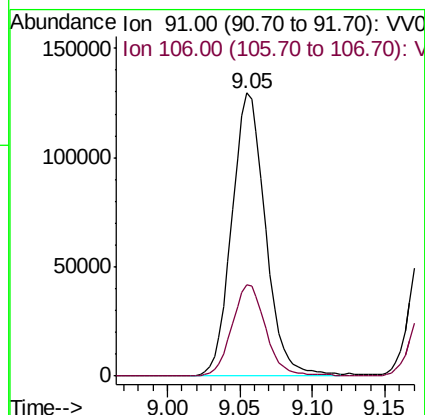
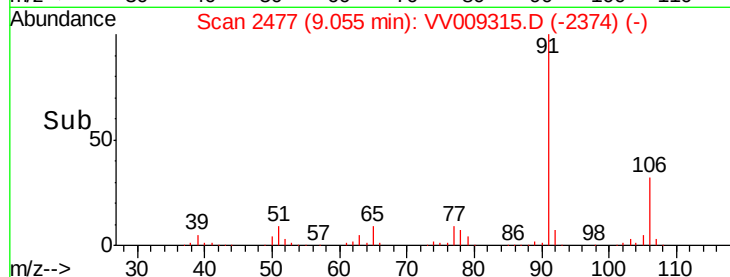
91 100

106 32.4 22.2 41.2



Abundance Ion 91.00 (90.70 to 91.70): VV009315.D (-2374) (-)

Ion 106.00 (105.70 to 106.70): VV009315.D (-2374) (-)



#54

m,p-Xylene

Concen: 22.646 ug/L

RT: 9.18 min Scan# 2517

Delta R.T. -0.00 min

Lab File: VV009315.D

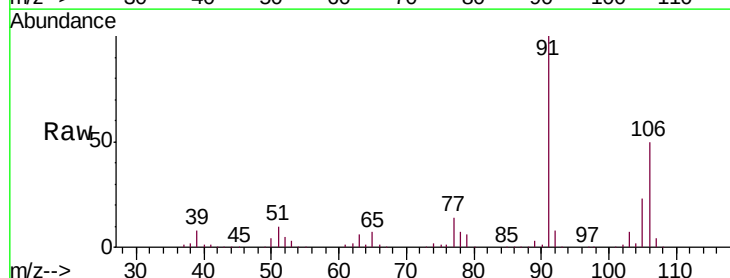
Acq: 21 Feb 2019 09:54

Tgt Ion: 106 Resp: 81379

Ion Ratio Lower Upper

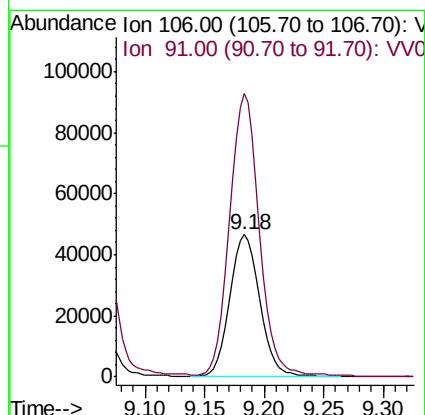
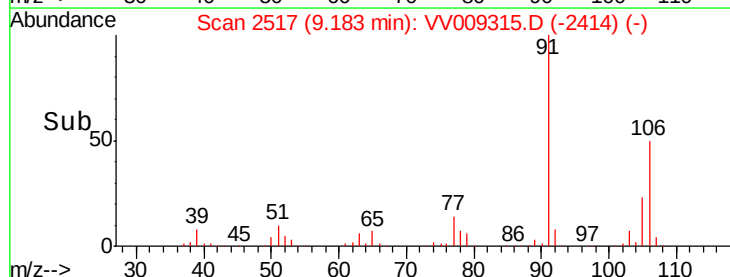
106 100

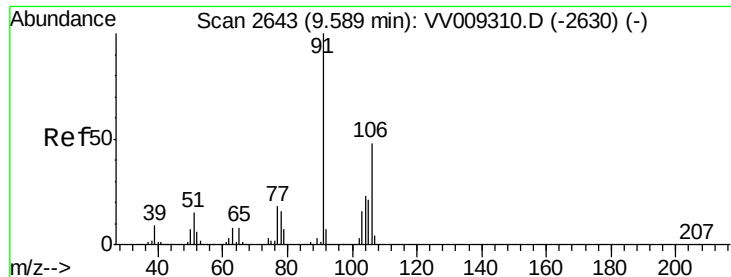
91 199.0 141.4 262.6



Abundance Ion 106.00 (105.70 to 106.70): VV009315.D (-2414) (-)

Ion 91.00 (90.70 to 91.70): VV009315.D (-2414) (-)

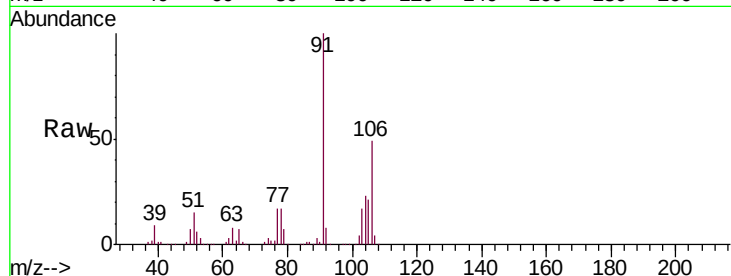




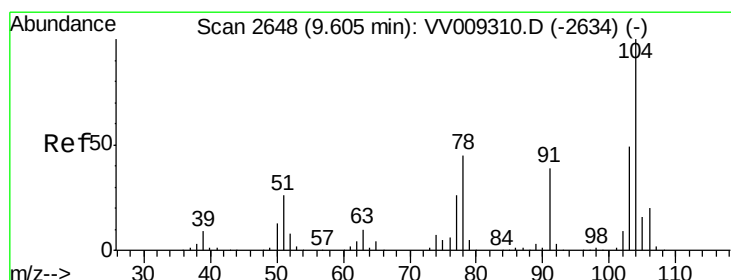
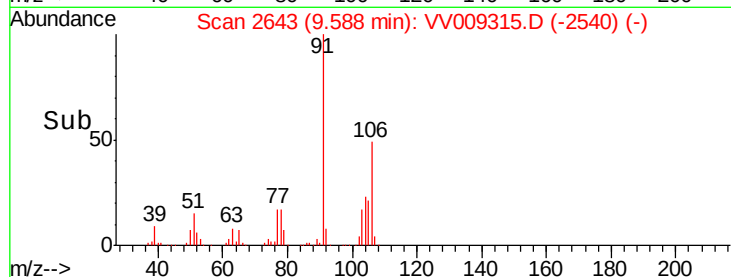
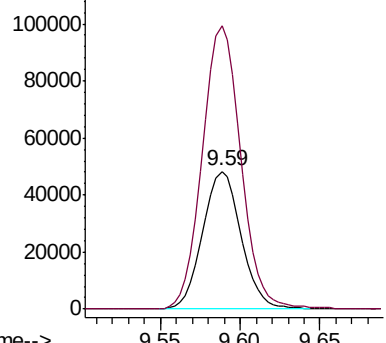
#55  
o-xylene  
Concen: 23.455 ug/L  
RT: 9.59 min Scan# 2643  
Delta R.T. -0.00 min  
Lab File: VV009315.D  
Acq: 21 Feb 2019 09:54

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02575

Tgt Ion:106 Resp: 79117  
Ion Ratio Lower Upper  
106 100  
91 205.3 146.4 271.8

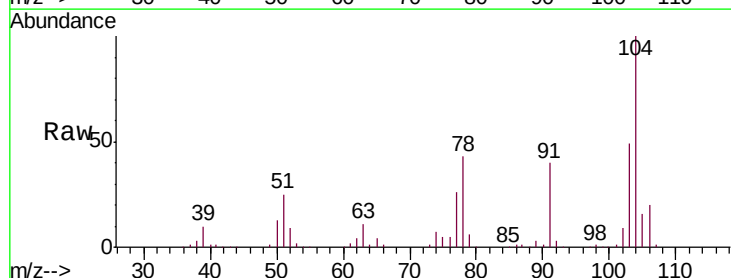


Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): VV0

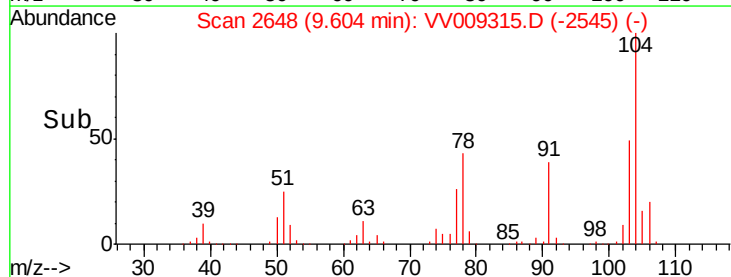
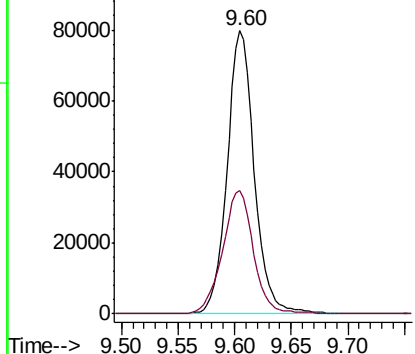


#56  
Styrene  
Concen: 23.011 ug/L  
RT: 9.60 min Scan# 2648  
Delta R.T. -0.00 min  
Lab File: VV009315.D  
Acq: 21 Feb 2019 09:54

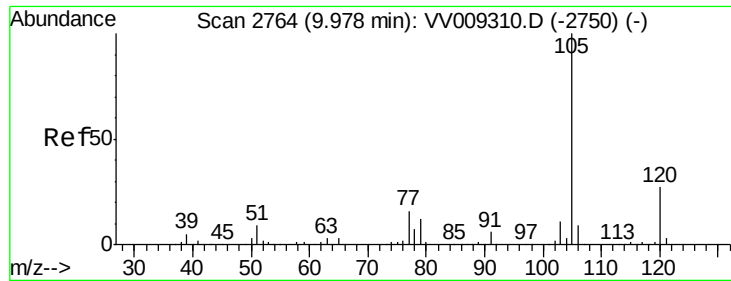
Tgt Ion:104 Resp: 133196  
Ion Ratio Lower Upper  
104 100  
78 43.5 31.6 58.6



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







#57

Isopropylbenzene

Concen: 22.871 ug/L

RT: 9.97 min Scan# 2763

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampled :

VSTD02575

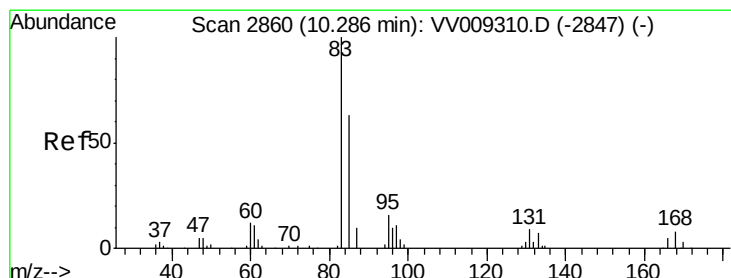
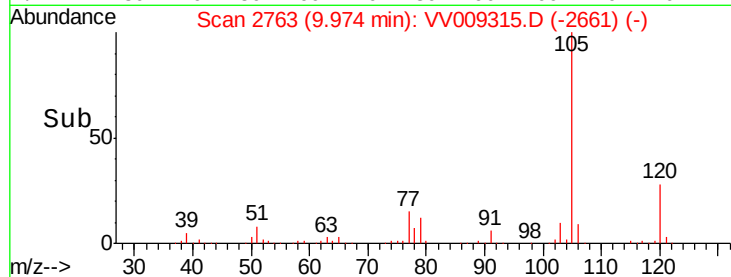
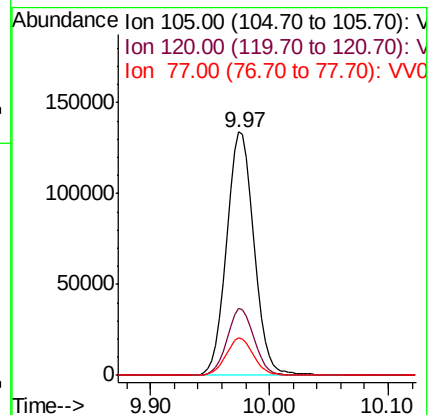
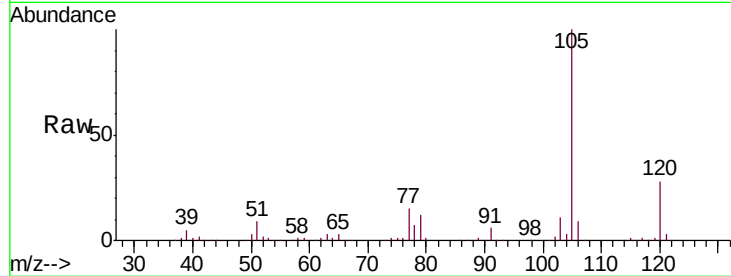
Tgt Ion: 105 Resp: 213559

Ion Ratio Lower Upper

105 100

120 26.9 21.7 32.5

77 15.4 12.8 19.2



#58

1,1,2,2-Tetrachloroethane

Concen: 22.172 ug/L

RT: 10.29 min Scan# 2860

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

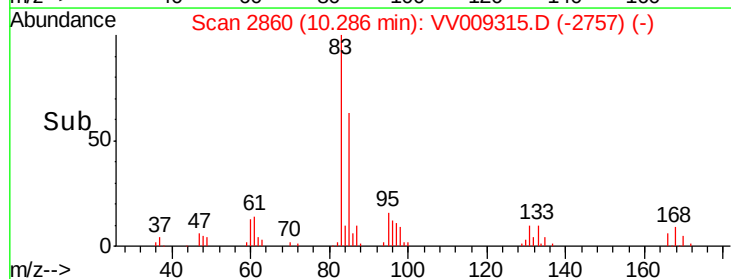
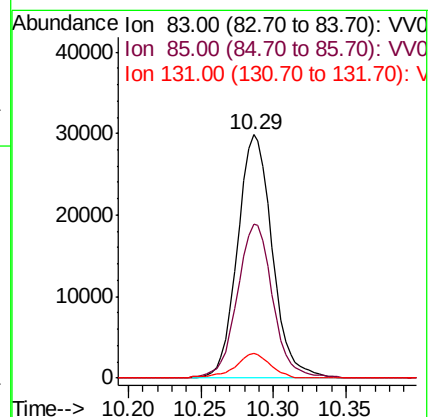
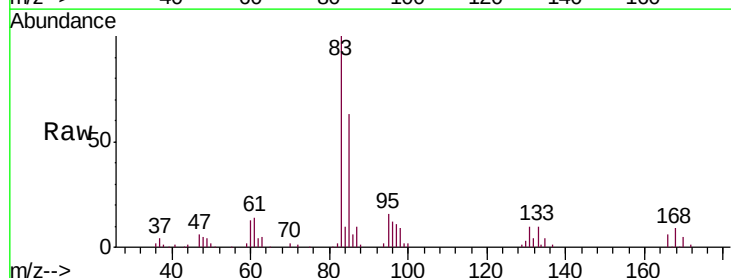
Tgt Ion: 83 Resp: 49706

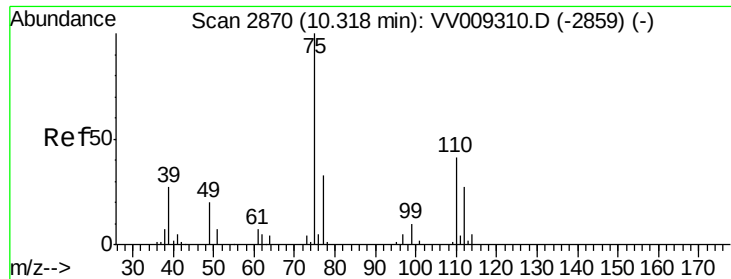
Ion Ratio Lower Upper

83 100

85 63.2 44.7 83.1

131 10.3 8.1 12.1

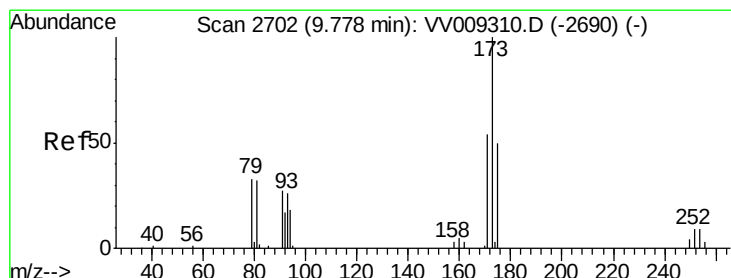
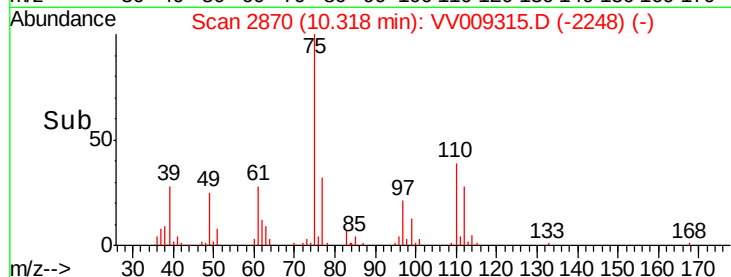
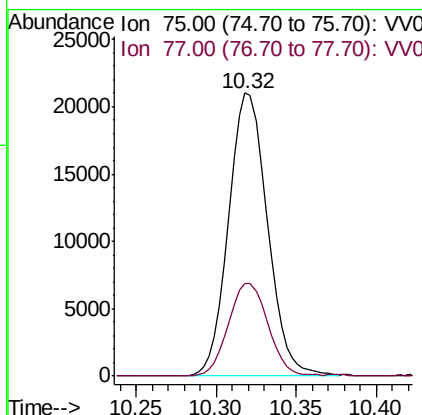
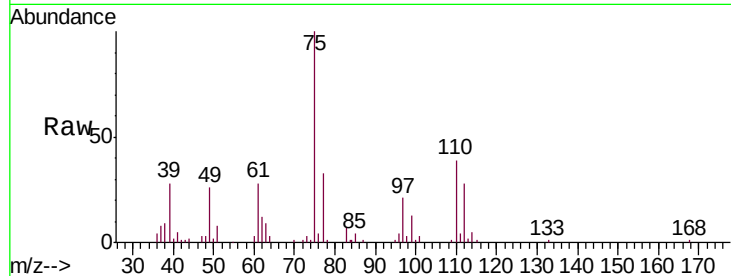




#59  
 1,2,3-Trichloropropane  
 Concen: 21.737 ug/L  
 RT: 10.32 min Scan# 2870  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

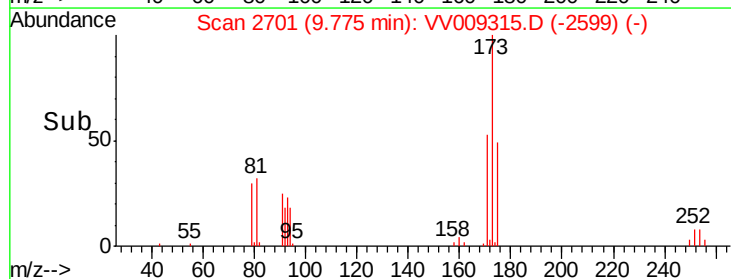
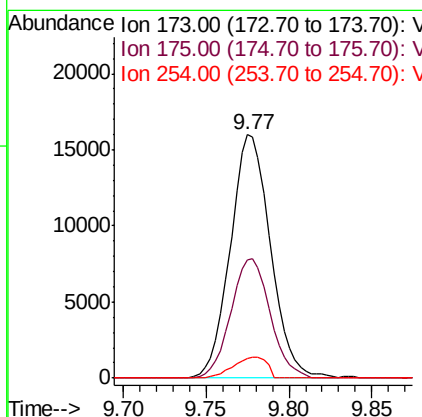
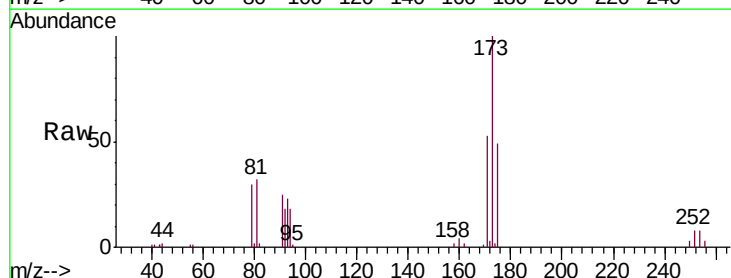
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02575

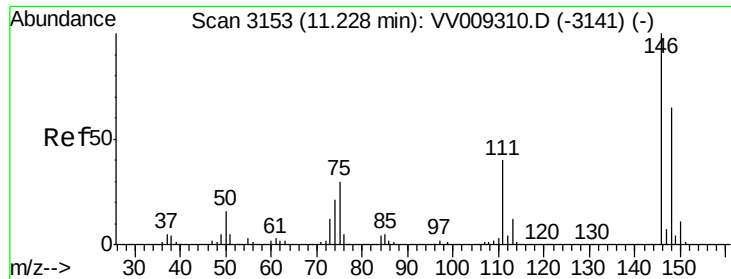
Tgt Ion: 75 Resp: 34919  
 Ion Ratio Lower Upper  
 75 100  
 77 33.3 26.3 39.5



#62  
 Bromoform  
 Concen: 21.835 ug/L  
 RT: 9.77 min Scan# 2701  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

Tgt Ion: 173 Resp: 27013  
 Ion Ratio Lower Upper  
 173 100  
 175 47.8 39.1 58.7  
 254 7.2 5.7 8.5





#63

1,3-Dichlorobenzene

Concen: 22.249 ug/L

RT: 11.23 min Scan# 3153

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02575

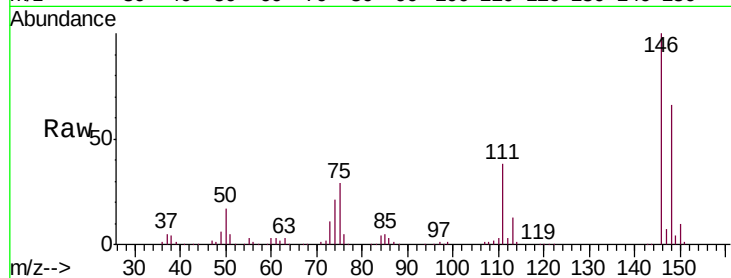
Tgt Ion:146 Resp: 95637

Ion Ratio Lower Upper

146 100

111 37.5 27.6 51.4

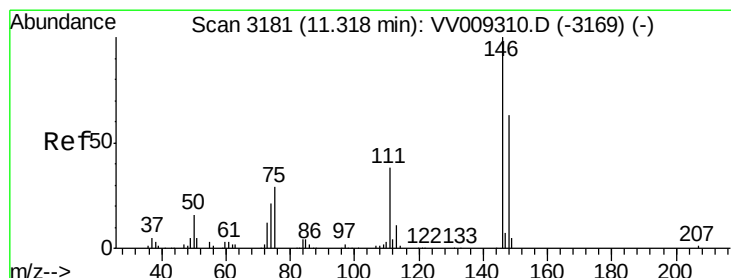
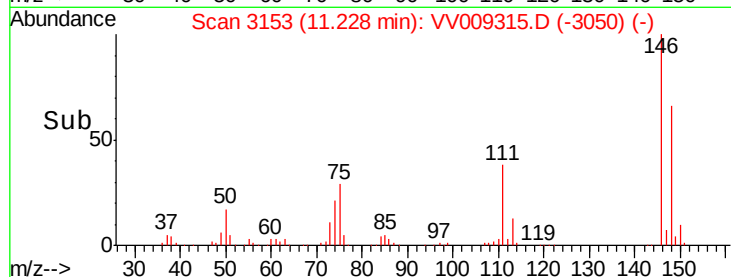
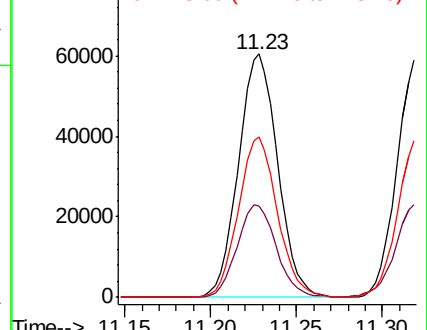
148 65.8 45.4 84.4



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#64

1,4-Dichlorobenzene

Concen: 22.069 ug/L

RT: 11.32 min Scan# 3182

Delta R.T. 0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

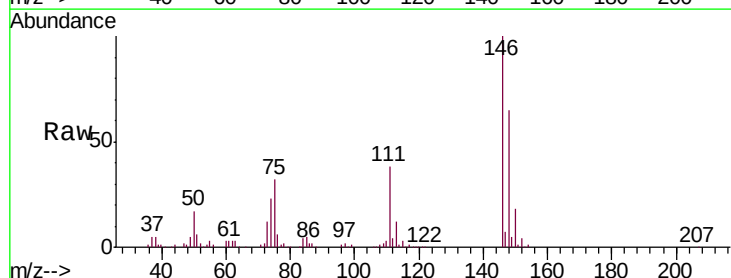
Tgt Ion:146 Resp: 94561

Ion Ratio Lower Upper

146 100

111 37.6 26.9 50.1

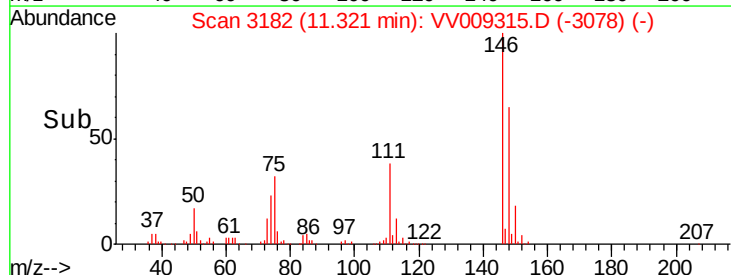
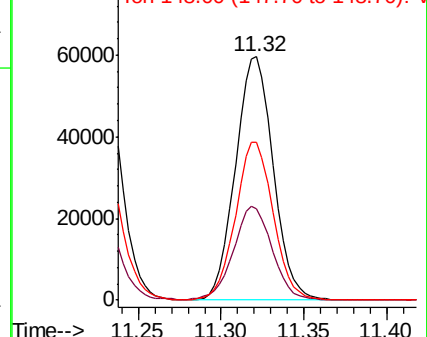
148 64.9 44.1 81.9

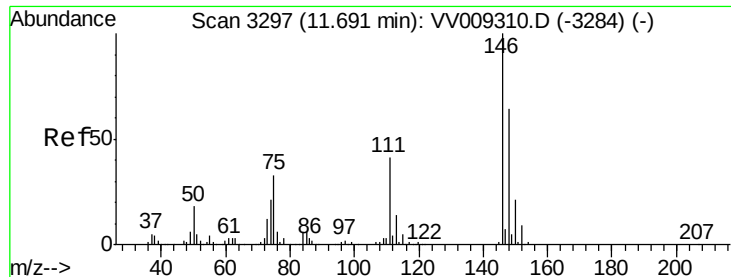


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 22.152 ug/L

RT: 11.69 min Scan# 3297

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02575

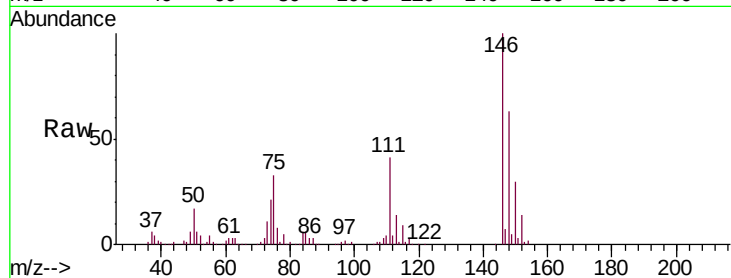
Tgt Ion:146 Resp: 89284

Ion Ratio Lower Upper

146 100

111 41.1 32.6 48.8

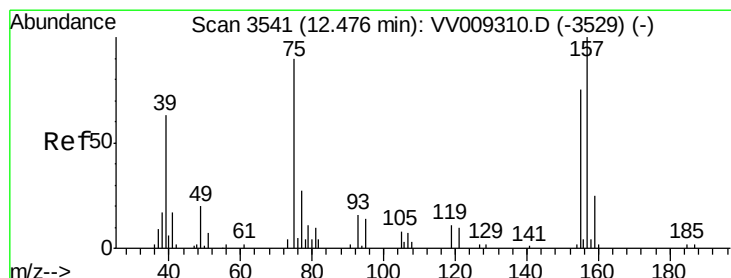
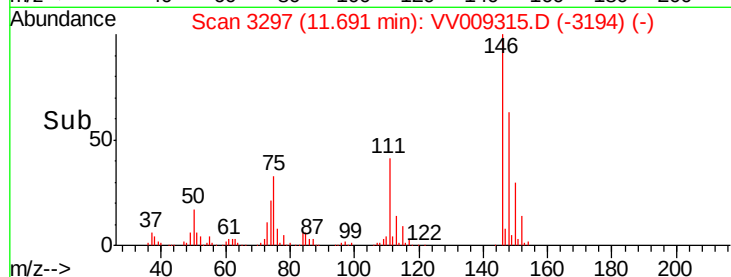
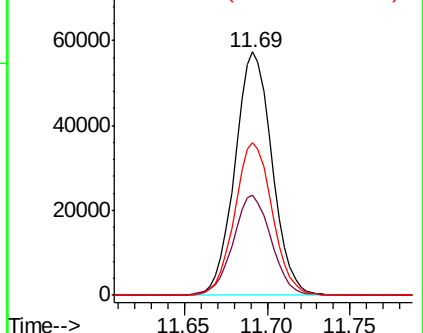
148 62.8 51.1 76.7



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 19.389 ug/L

RT: 12.48 min Scan# 3542

Delta R.T. 0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

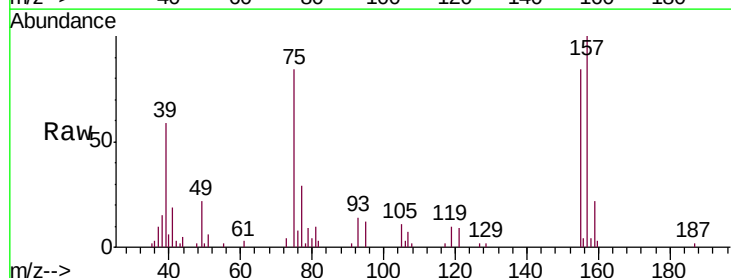
Tgt Ion: 75 Resp: 8679

Ion Ratio Lower Upper

75 100

157 119.3 88.6 133.0

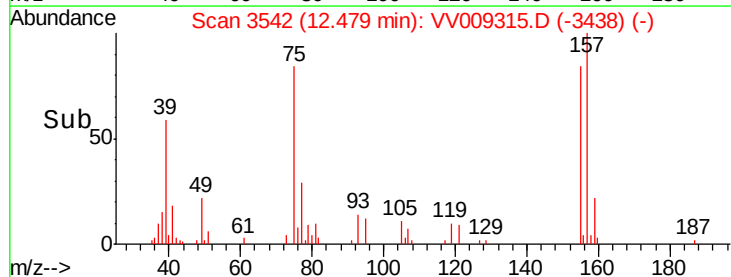
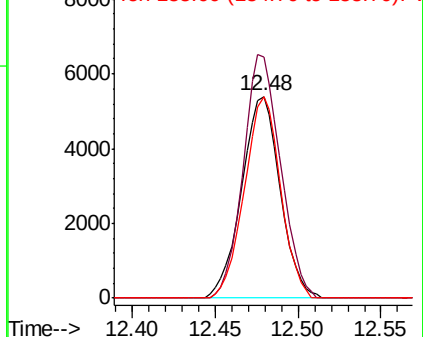
155 99.8 66.6 100.0

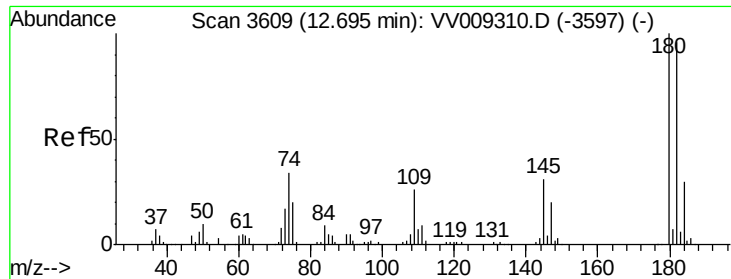


Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 157.00 (156.70 to 157.70): V

Ion 155.00 (154.70 to 155.70): V

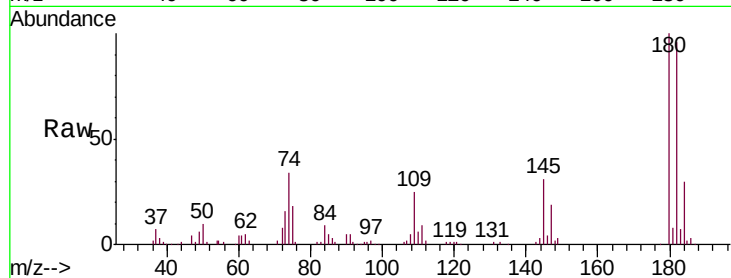




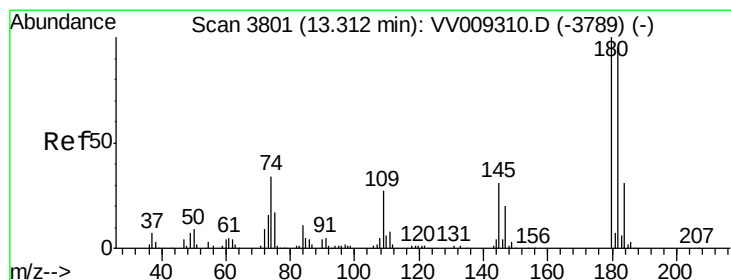
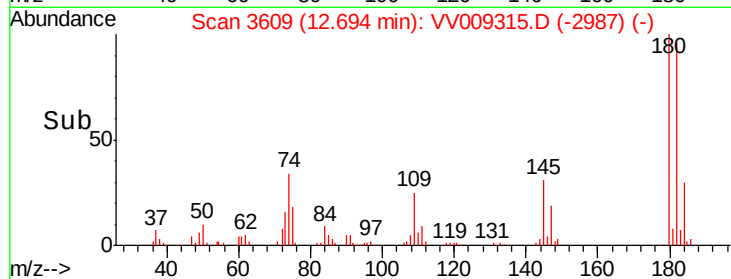
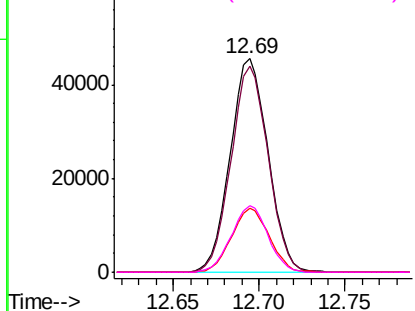
#67  
 1,3,5-Trichlorobenzene  
 Concen: 22.430 ug/L  
 RT: 12.69 min Scan# 3609  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02575

Tgt Ion:180 Resp: 69766  
 Ion Ratio Lower Upper  
 180 100  
 182 94.4 77.4 116.2  
 184 29.8 24.9 37.3  
 145 30.0 24.3 36.5

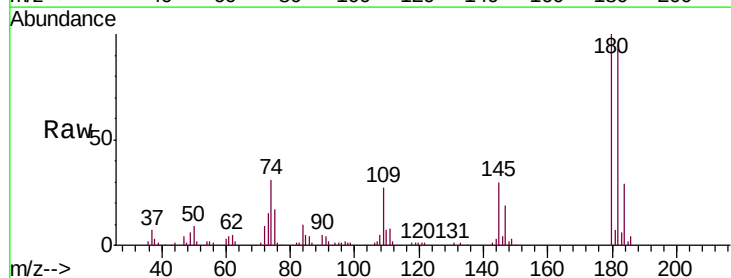


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

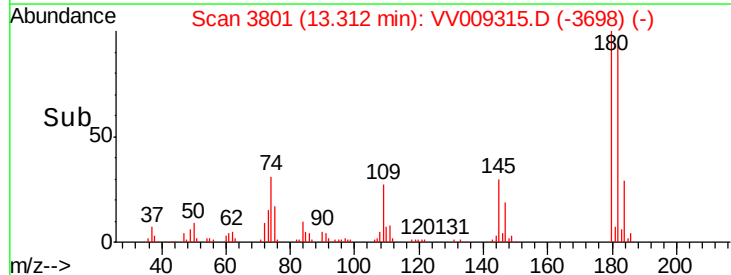
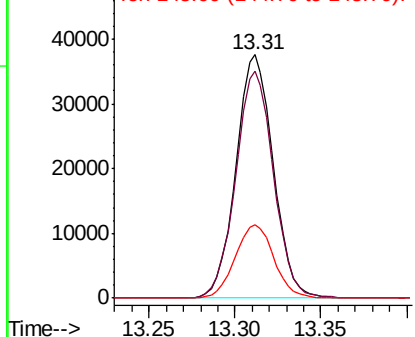


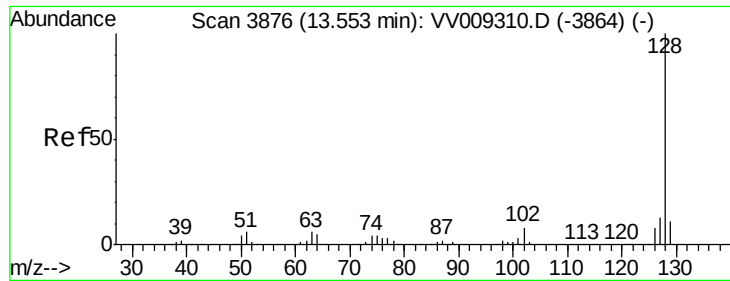
#68  
 1,2,4-trichlorobenzene  
 Concen: 22.317 ug/L  
 RT: 13.31 min Scan# 3801  
 Delta R.T. -0.00 min  
 Lab File: VV009315.D  
 Acq: 21 Feb 2019 09:54

Tgt Ion:180 Resp: 56637  
 Ion Ratio Lower Upper  
 180 100  
 182 94.4 76.7 115.1  
 145 31.2 25.1 37.7



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





#69

Naphthalene

Concen: 21.134 ug/L

RT: 13.55 min Scan# 3876

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02575

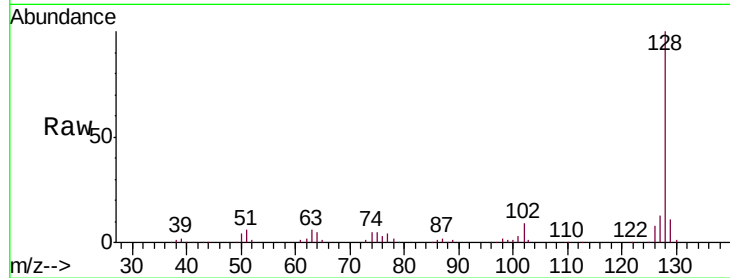
Tgt Ion:128 Resp: 114966

Ion Ratio Lower Upper

128 100

129 10.9 8.6 13.0

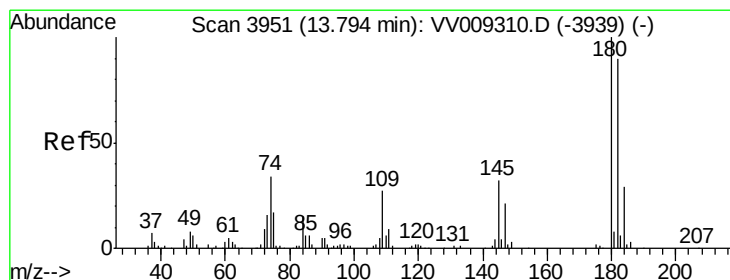
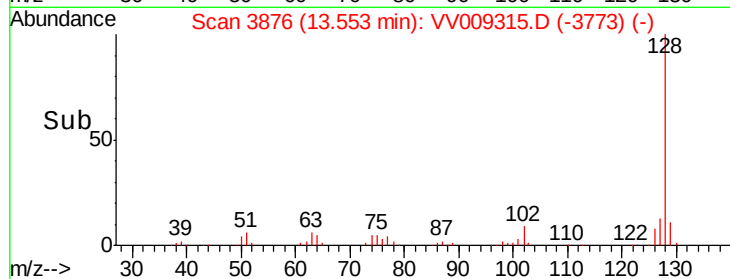
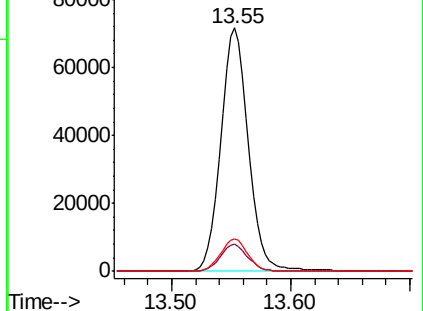
127 13.2 10.5 15.7



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: 21.976 ug/L

RT: 13.79 min Scan# 3951

Delta R.T. -0.00 min

Lab File: VV009315.D

Acq: 21 Feb 2019 09:54

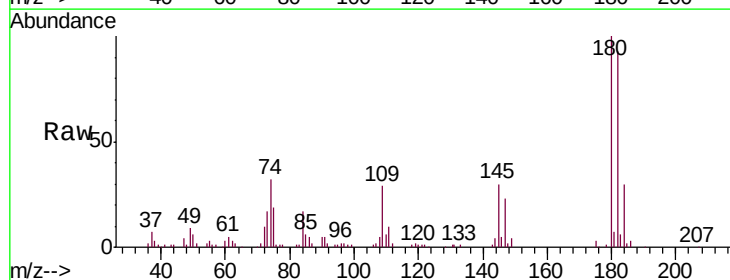
Tgt Ion:180 Resp: 51471

Ion Ratio Lower Upper

180 100

182 94.4 73.6 110.4

145 31.9 26.1 39.1



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

