

Data File : VV009292.D  
Acq On : 13 Feb 2019 13:51  
Operator : SY/MD  
Sample : VSTD02563  
Misc : 5.00G/10ML/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02563

Quant Time: Feb 13 14:18:44 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM021319S.M  
Quant Title : VOC Analysis  
QLast Update : Wed Feb 13 13:18:17 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 220407   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 218856   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 105492   | 25.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |       |     |        |       |      |       |
|--------------------------------|-------|-----|--------|-------|------|-------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 74784  | 19.85 | ug/L | 0.00  |
| 7) Chloroethane-d5             | 1.57  | 69  | 57607  | 23.99 | ug/L | -0.01 |
| 10) 1,1-Dichloroethene-d2      | 2.13  | 63  | 154881 | 20.00 | ug/L | 0.00  |
| 20) 2-Butanone-d5              | 3.94  | 46  | 73082  | 43.29 | ug/L | -0.01 |
| 24) Chloroform-d               | 4.40  | 84  | 140630 | 20.70 | ug/L | 0.00  |
| 26) 1,2-Dichloroethane-d4      | 5.08  | 65  | 84789  | 21.14 | ug/L | 0.00  |
| 29) Benzene-d6                 | 5.10  | 84  | 271649 | 19.99 | ug/L | 0.00  |
| 33) 1,2-Dichloropropane-d6     | 6.12  | 67  | 83687  | 19.81 | ug/L | 0.00  |
| 37) Toluene-d8                 | 7.36  | 98  | 252330 | 20.47 | ug/L | 0.00  |
| 38) trans-1,3-Dichloropropene- | 7.67  | 79  | 38854  | 20.66 | ug/L | 0.00  |
| 39) 2-Hexanone-d5              | 8.13  | 63  | 47778  | 46.61 | ug/L | 0.00  |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26 | 84  | 89234  | 21.39 | ug/L | 0.00  |
| 61) 1,2-Dichlorobenzene-d4     | 11.68 | 152 | 88441  | 21.36 | ug/L | 0.00  |

#### Target Compounds

|                                |      |     |        |        |      | Qvalue |
|--------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 87120  | 21.293 | ug/L | 98     |
| 3) Chloromethane               | 1.25 | 50  | 98084  | 22.244 | ug/L | 98     |
| 5) Vinyl chloride              | 1.33 | 62  | 96137  | 21.856 | ug/L | 98     |
| 6) Bromomethane                | 1.51 | 94  | 39507  | 18.816 | ug/L | 99     |
| 8) Chloroethane                | 1.59 | 64  | 58466  | 24.842 | ug/L | 98     |
| 9) Trichlorofluoromethane      | 1.76 | 101 | 139985 | 22.956 | ug/L | 98     |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 77449  | 22.023 | ug/L | 98     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 69132  | 21.552 | ug/L | 92     |
| 13) Acetone                    | 2.19 | 43  | 111352 | 46.473 | ug/L | 100    |
| 14) Carbon disulfide           | 2.32 | 76  | 269658 | 21.960 | ug/L | 99     |
| 15) Methyl Acetate             | 2.46 | 43  | 70960  | 24.427 | ug/L | 96     |
| 16) Methylene chloride         | 2.54 | 84  | 92437  | 19.951 | ug/L | 97     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 205361 | 23.716 | ug/L | 100    |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 82402  | 22.579 | ug/L | 99     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 156949 | 22.591 | ug/L | 98     |
| 21) 2-Butanone                 | 4.02 | 43  | 114244 | 47.003 | ug/L | 97     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 85357  | 22.770 | ug/L | 98     |
| 23) Bromochloromethane         | 4.30 | 128 | 38288  | 22.767 | ug/L | 98     |
| 25) Chloroform                 | 4.43 | 83  | 158517 | 23.080 | ug/L | 99     |
| 27) 1,2-Dichloroethane         | 5.18 | 62  | 122067 | 24.764 | ug/L | 100    |
| 30) Cyclohexane                | 4.73 | 56  | 148951 | 21.487 | ug/L | 100    |
| 31) 1,1,1-Trichloroethane      | 4.66 | 97  | 136267 | 21.434 | ug/L | 99     |
| 32) Carbon tetrachloride       | 4.88 | 117 | 119515 | 21.263 | ug/L | 100    |
| 34) Benzene                    | 5.15 | 78  | 334335 | 22.297 | ug/L | 100    |
| 35) Trichloroethene            | 5.96 | 95  | 89282  | 21.957 | ug/L | 99     |
| 36) Methylcyclohexane          | 6.18 | 83  | 144006 | 21.190 | ug/L | 99     |
| 40) 1,2-Dichloropropane        | 6.22 | 63  | 86994  | 22.027 | ug/L | 100    |
| 41) Bromodichloromethane       | 6.56 | 83  | 113529 | 22.238 | ug/L | 97     |
| 42) cis-1,3-Dichloropropene    | 7.07 | 75  | 131962 | 22.883 | ug/L | 100    |
| 43) 4-Methyl-2-pentanone       | 7.27 | 43  | 174431 | 46.175 | ug/L | 99     |

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ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02563

Quant Time: Feb 13 14:18:44 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM021319S.M  
Quant Title : VOC Analysis  
QLast Update : Wed Feb 13 13:18:17 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 44) Toluene                    | 7.43  | 91   | 360234   | 22.897 | ug/L  | 99       |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 115622   | 22.499 | ug/L  | 98       |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 68083    | 22.651 | ug/L  | 96       |
| 47) Tetrachloroethene          | 8.02  | 164  | 67998    | 22.180 | ug/L  | 98       |
| 49) 2-Hexanone                 | 8.18  | 43   | 148293   | 45.779 | ug/L  | 95       |
| 50) Dibromochloromethane       | 8.29  | 129  | 78162    | 22.647 | ug/L  | 95       |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 68683    | 22.796 | ug/L  | 98       |
| 52) Chlorobenzene              | 8.93  | 112  | 226244   | 22.760 | ug/L  | 98       |
| 53) Ethylbenzene               | 9.06  | 91   | 400507   | 22.977 | ug/L  | 100      |
| 54) m,p-Xylene                 | 9.18  | 106  | 150782   | 23.492 | ug/L  | 96       |
| 55) o-xylene                   | 9.59  | 106  | 140644   | 23.158 | ug/L  | 99       |
| 56) Styrene                    | 9.61  | 104  | 242570   | 23.723 | ug/L  | 98       |
| 57) Isopropylbenzene           | 9.98  | 105  | 386343   | 23.181 | ug/L  | 98       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 104416   | 23.803 | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 80467    | 23.441 | ug/L  | 99       |
| 62) Bromoform                  | 9.78  | 173  | 48349    | 23.134 | ug/L  | 98       |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 175899   | 23.526 | ug/L  | 99       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 175473   | 23.222 | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 167234   | 23.890 | ug/L  | 100      |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 20883    | 23.610 | ug/L  | 99       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 129582   | 23.342 | ug/L  | 100      |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 101405   | 23.444 | ug/L  | 98       |
| 69) Naphthalene                | 13.55 | 128  | 205235   | 23.528 | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.80 | 180  | 95381    | 24.265 | ug/L  | 99       |

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

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```
ALS Vial      : 1      Sample Multiplier: 1
```

**Instrument :**  
MSVOA\_V  
**ClientSampleId :**  
VSTD02563

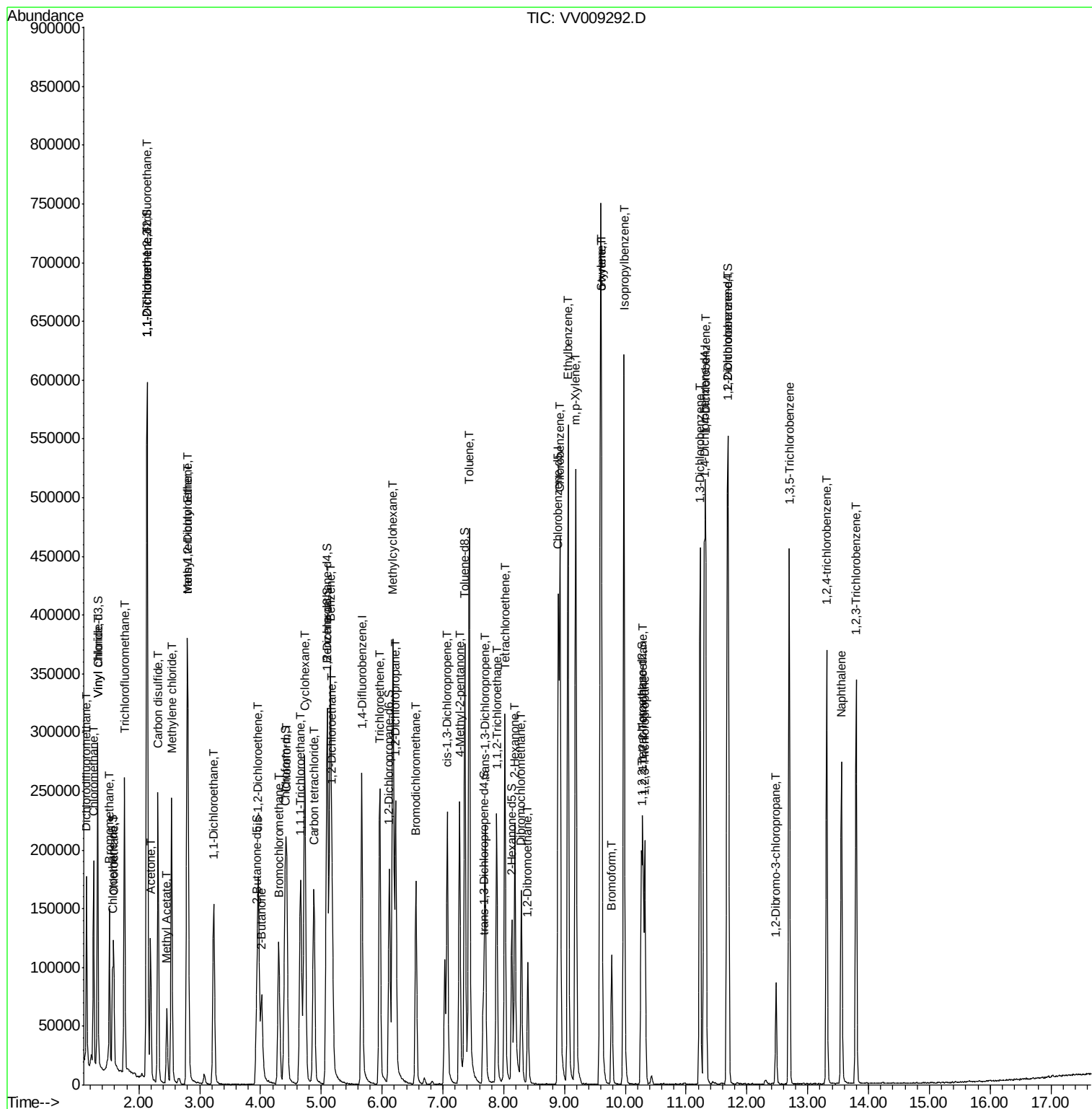
Quant Time: Feb 13 14:18:44 2019

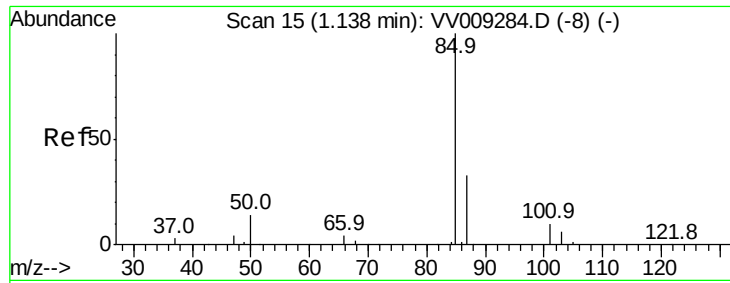
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A\_V\METHOD\S0M2VLM021319S.M

Quant Title : VOC Analysis

QLast Update : Wed Feb 13 13:18:17 2019

Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 21.293 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

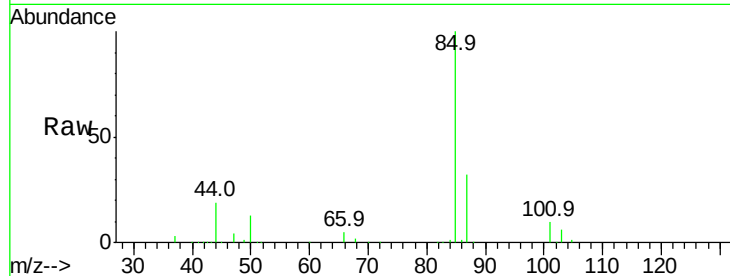
VSTD02563

Tgt Ion: 85 Resp: 87120

Ion Ratio Lower Upper

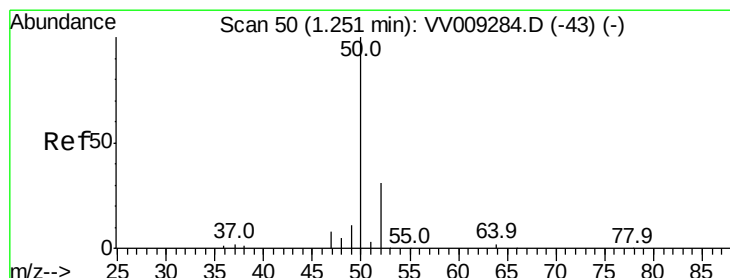
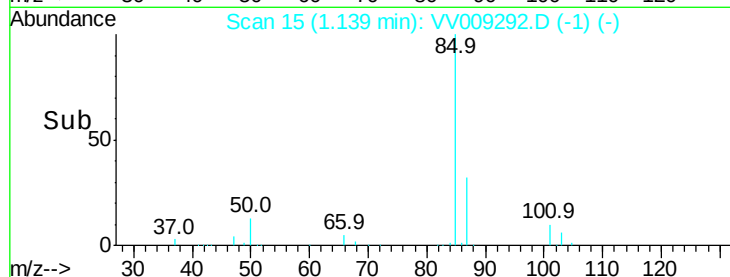
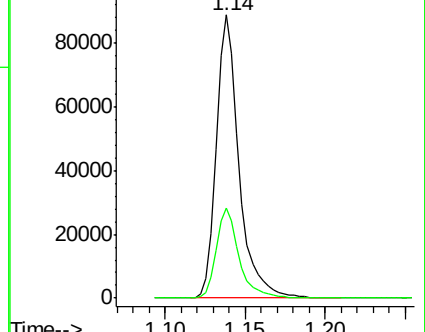
85 100

87 31.7 22.7 42.3



Abundance Ion 85.00 (84.70 to 85.70): VV009292.D (-1) (-)

Ion 87.00 (86.70 to 87.70): VV009292.D (-1) (-)



#3

Chloromethane

Concen: 22.244 ug/L

RT: 1.25 min Scan# 51

Delta R.T. 0.00 min

Lab File: VV009292.D

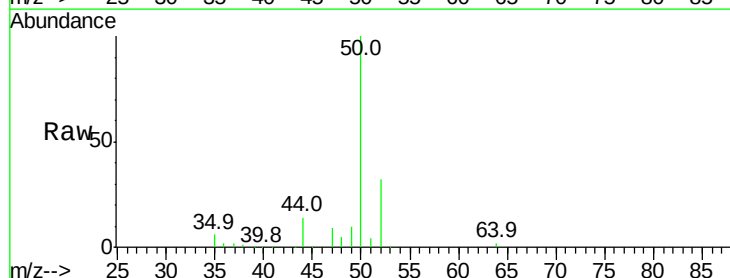
Acq: 13 Feb 2019 13:51

Tgt Ion: 50 Resp: 98084

Ion Ratio Lower Upper

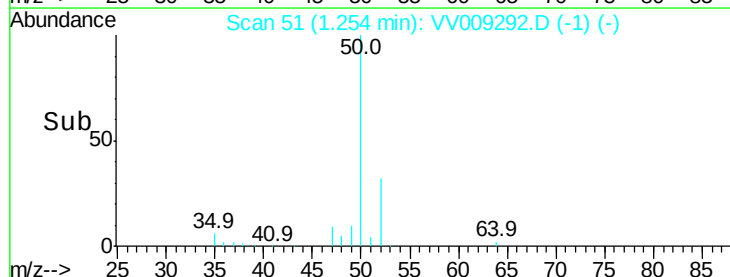
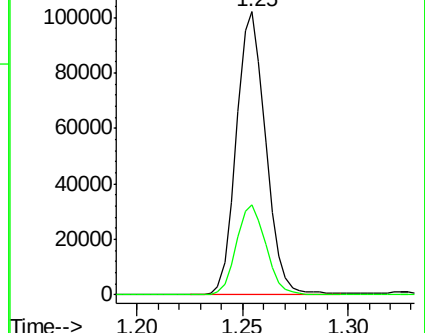
50 100

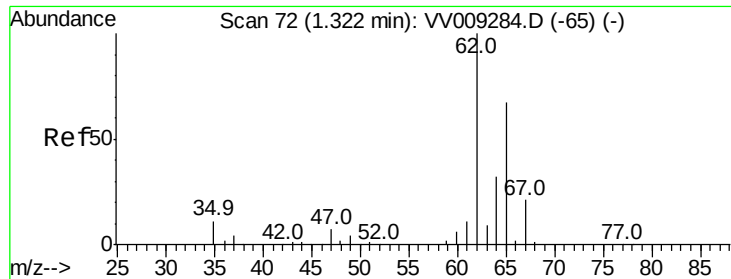
52 31.9 21.5 39.9



Abundance Ion 50.00 (49.70 to 50.70): VV009292.D (-1) (-)

Ion 52.00 (51.70 to 52.70): VV009292.D (-1) (-)





#5

Vinyl chloride

Concen: 21.856 ug/L

RT: 1.33 min Scan# 73

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

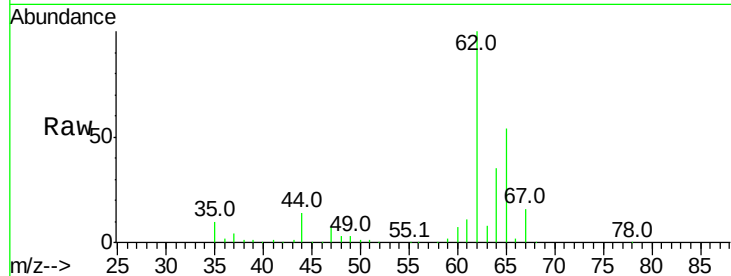
VSTD02563

Tgt Ion: 62 Resp: 96137

Ion Ratio Lower Upper

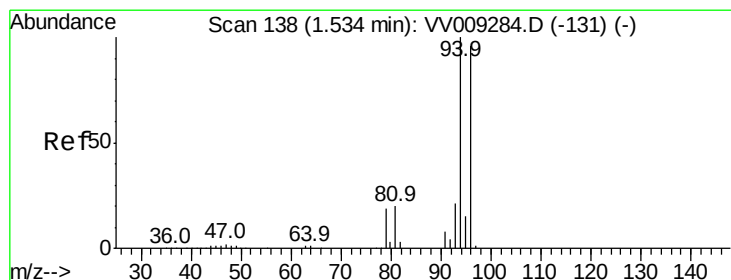
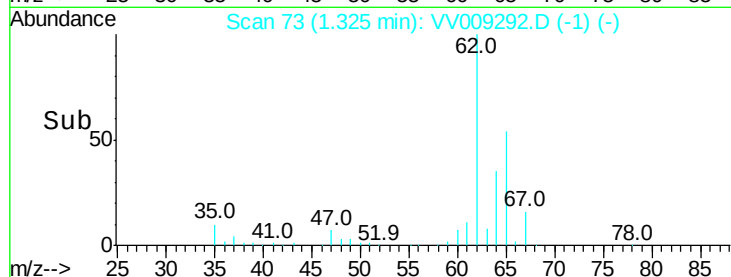
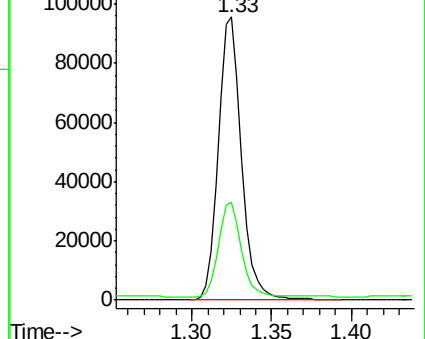
62 100

64 34.6 24.9 46.3



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.00 (63.70 to 64.70): VV0



#6

Bromomethane

Concen: 18.816 ug/L

RT: 1.51 min Scan# 132

Delta R.T. -0.02 min

Lab File: VV009292.D

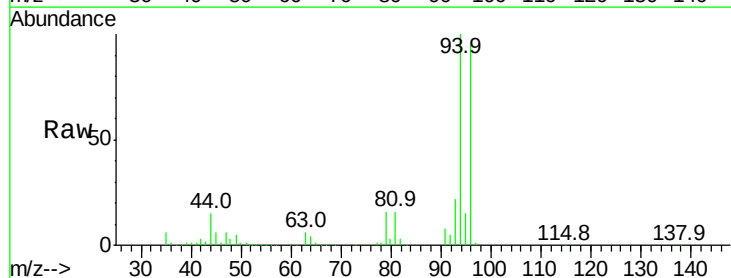
Acq: 13 Feb 2019 13:51

Tgt Ion: 94 Resp: 39507

Ion Ratio Lower Upper

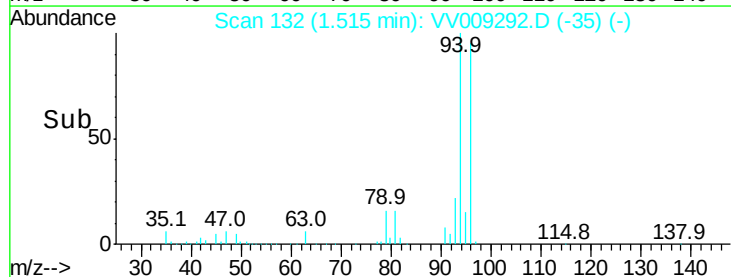
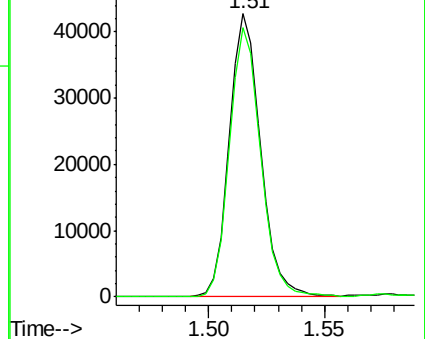
94 100

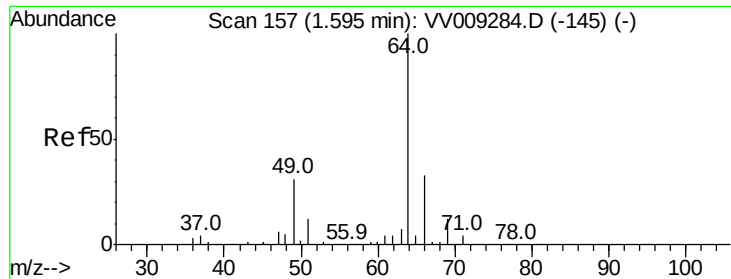
96 95.8 9.5 179.7



Abundance Ion 94.00 (93.70 to 94.70): VV0

Ion 96.00 (95.70 to 96.70): VV0





#8

Chloroethane

Concen: 24.842 ug/L

RT: 1.59 min Scan# 154

Delta R.T. -0.01 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

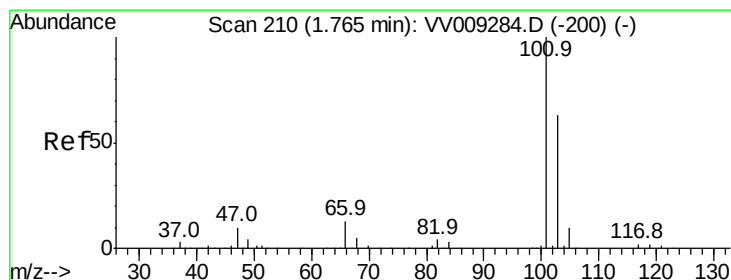
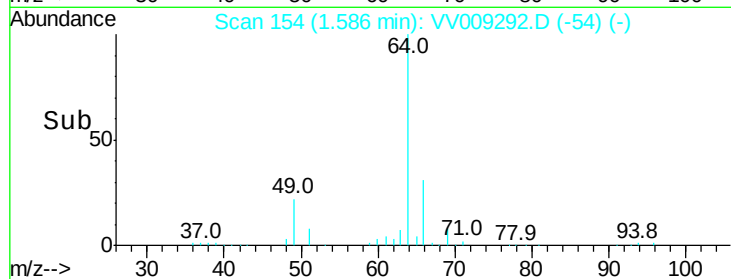
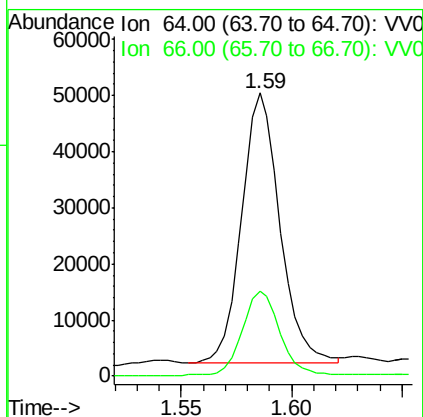
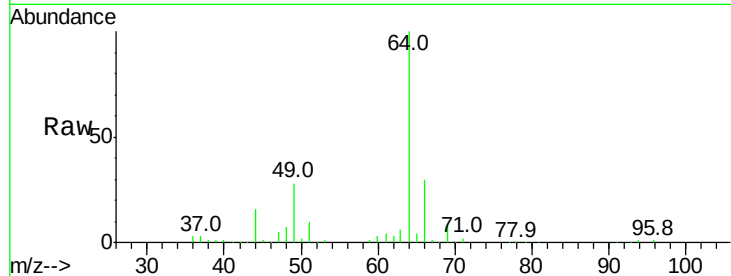
VSTD02563

Tgt Ion: 64 Resp: 58466

Ion Ratio Lower Upper

64 100

66 30.2 21.9 40.7



#9

Trichlorofluoromethane

Concen: 22.956 ug/L

RT: 1.76 min Scan# 209

Delta R.T. -0.00 min

Lab File: VV009292.D

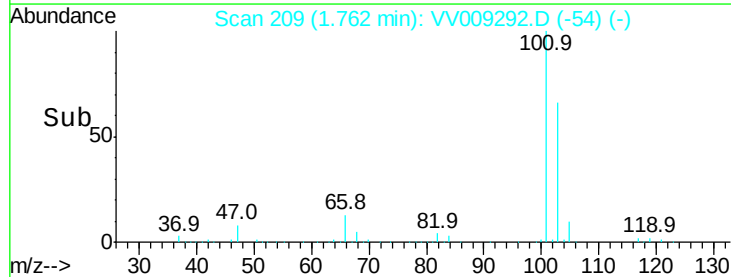
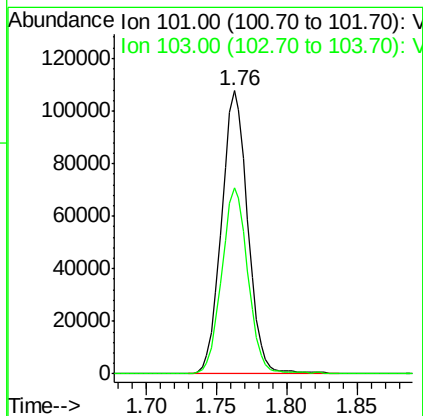
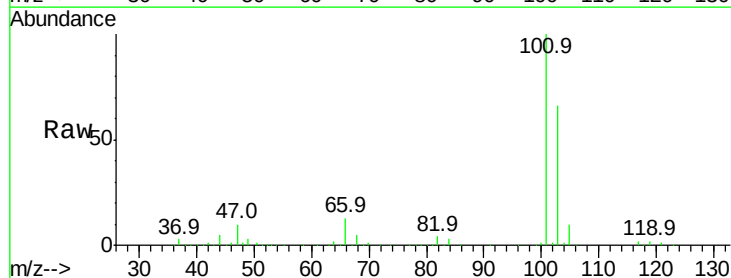
Acq: 13 Feb 2019 13:51

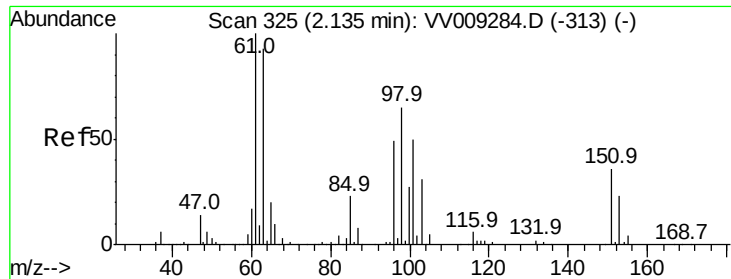
Tgt Ion: 101 Resp: 139985

Ion Ratio Lower Upper

101 100

103 65.5 44.6 82.8





#11

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

Concen: 22.023 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02563

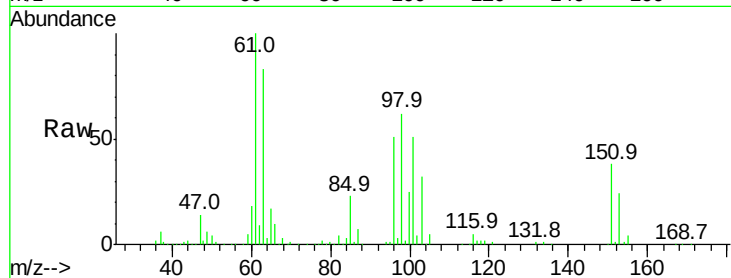
Tgt Ion: 101 Resp: 77449

Ion Ratio Lower Upper

101 100

85 45.2 36.5 54.7

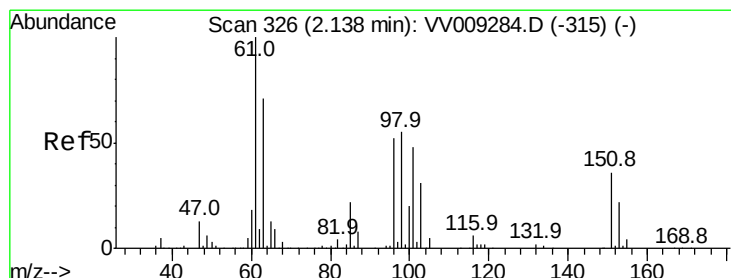
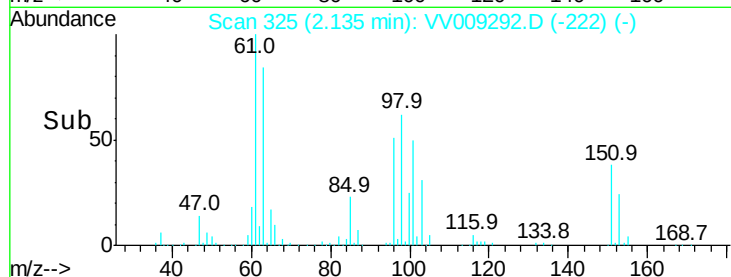
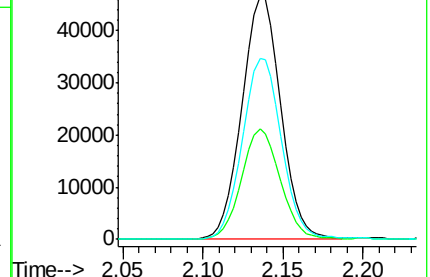
151 74.9 58.4 87.6



Abundance Ion 101.00 (100.70 to 101.70): VV009292.D (-222) (-)

Ion 85.00 (84.70 to 85.70): VV009292.D (-222) (-)

Ion 151.00 (150.70 to 151.70): VV009292.D (-222) (-)



#12

1,1-Dichloroethene

Concen: 21.552 ug/L

RT: 2.14 min Scan# 326

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

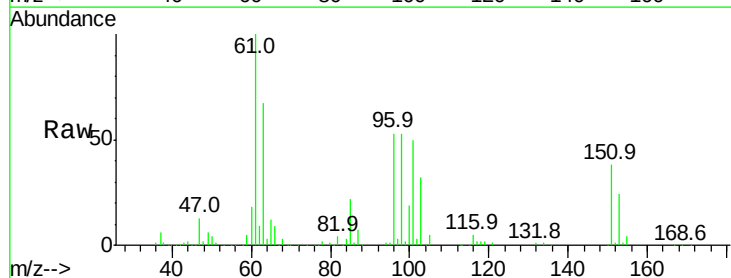
Tgt Ion: 96 Resp: 69132

Ion Ratio Lower Upper

96 100

61 188.3 136.3 253.1

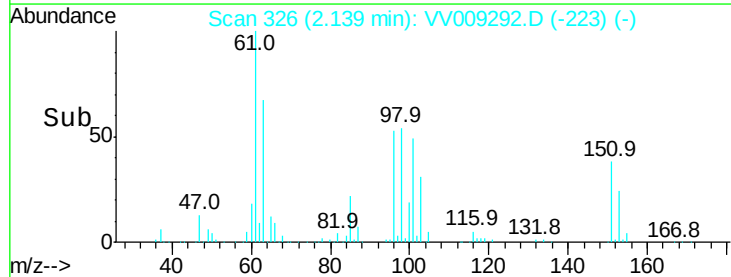
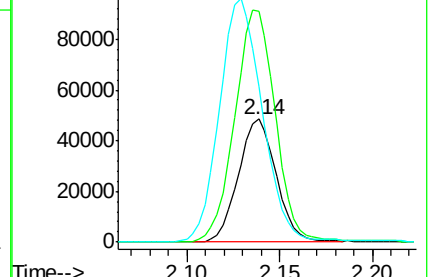
63 126.9 100.0 185.8

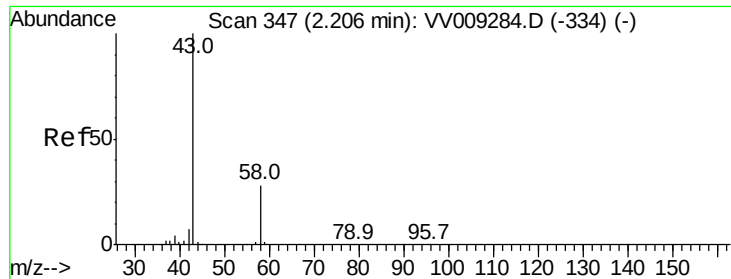


Abundance Ion 96.00 (95.70 to 96.70): VV009292.D (-223) (-)

Ion 61.00 (60.70 to 61.70): VV009292.D (-223) (-)

Ion 63.00 (62.70 to 63.70): VV009292.D (-223) (-)





#13

Acetone

Concen: 46.473 ug/L

RT: 2.19 min Scan# 342

Delta R.T. -0.02 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

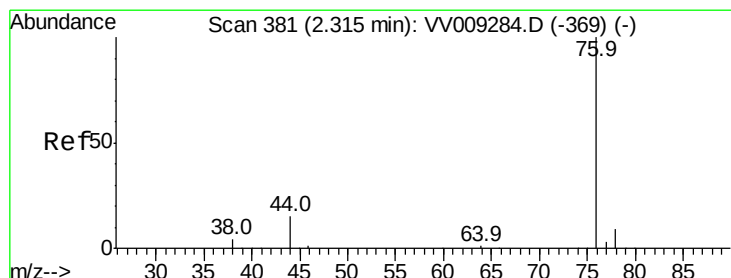
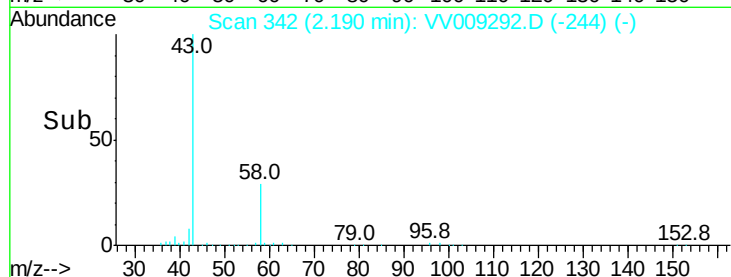
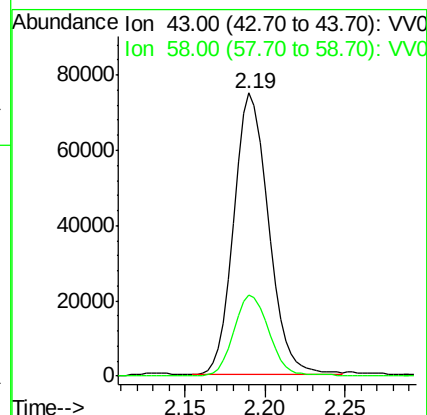
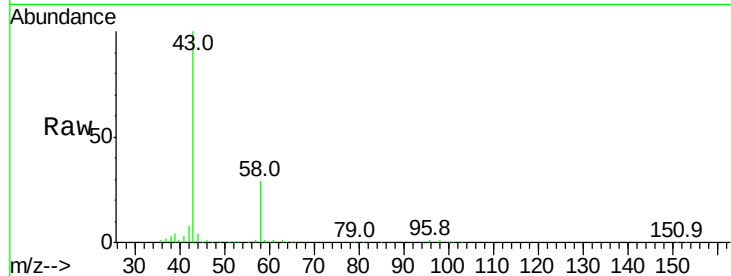
VSTD02563

Tgt Ion: 43 Resp: 111352

Ion Ratio Lower Upper

43 100

58 28.6 0.0 57.4



#14

Carbon disulfide

Concen: 21.960 ug/L

RT: 2.32 min Scan# 381

Delta R.T. 0.00 min

Lab File: VV009292.D

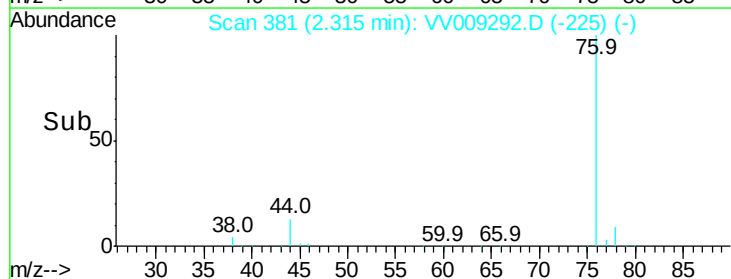
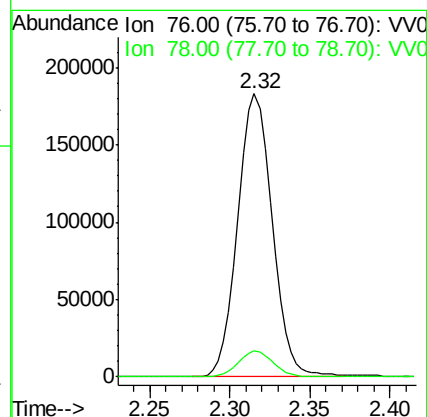
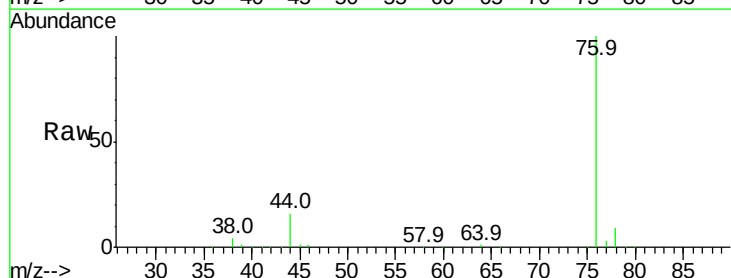
Acq: 13 Feb 2019 13:51

Tgt Ion: 76 Resp: 269658

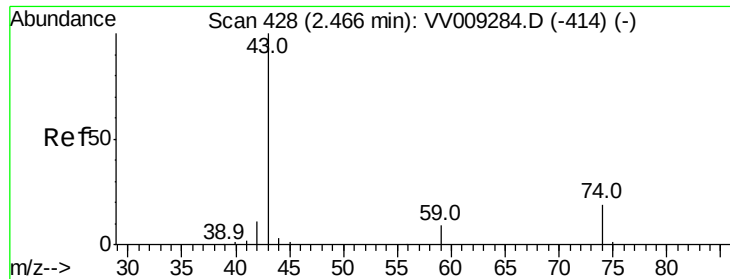
Ion Ratio Lower Upper

76 100

78 9.1 7.0 10.6







#15

Methyl Acetate

Concen: 24.427 ug/L

RT: 2.46 min Scan# 426

Delta R.T. -0.01 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

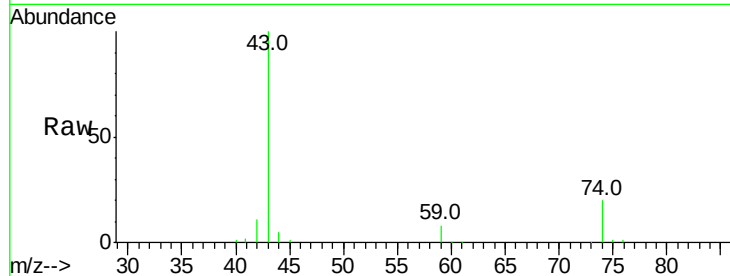
VSTD02563

Tgt Ion: 43 Resp: 70960

Ion Ratio Lower Upper

43 100

74 20.4 14.8 22.2



Abundance Ion 43.00 (42.70 to 43.70): VV009292.D (-325) (-)

Ion 74.00 (73.70 to 74.70): VV009292.D (-325) (-)

2.46

50000

40000

30000

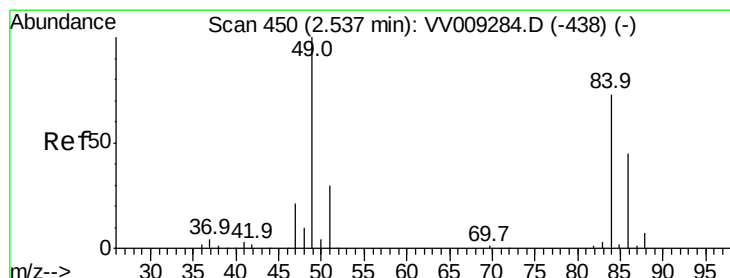
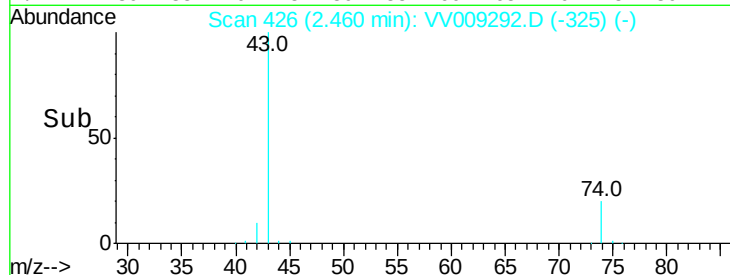
20000

10000

0

Time-->

2.40 2.45 2.50 2.55



#16

Methylene chloride

Concen: 19.951 ug/L

RT: 2.54 min Scan# 450

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

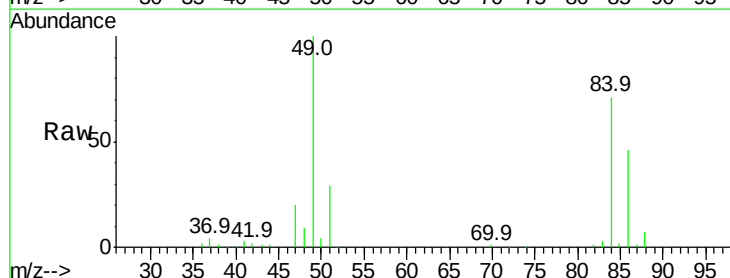
Tgt Ion: 84 Resp: 92437

Ion Ratio Lower Upper

84 100

49 140.6 96.2 178.6

86 64.4 43.5 80.7



Abundance Ion 84.00 (83.70 to 84.70): VV009292.D (-347) (-)

Ion 49.00 (48.70 to 49.70): VV009292.D (-347) (-)

Ion 86.00 (85.70 to 86.70): VV009292.D (-347) (-)

2.54

100000

80000

60000

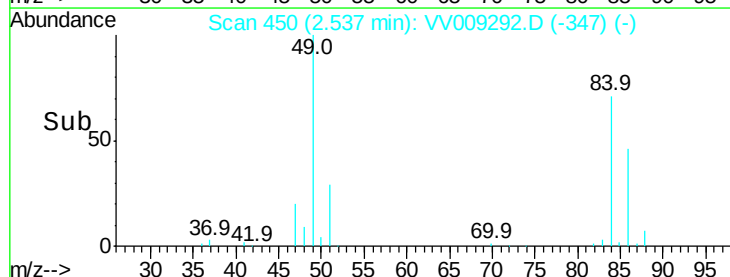
40000

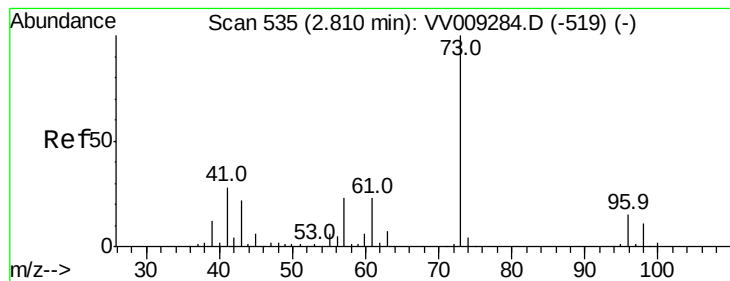
20000

0

Time-->

2.45 2.50 2.55 2.60





#17

Methyl tert-butyl Ether

Concen: 23.716 ug/L

RT: 2.81 min Scan# 534

Delta R.T. -0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02563

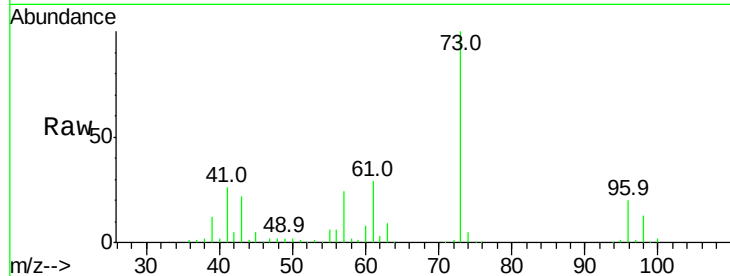
Tgt Ion: 73 Resp: 205361

Ion Ratio Lower Upper

73 100

43 22.8 18.3 27.5

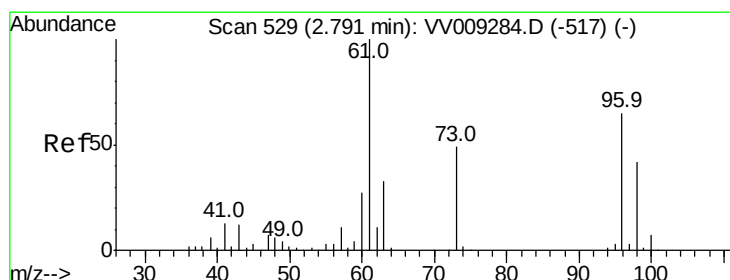
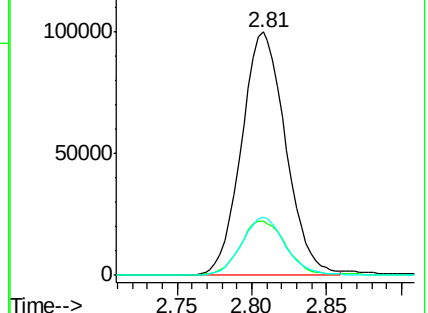
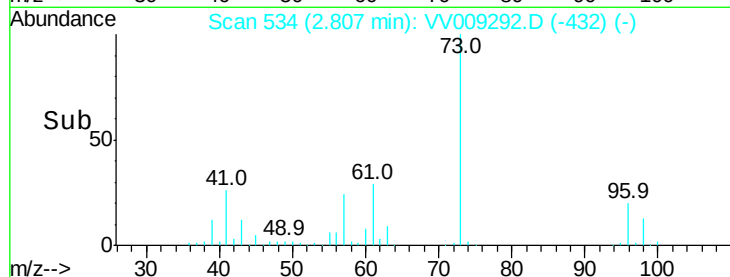
57 23.7 18.8 28.2



Abundance Ion 73.00 (72.70 to 73.70): VV009292.D (-432) (-)

Ion 43.00 (42.70 to 43.70): VV009292.D (-432) (-)

Ion 57.00 (56.70 to 57.70): VV009292.D (-432) (-)



#18

trans-1,2-Dichloroethene

Concen: 22.579 ug/L

RT: 2.79 min Scan# 529

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

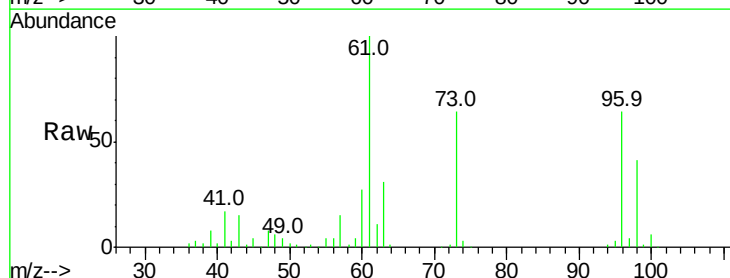
Tgt Ion: 96 Resp: 82402

Ion Ratio Lower Upper

96 100

61 155.7 108.4 201.2

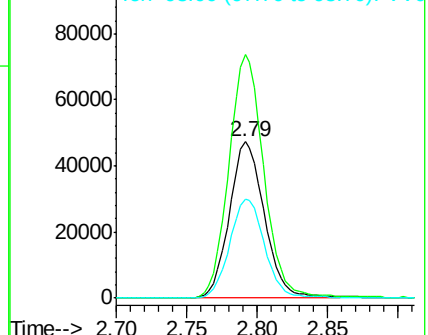
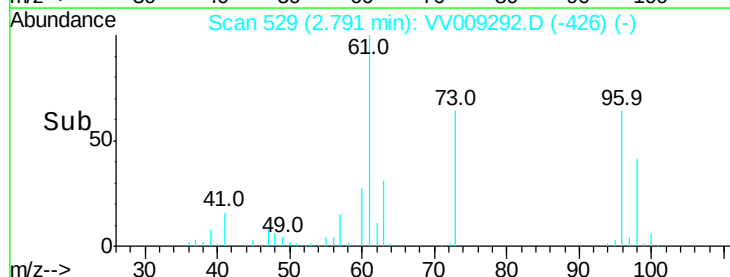
98 63.3 45.0 83.6

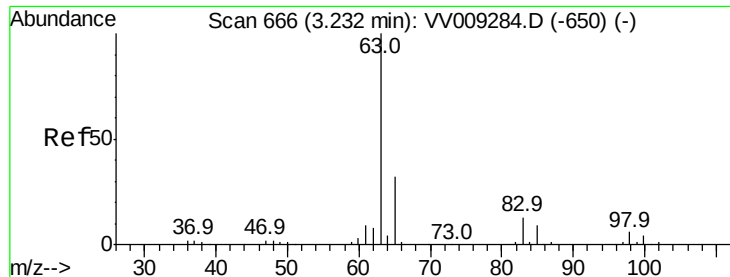


Abundance Ion 96.00 (95.70 to 96.70): VV009292.D (-426) (-)

Ion 61.00 (60.70 to 61.70): VV009292.D (-426) (-)

Ion 98.00 (97.70 to 98.70): VV009292.D (-426) (-)

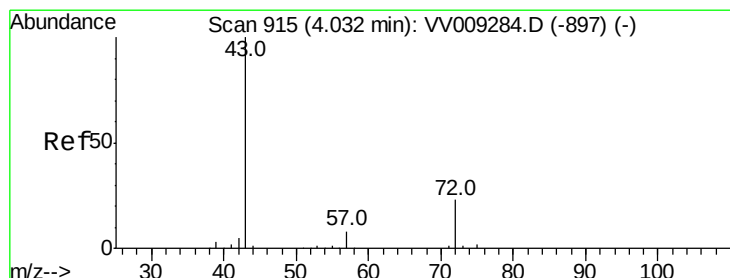
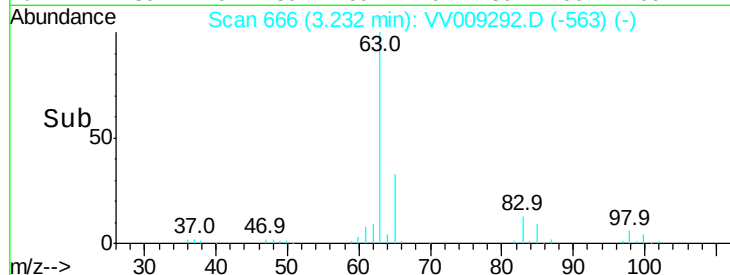
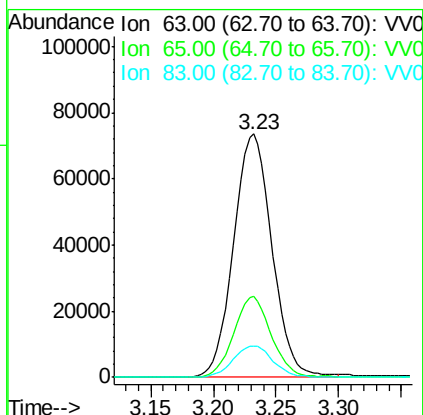
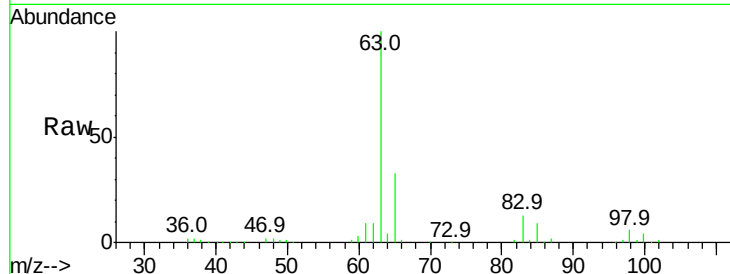




#19  
 1,1-Dichloroethane  
 Concen: 22.591 ug/L  
 RT: 3.23 min Scan# 666  
 Delta R.T. 0.00 min  
 Lab File: VV009292.D  
 Acq: 13 Feb 2019 13:51

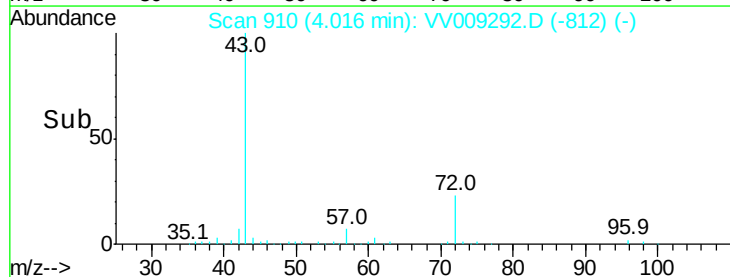
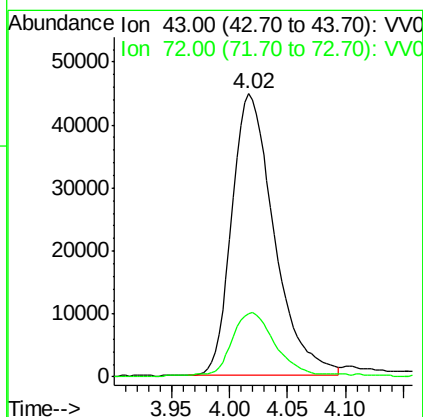
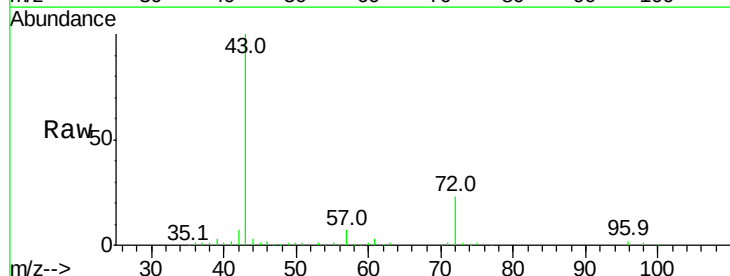
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02563

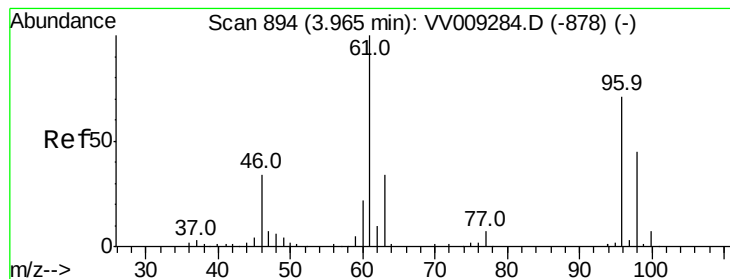
Tgt Ion: 63 Resp: 156949  
 Ion Ratio Lower Upper  
 63 100  
 65 33.3 22.5 41.7  
 83 13.0 9.4 17.6



#21  
 2-Butanone  
 Concen: 47.003 ug/L  
 RT: 4.02 min Scan# 910  
 Delta R.T. -0.02 min  
 Lab File: VV009292.D  
 Acq: 13 Feb 2019 13:51

Tgt Ion: 43 Resp: 114244  
 Ion Ratio Lower Upper  
 43 100  
 72 22.5 10.5 31.6





#22

cis-1,2-Dichloroethene

Concen: 22.770 ug/L

RT: 3.96 min Scan# 894

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02563

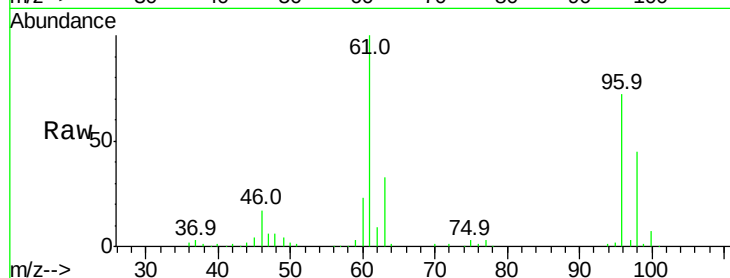
Tgt Ion: 96 Resp: 85357

Ion Ratio Lower Upper

96 100

61 138.4 99.3 184.5

98 62.9 44.4 82.4

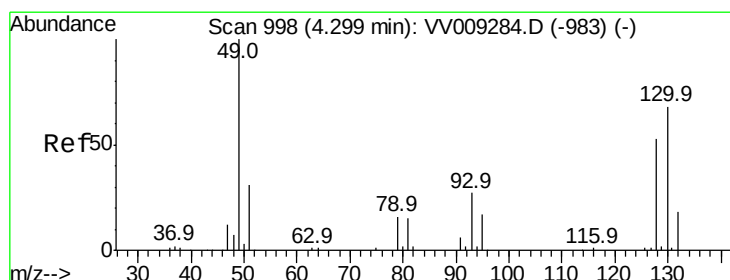
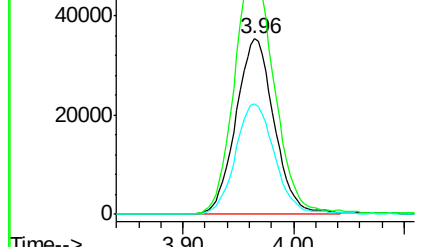
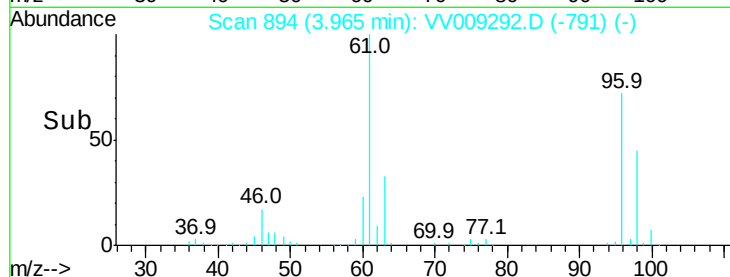


Abundance Ion 96.00 (95.70 to 96.70): VV009292.D (-895) (-)

Ion 61.00 (60.70 to 61.70): VV009292.D (-895) (-)

Ion 98.00 (97.70 to 98.70): VV009292.D (-895) (-)

Time-->



#23

Bromochloromethane

Concen: 22.767 ug/L

RT: 4.30 min Scan# 998

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Tgt Ion:128 Resp: 38288

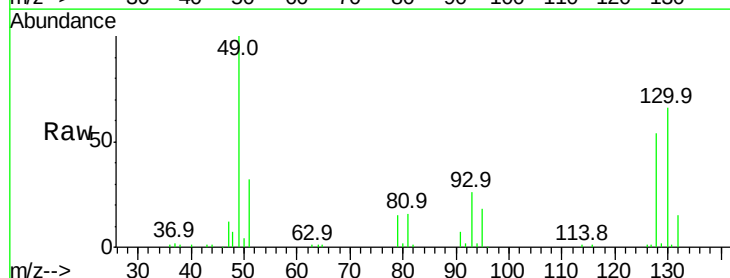
Ion Ratio Lower Upper

128 100

49 186.6 132.6 246.2

130 122.7 89.0 165.2

51 59.0 46.5 69.7



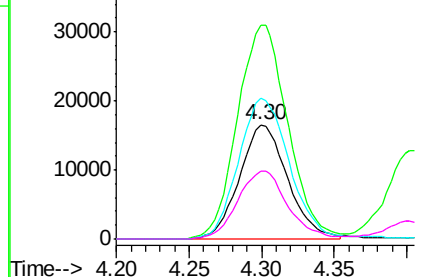
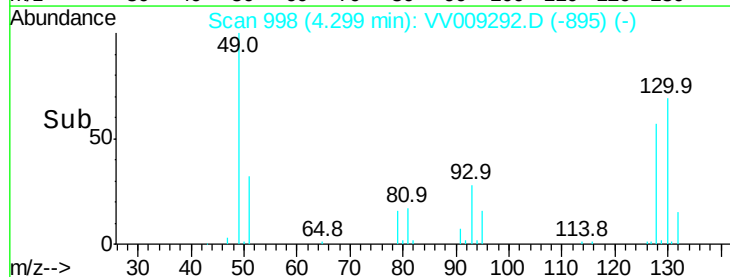
Abundance Ion 128.00 (127.70 to 128.70): VV009292.D (-895) (-)

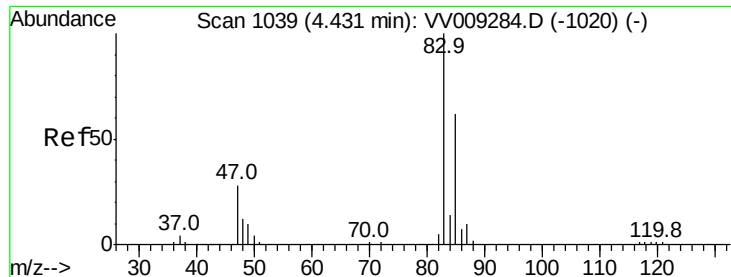
Ion 49.00 (48.70 to 49.70): VV009292.D (-895) (-)

Ion 130.00 (129.70 to 130.70): VV009292.D (-895) (-)

Ion 51.00 (50.70 to 51.70): VV009292.D (-895) (-)

Time-->

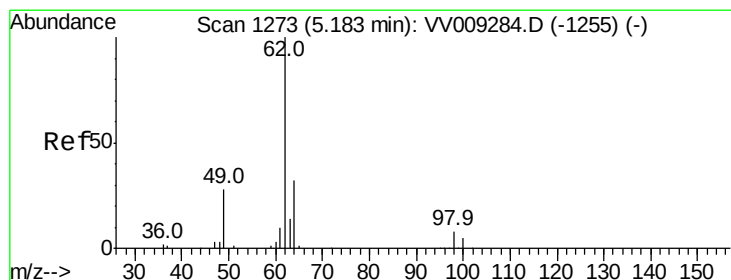
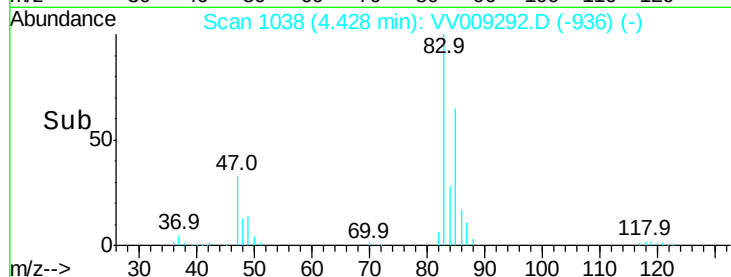
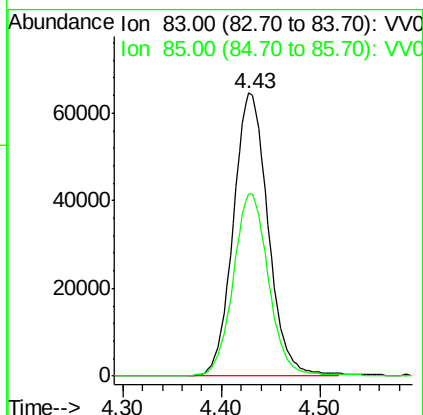
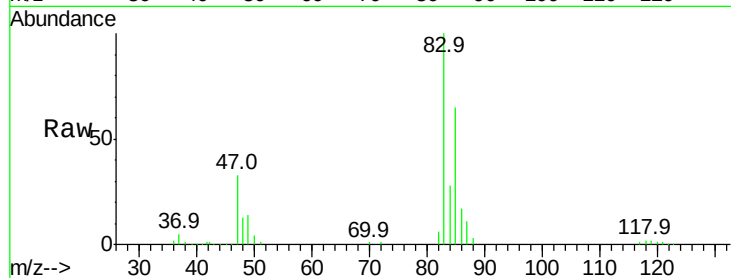




#25  
Chloroform  
Concen: 23.080 ug/L  
RT: 4.43 min Scan# 1038  
Delta R.T. -0.00 min  
Lab File: VV009292.D  
Acq: 13 Feb 2019 13:51

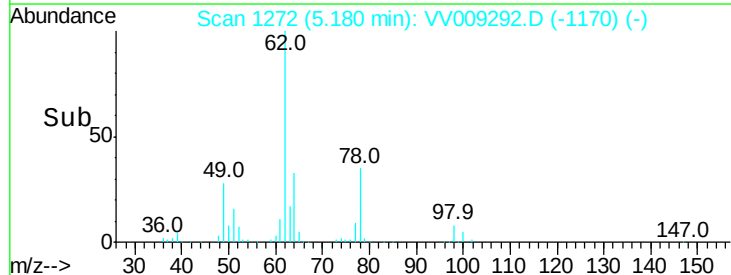
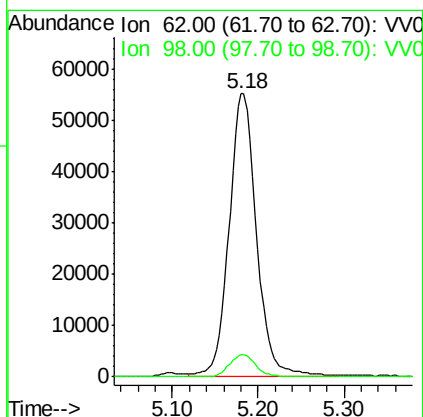
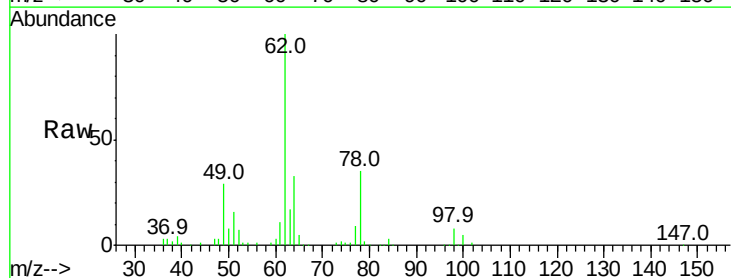
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02563

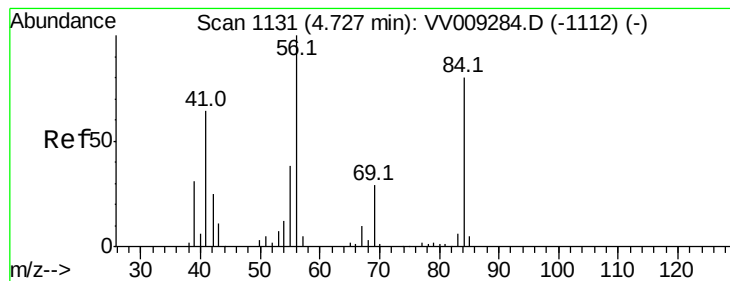
Tgt Ion: 83 Resp: 158517  
Ion Ratio Lower Upper  
83 100  
85 65.1 44.9 83.3



#27  
1,2-Dichloroethane  
Concen: 24.764 ug/L  
RT: 5.18 min Scan# 1272  
Delta R.T. -0.00 min  
Lab File: VV009292.D  
Acq: 13 Feb 2019 13:51

Tgt Ion: 62 Resp: 122067  
Ion Ratio Lower Upper  
62 100  
98 7.8 6.2 9.2





#30

Cyclohexane

Concen: 21.487 ug/L

RT: 4.73 min Scan# 1131

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02563

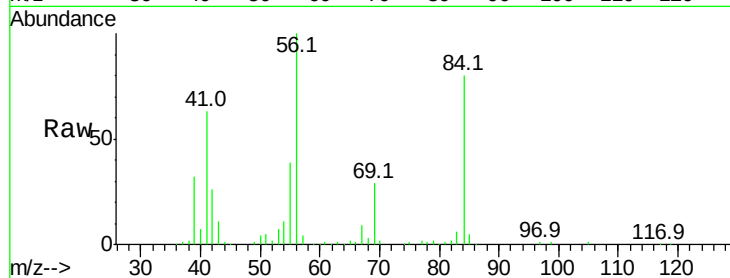
Tgt Ion: 56 Resp: 148951

Ion Ratio Lower Upper

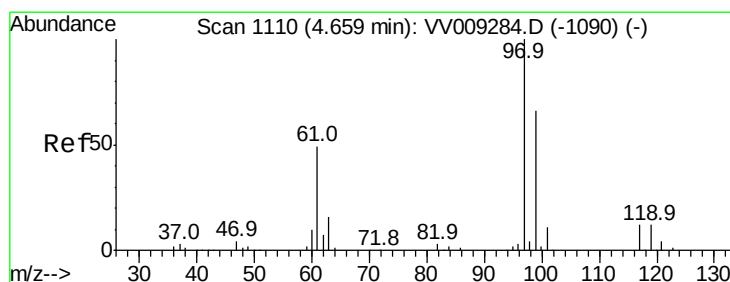
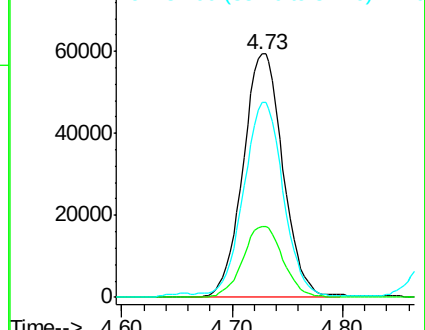
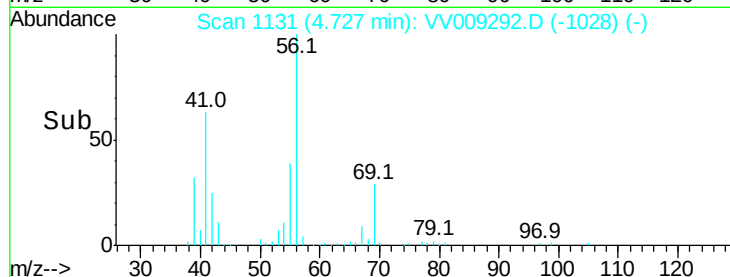
56 100

69 29.4 23.8 35.6

84 77.7 62.4 93.6



Abundance Ion 56.00 (55.70 to 56.70): VV009292.D (-1028) (-)



#31

1,1,1-Trichloroethane

Concen: 21.434 ug/L

RT: 4.66 min Scan# 1110

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

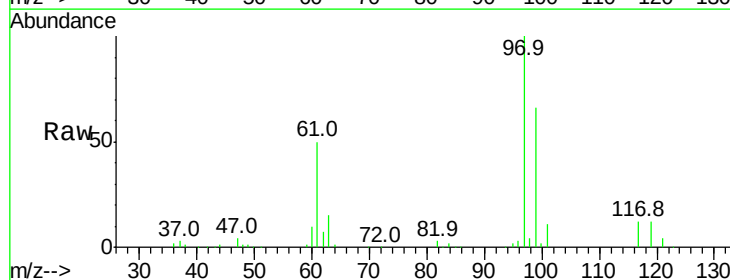
Tgt Ion: 97 Resp: 136267

Ion Ratio Lower Upper

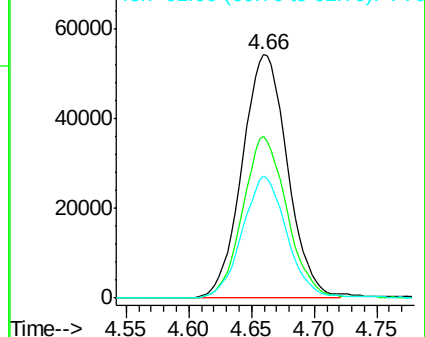
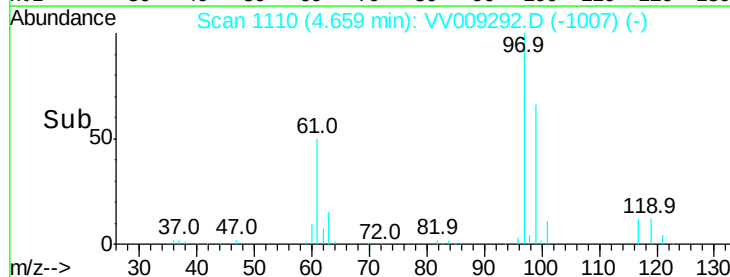
97 100

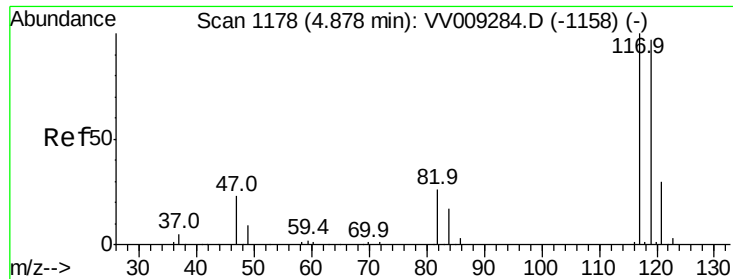
99 64.6 51.5 77.3

61 49.3 39.0 58.4



Abundance Ion 97.00 (96.70 to 97.70): VV009292.D (-1007) (-)





#32

Carbon tetrachloride

Concen: 21.263 ug/L

RT: 4.88 min Scan# 1178

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

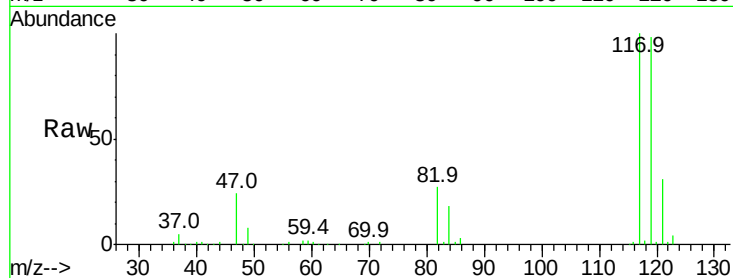
VSTD02563

Tgt Ion:117 Resp: 119515

Ion Ratio Lower Upper

117 100

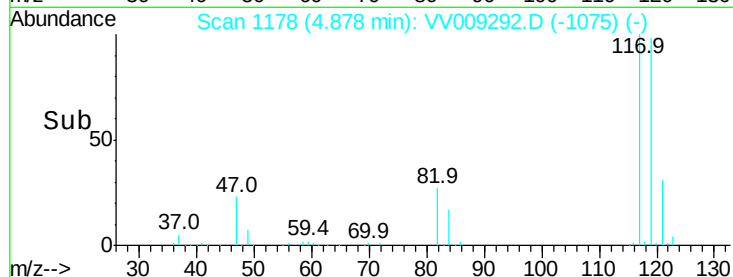
119 96.9 77.3 115.9



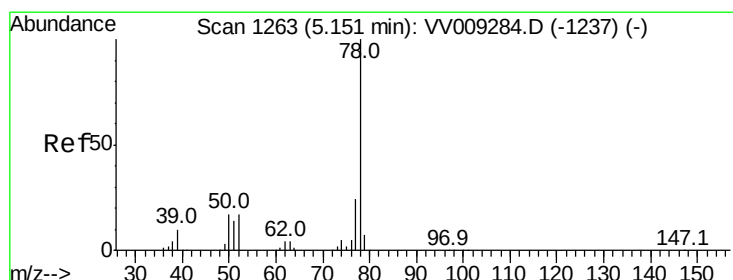
Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

4.88



Time-->



#34

Benzene

Concen: 22.297 ug/L

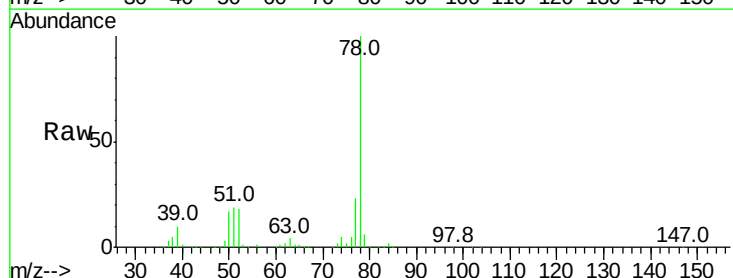
RT: 5.15 min Scan# 1262

Delta R.T. -0.00 min

Lab File: VV009292.D

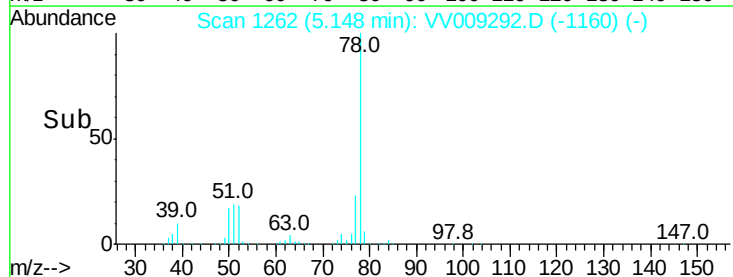
Acq: 13 Feb 2019 13:51

Tgt Ion: 78 Resp: 334335

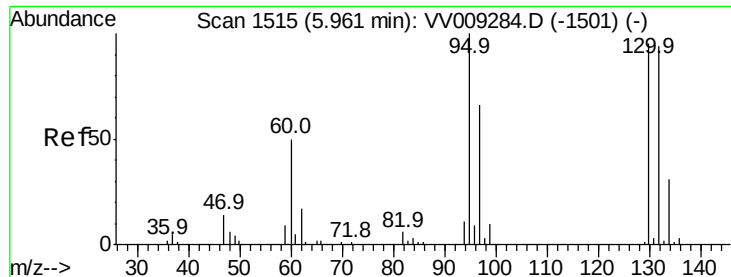


Abundance Ion 78.00 (77.70 to 78.70): VV0

5.15



Time-->



#35

Trichloroethene

Concen: 21.957 ug/L

RT: 5.96 min Scan# 1515

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02563

Tgt Ion: 95 Resp: 89282

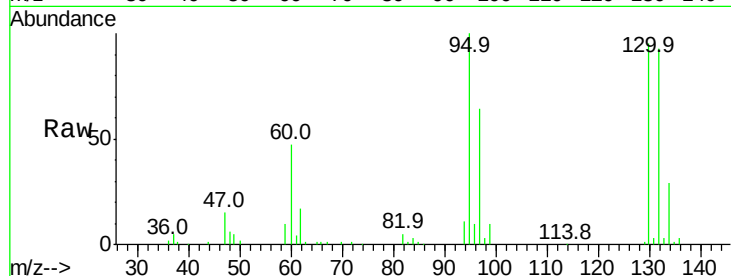
Ion Ratio Lower Upper

95 100

97 63.5 44.4 82.4

132 94.2 64.5 119.9

130 94.0 65.0 120.8

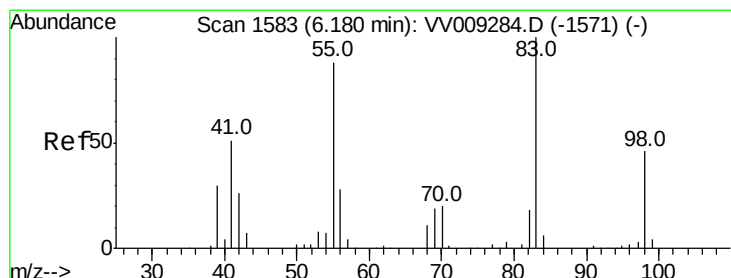
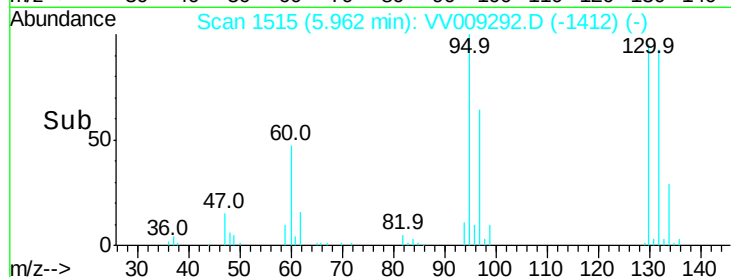
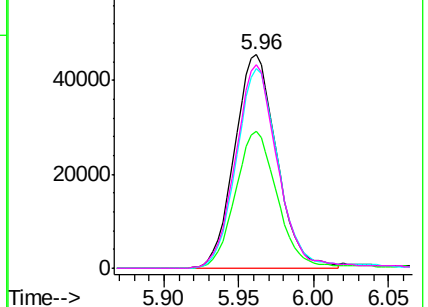


Abundance Ion 95.00 (94.70 to 95.70): VV0

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: 21.190 ug/L

RT: 6.18 min Scan# 1583

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

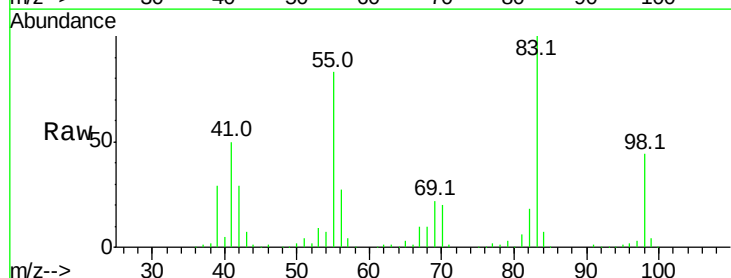
Tgt Ion: 83 Resp: 144006

Ion Ratio Lower Upper

83 100

55 88.2 69.7 104.5

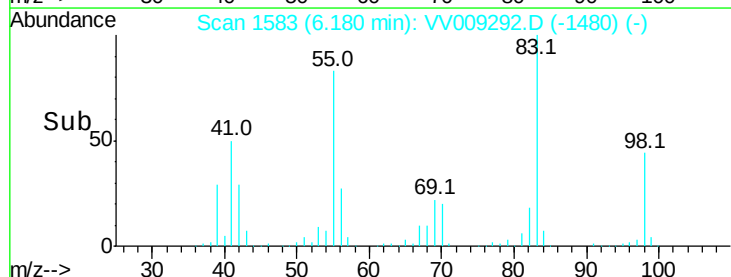
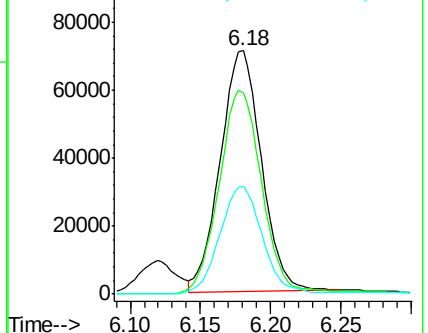
98 45.9 36.6 54.8



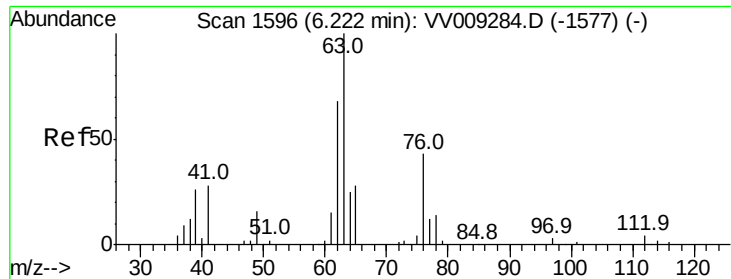
Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 55.00 (54.70 to 55.70): VV0

Ion 98.00 (97.70 to 98.70): VV0



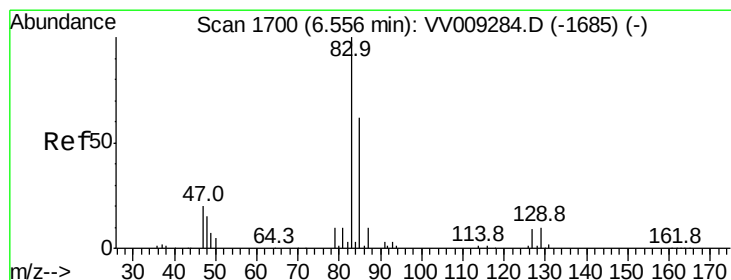
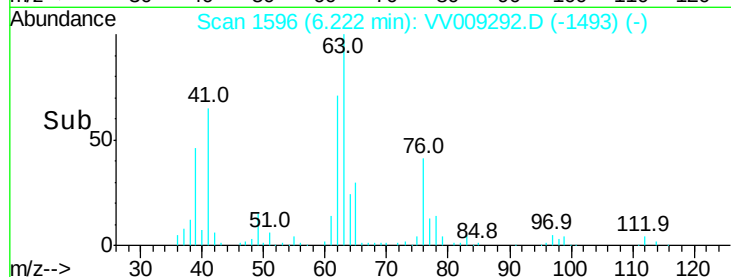
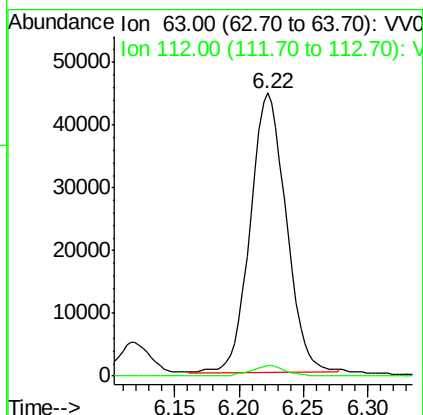
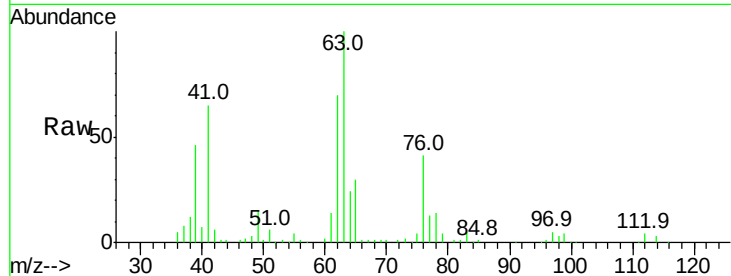




#40  
 1,2-Dichloropropane  
 Concen: 22.027 ug/L  
 RT: 6.22 min Scan# 1596  
 Delta R.T. 0.00 min  
 Lab File: VV009292.D  
 Acq: 13 Feb 2019 13:51

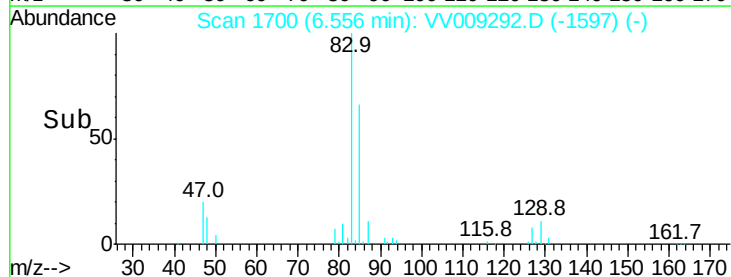
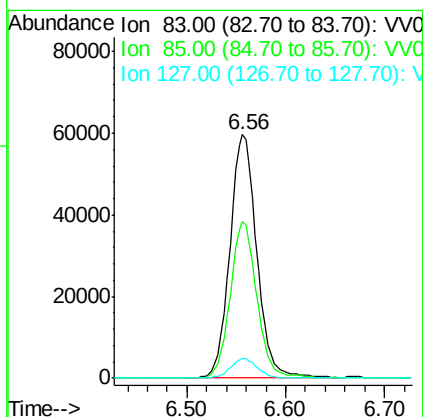
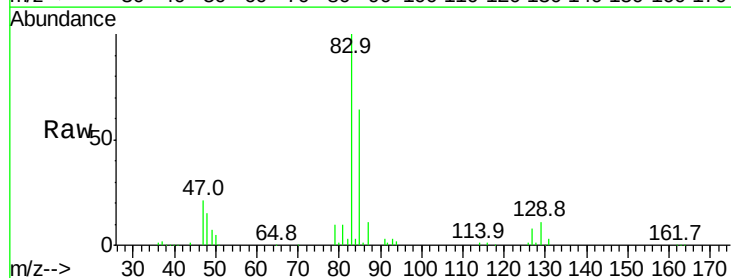
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02563

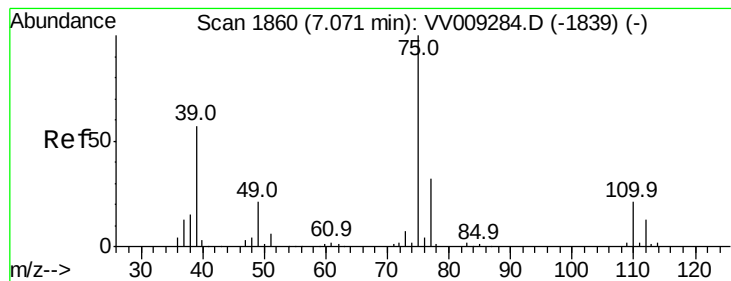
Tgt Ion: 63 Resp: 86994  
 Ion Ratio Lower Upper  
 63 100  
 112 3.7 3.0 4.4



#41  
 Bromodichloromethane  
 Concen: 22.238 ug/L  
 RT: 6.56 min Scan# 1700  
 Delta R.T. 0.00 min  
 Lab File: VV009292.D  
 Acq: 13 Feb 2019 13:51

Tgt Ion: 83 Resp: 113529  
 Ion Ratio Lower Upper  
 83 100  
 85 64.3 43.5 80.7  
 127 8.0 6.9 10.3



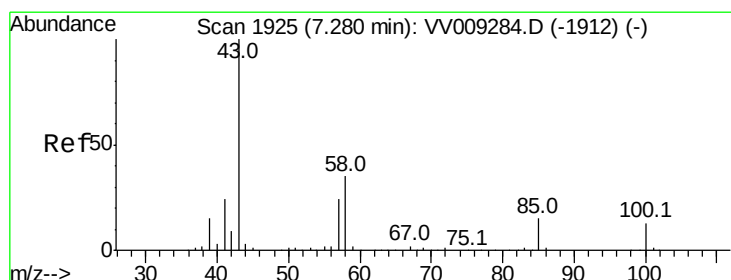
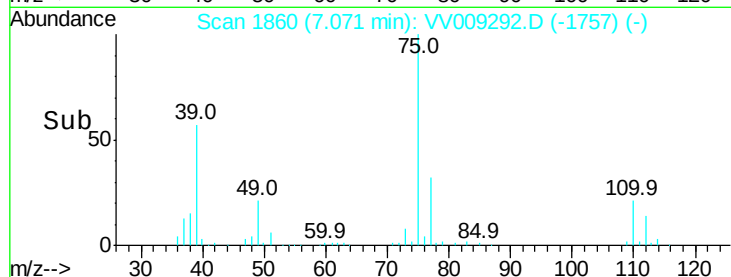
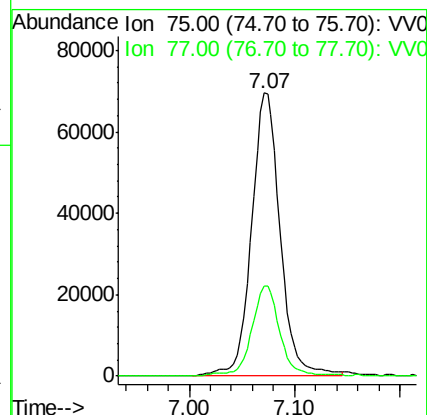
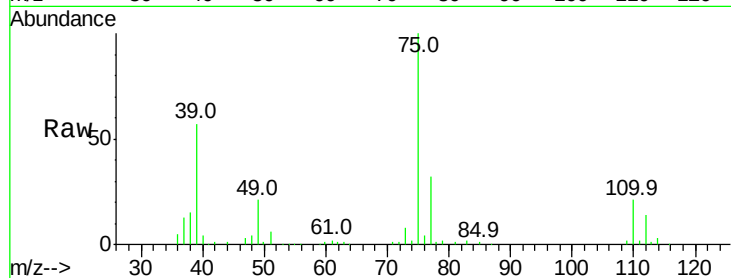


#42

cis-1,3-Dichloropropene  
Concen: 22.883 ug/L  
RT: 7.07 min Scan# 1860  
Delta R.T. 0.00 min  
Lab File: VV009292.D  
Acq: 13 Feb 2019 13:51

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02563

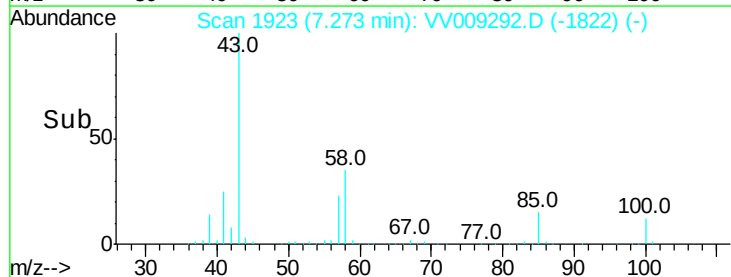
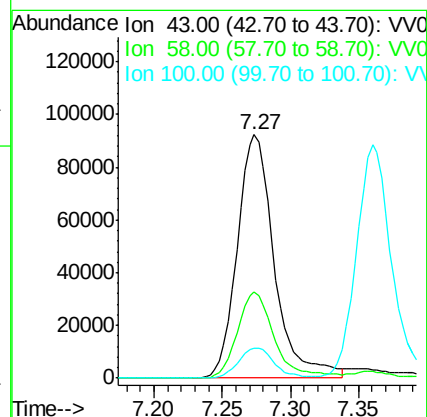
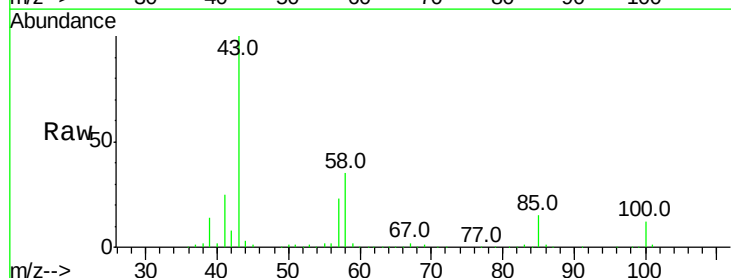
Tgt Ion: 75 Resp: 131962  
Ion Ratio Lower Upper  
75 100  
77 31.7 22.3 41.5

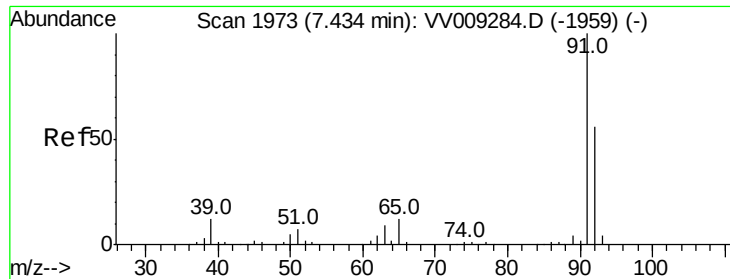


#43

4-Methyl-2-pentanone  
Concen: 46.175 ug/L  
RT: 7.27 min Scan# 1923  
Delta R.T. -0.01 min  
Lab File: VV009292.D  
Acq: 13 Feb 2019 13:51

Tgt Ion: 43 Resp: 174431  
Ion Ratio Lower Upper  
43 100  
58 35.5 28.0 42.0  
100 12.0 9.7 14.5





#44

Toluene

Concen: 22.897 ug/L

RT: 7.43 min Scan# 1973

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

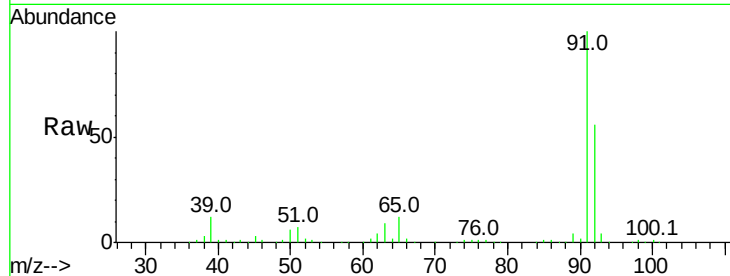
VSTD02563

Tgt Ion: 91 Resp: 360234

Ion Ratio Lower Upper

91 100

92 56.4 39.1 72.5



Abundance Ion 91.00 (90.70 to 91.70): VV009292.D (-1951) (-)

Ion 92.00 (91.70 to 92.70): VV009292.D (-1951) (-)

7.43

200000

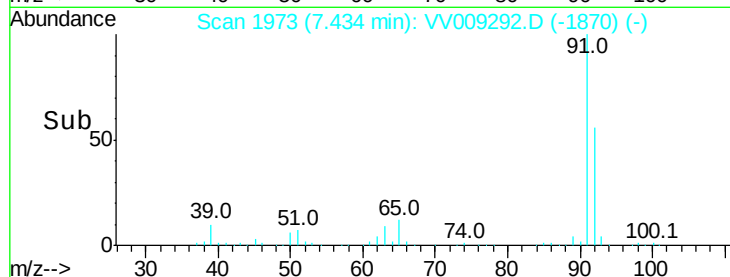
150000

100000

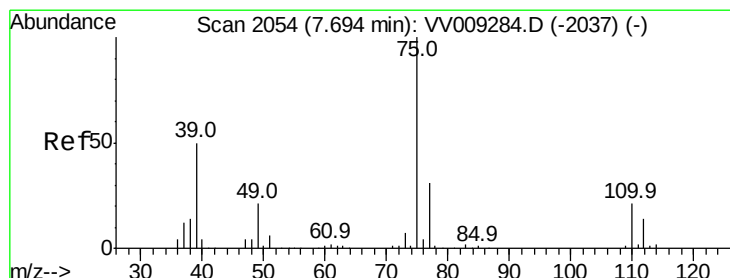
50000

0

Time-->



Time-->



#45

trans-1,3-Dichloropropene

Concen: 22.499 ug/L

RT: 7.69 min Scan# 2054

Delta R.T. 0.00 min

Lab File: VV009292.D

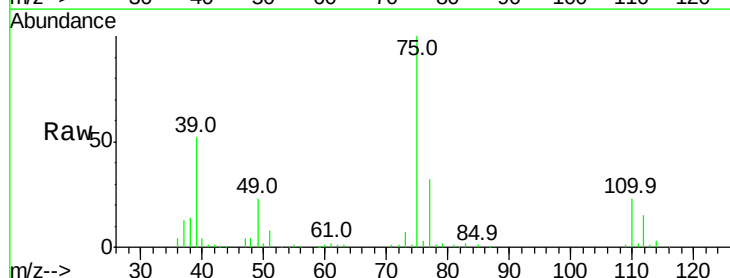
Acq: 13 Feb 2019 13:51

Tgt Ion: 75 Resp: 115622

Ion Ratio Lower Upper

75 100

77 32.2 21.8 40.6



Abundance Ion 75.00 (74.70 to 75.70): VV009292.D (-1951) (-)

Ion 77.00 (76.70 to 77.70): VV009292.D (-1951) (-)

7.69

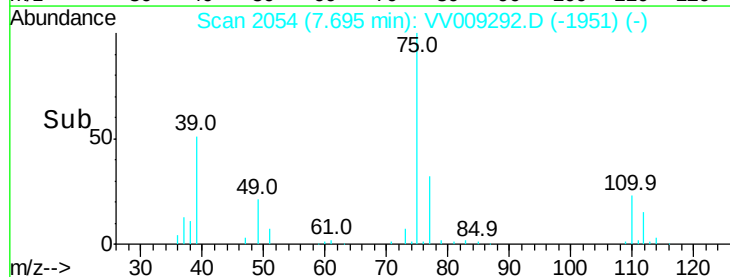
60000

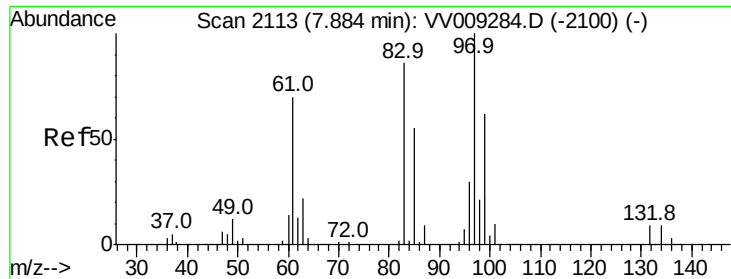
40000

20000

0

Time-->

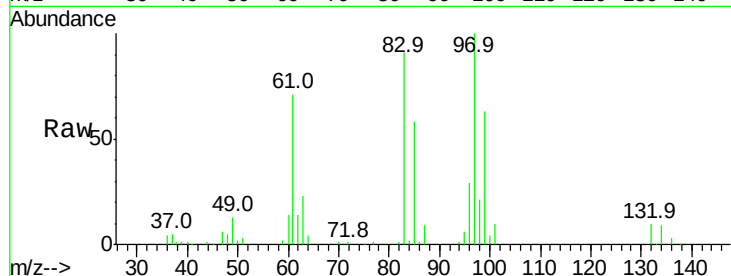




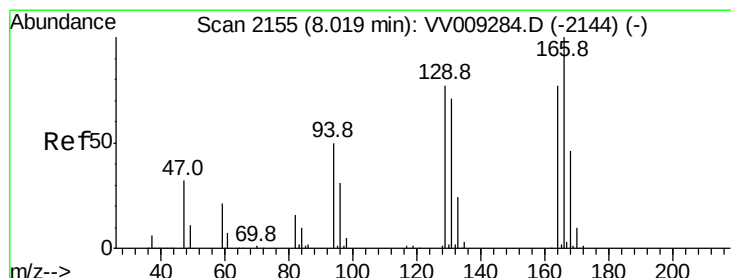
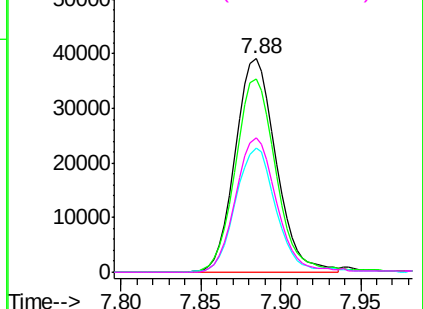
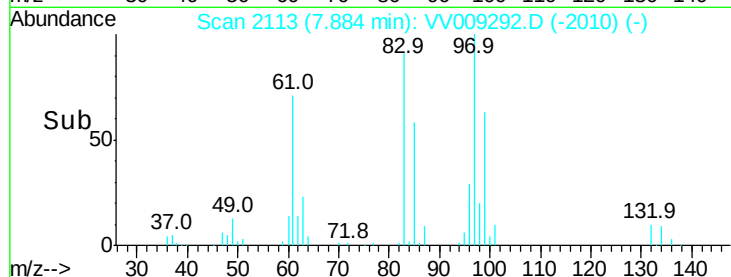
#46  
1,1,2-Trichloroethane  
Concen: 22.651 ug/L  
RT: 7.88 min Scan# 2113  
Delta R.T. 0.00 min  
Lab File: VV009292.D  
Acq: 13 Feb 2019 13:51

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02563

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 68083 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 83       | 90.6  | 60.0  | 111.4 |
| 85       | 58.2  | 38.9  | 72.3  |
| 99       | 62.6  | 43.3  | 80.5  |

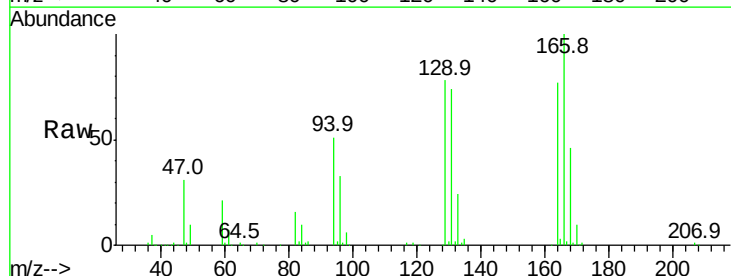


Abundance Ion 97.00 (96.70 to 97.70): VV009292.D (-2010) (-)

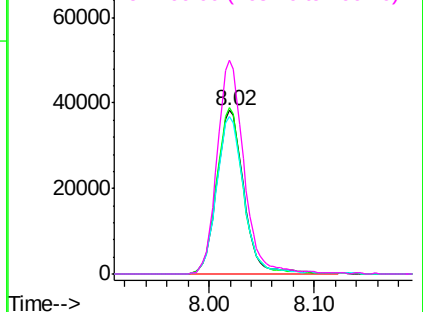
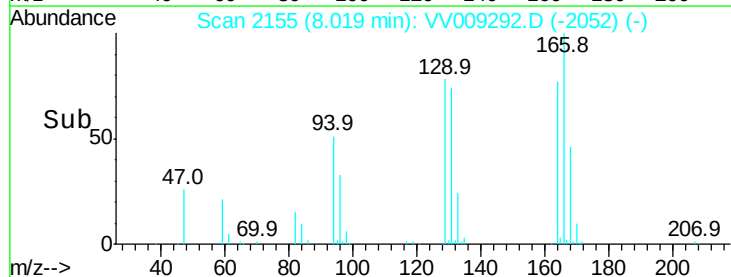


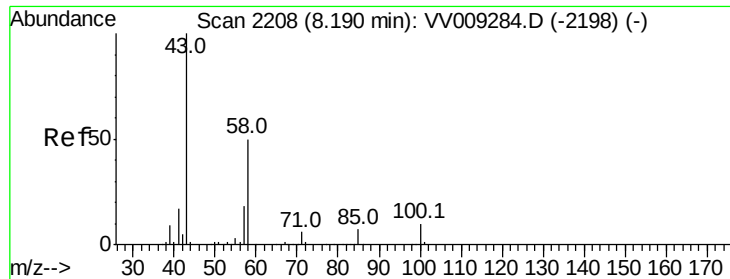
#47  
Tetrachloroethene  
Concen: 22.180 ug/L  
RT: 8.02 min Scan# 2155  
Delta R.T. 0.00 min  
Lab File: VV009292.D  
Acq: 13 Feb 2019 13:51

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 67998 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 101.6 | 69.9  | 129.9 |
| 131      | 96.3  | 65.0  | 120.8 |
| 166      | 130.6 | 91.0  | 169.0 |



Abundance Ion 164.00 (163.70 to 164.70): VV009292.D (-2052) (-)

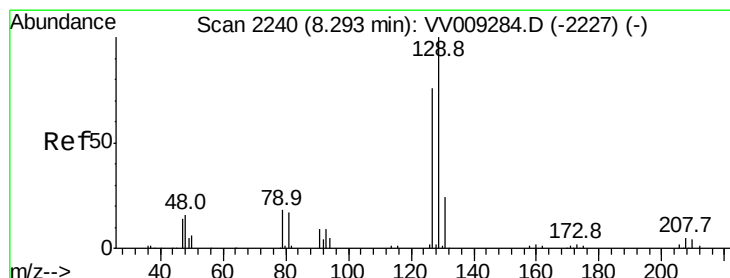
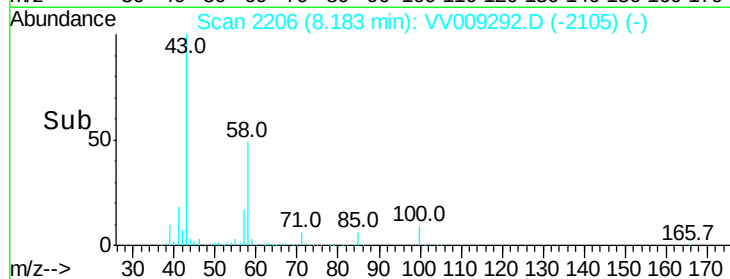
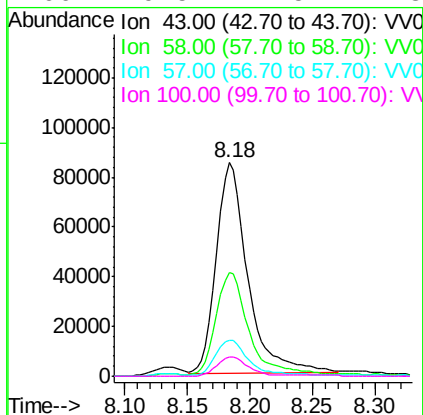
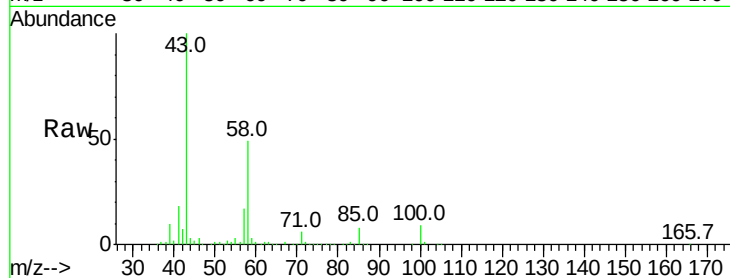




#49  
2-Hexanone  
Concen: 45.779 ug/L  
RT: 8.18 min Scan# 2206  
Delta R.T. -0.01 min  
Lab File: VV009292.D  
Acq: 13 Feb 2019 13:51

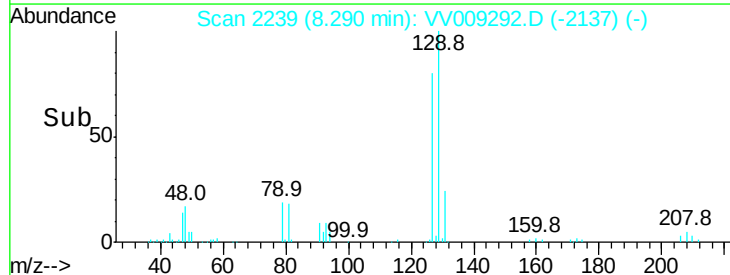
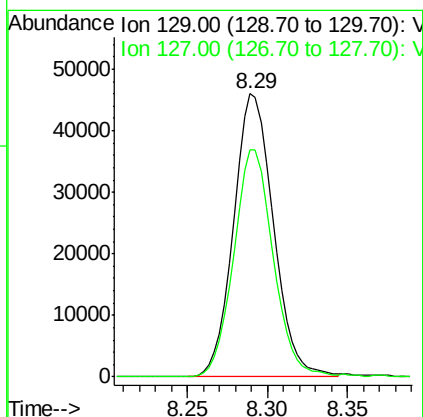
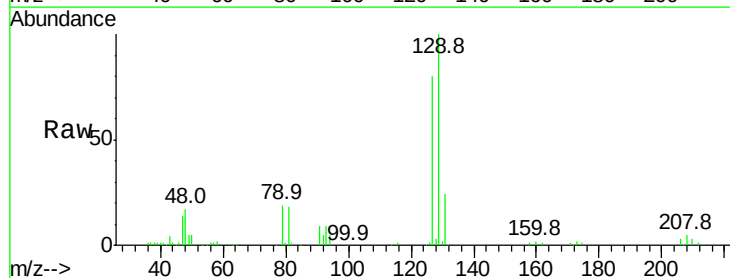
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02563

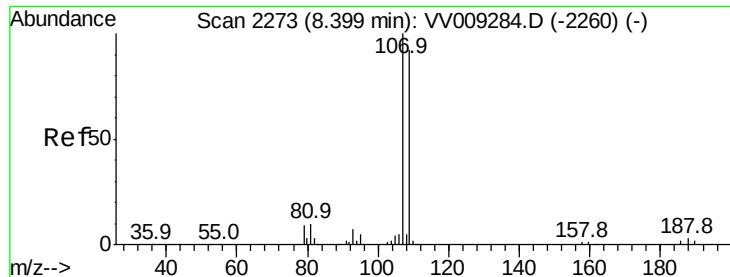
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 148293 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 50.8  | 37.4  | 56.2   |
| 57       | 17.6  | 13.0  | 19.6   |
| 100      | 9.5   | 7.5   | 11.3   |



#50  
Dibromochloromethane  
Concen: 22.647 ug/L  
RT: 8.29 min Scan# 2239  
Delta R.T. -0.00 min  
Lab File: VV009292.D  
Acq: 13 Feb 2019 13:51

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 129   | Resp: | 78162 |
| Ion      | Ratio | Lower | Upper |
| 129      | 100   |       |       |
| 127      | 80.3  | 53.1  | 98.7  |





#51

1,2-Dibromoethane

Concen: 22.796 ug/L

RT: 8.40 min Scan# 2272

Delta R.T. -0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02563

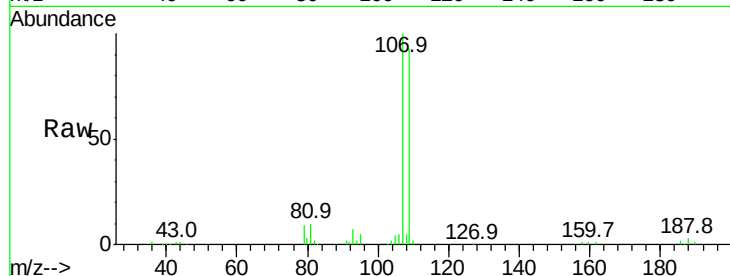
Tgt Ion:107 Resp: 68683

Ion Ratio Lower Upper

107 100

109 93.2 64.2 119.2

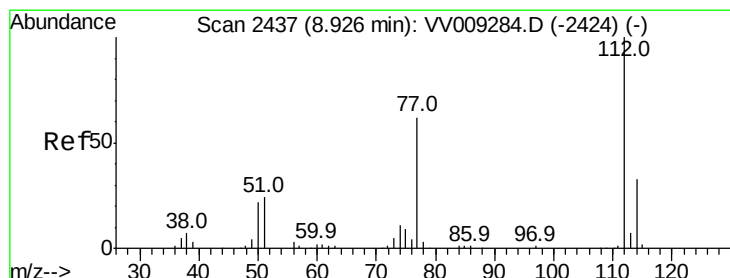
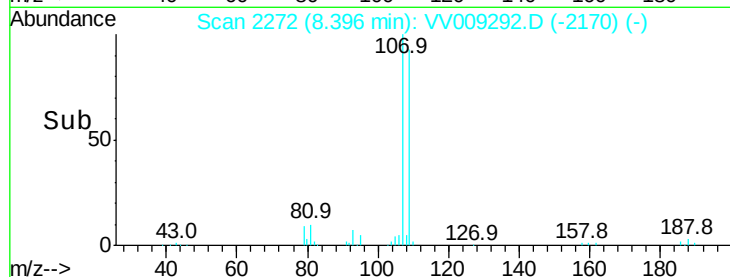
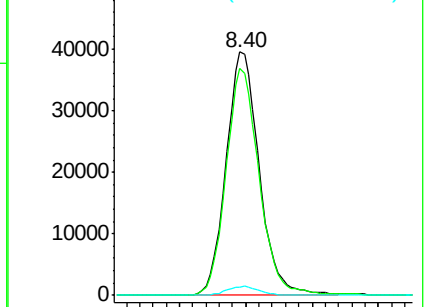
188 3.5 2.6 4.0



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: 22.760 ug/L

RT: 8.93 min Scan# 2437

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

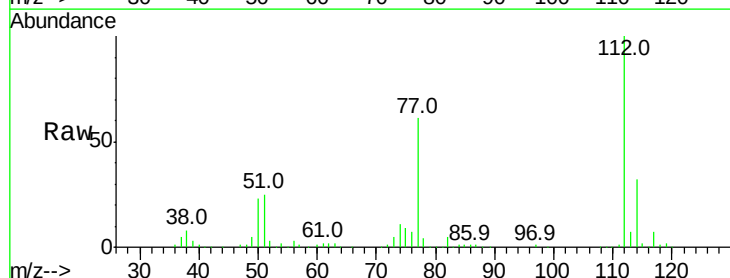
Tgt Ion:112 Resp: 226244

Ion Ratio Lower Upper

112 100

77 61.1 50.2 75.4

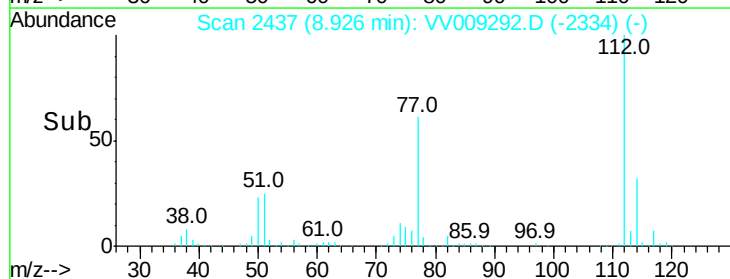
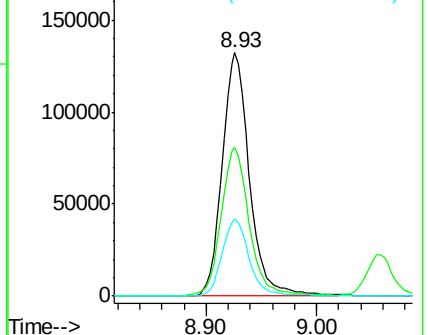
114 31.5 22.9 42.5

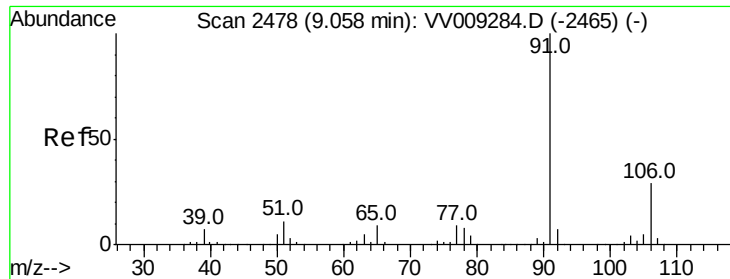


Abundance Ion 112.00 (111.70 to 112.70): V

Ion 77.00 (76.70 to 77.70): VV0

Ion 114.00 (113.70 to 114.70): V





#53

Ethylbenzene

Concen: 22.977 ug/L

RT: 9.06 min Scan# 2478

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

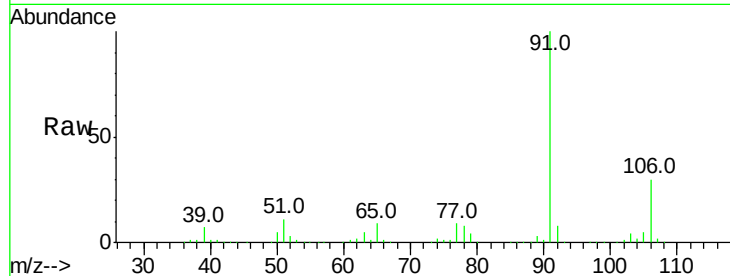
VSTD02563

Tgt Ion: 91 Resp: 400507

Ion Ratio Lower Upper

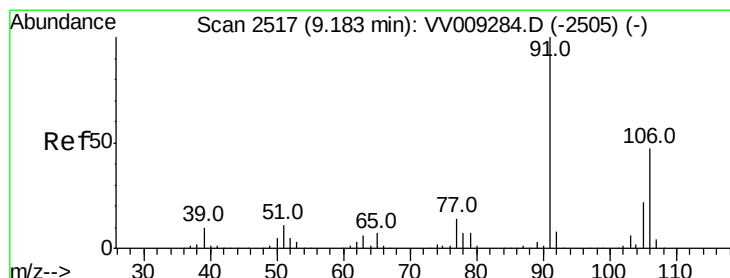
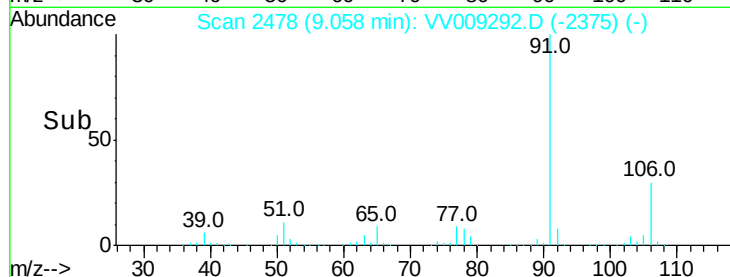
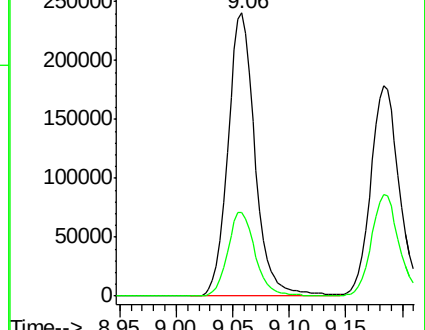
91 100

106 29.6 20.6 38.2



Abundance Ion 91.00 (90.70 to 91.70): VV009292.D (-2475) (-)

Ion 106.00 (105.70 to 106.70): VV009292.D (-2475) (-)



#54

m,p-Xylene

Concen: 23.492 ug/L

RT: 9.18 min Scan# 2517

Delta R.T. 0.00 min

Lab File: VV009292.D

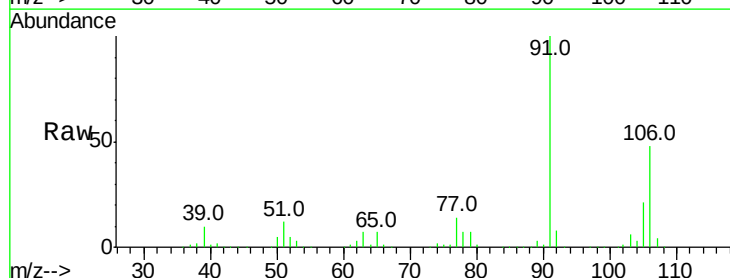
Acq: 13 Feb 2019 13:51

Tgt Ion: 106 Resp: 150782

Ion Ratio Lower Upper

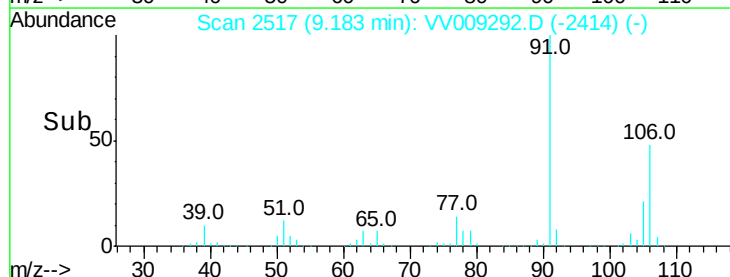
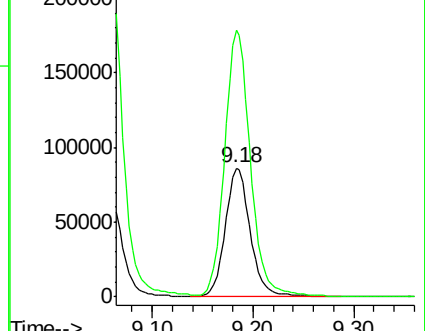
106 100

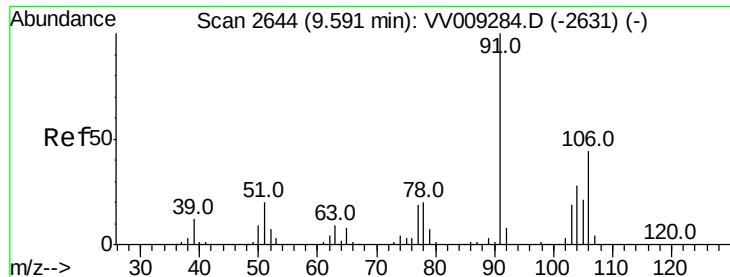
91 207.6 149.4 277.5



Abundance Ion 106.00 (105.70 to 106.70): VV009292.D (-2514) (-)

Ion 91.00 (90.70 to 91.70): VV009292.D (-2514) (-)





#55

o-xylene

Concen: 23.158 ug/L

RT: 9.59 min Scan# 2643

Delta R.T. -0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

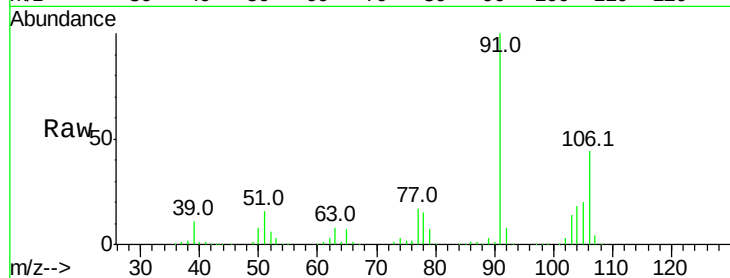
VSTD02563

Tgt Ion:106 Resp: 140644

Ion Ratio Lower Upper

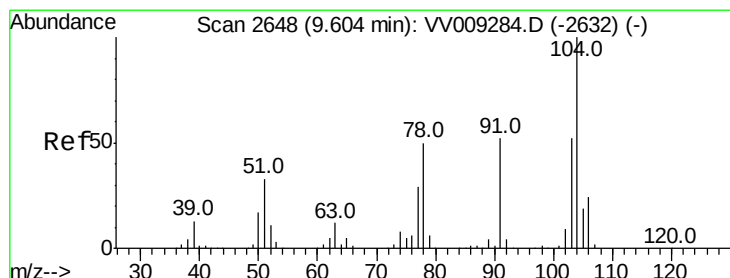
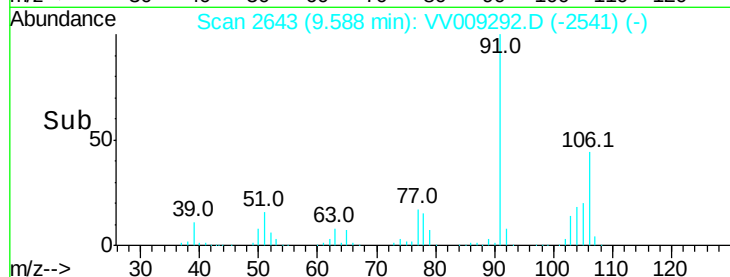
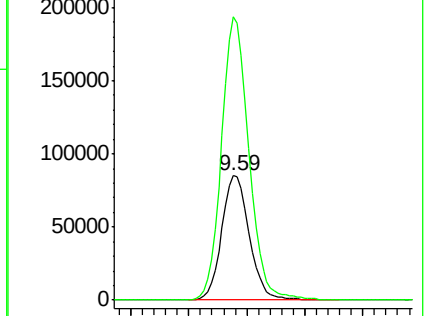
106 100

91 228.0 159.0 295.2



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VV0



#56

Styrene

Concen: 23.723 ug/L

RT: 9.61 min Scan# 2649

Delta R.T. 0.00 min

Lab File: VV009292.D

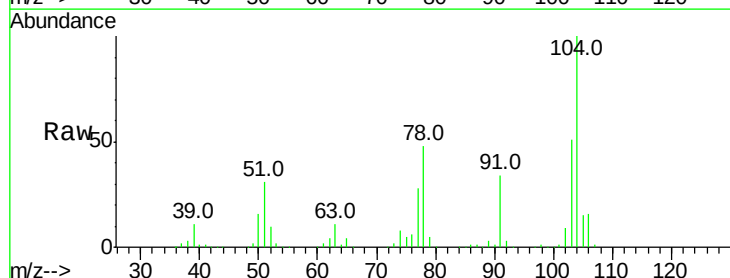
Acq: 13 Feb 2019 13:51

Tgt Ion:104 Resp: 242570

Ion Ratio Lower Upper

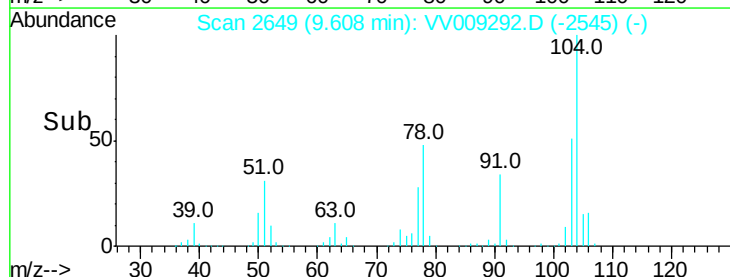
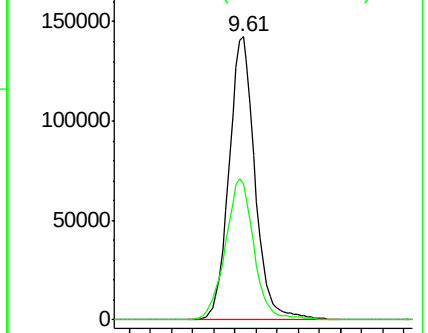
104 100

78 48.0 34.8 64.6

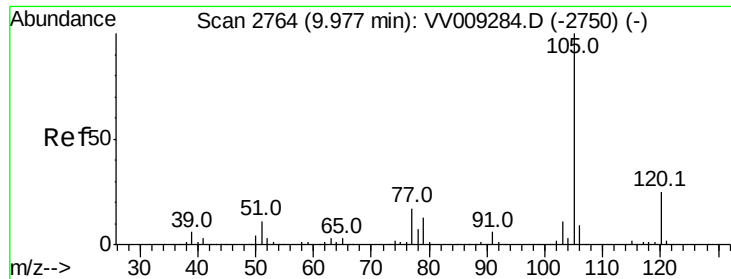


Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VV0







#57

Isopropylbenzene

Concen: 23.181 ug/L

RT: 9.98 min Scan# 2764

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02563

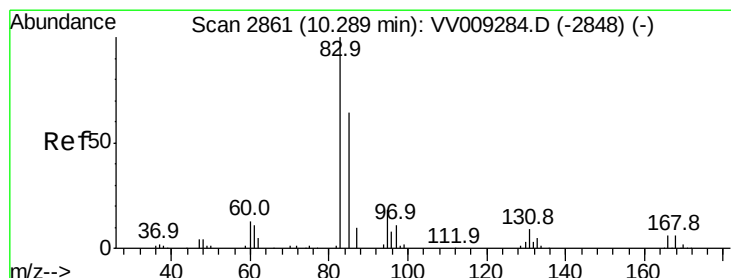
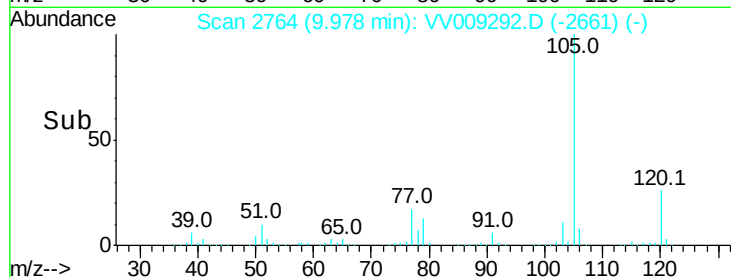
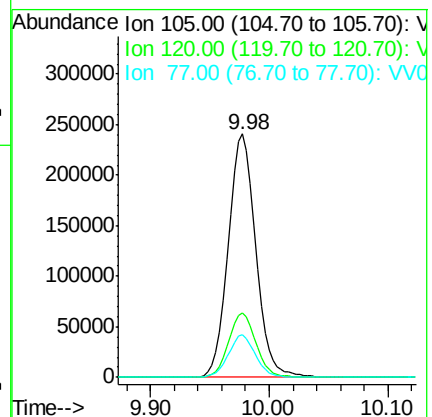
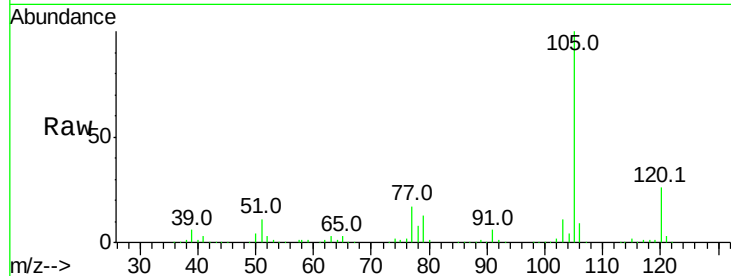
Tgt Ion:105 Resp: 386343

Ion Ratio Lower Upper

105 100

120 26.4 20.3 30.5

77 17.3 13.4 20.0



#58

1,1,2,2-Tetrachloroethane

Concen: 23.803 ug/L

RT: 10.29 min Scan# 2861

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

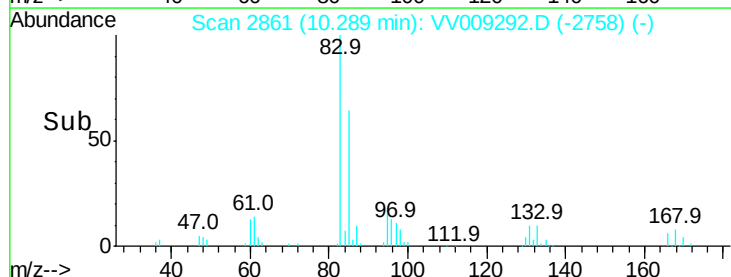
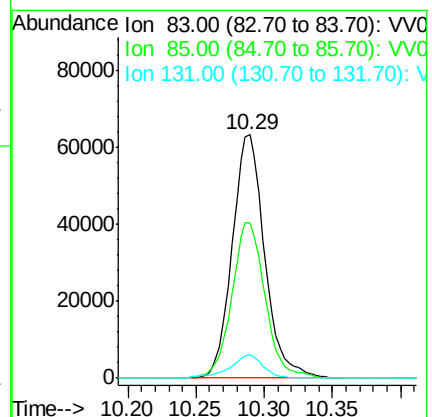
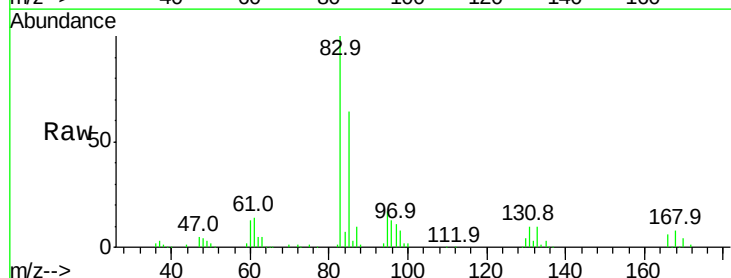
Tgt Ion: 83 Resp: 104416

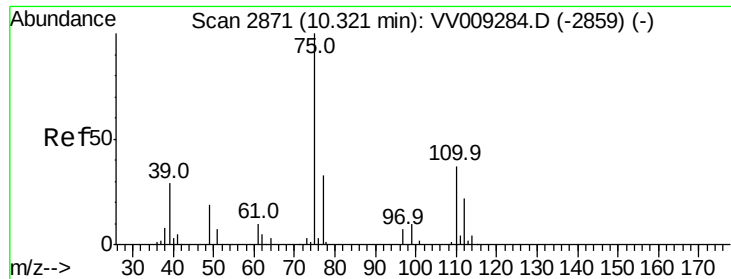
Ion Ratio Lower Upper

83 100

85 63.8 45.1 83.7

131 9.7 7.9 11.9





#59

1,2,3-Trichloropropane

Concen: 23.441 ug/L

RT: 10.32 min Scan# 2871

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

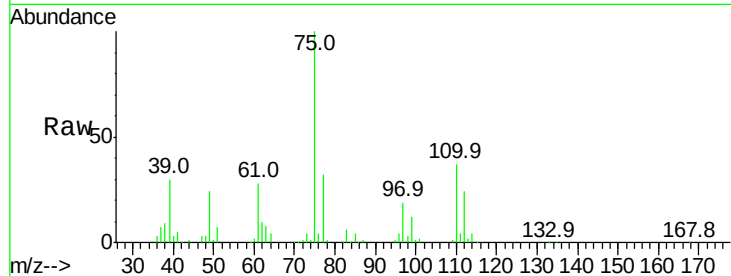
VSTD02563

Tgt Ion: 75 Resp: 80467

Ion Ratio Lower Upper

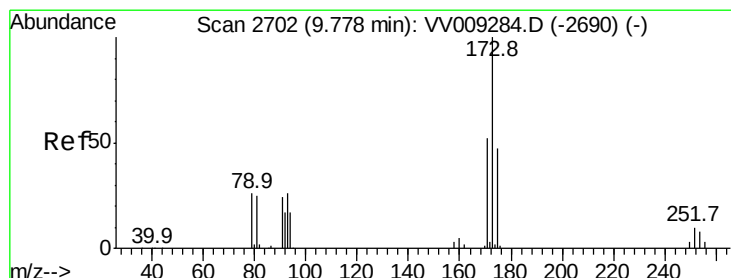
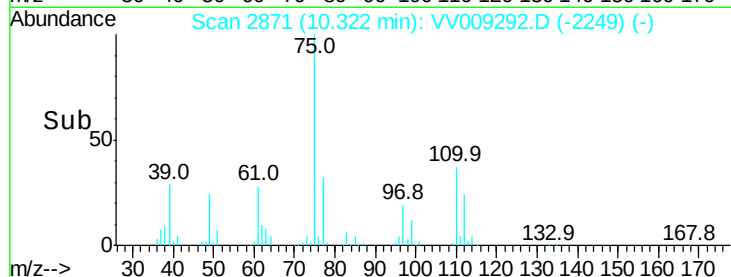
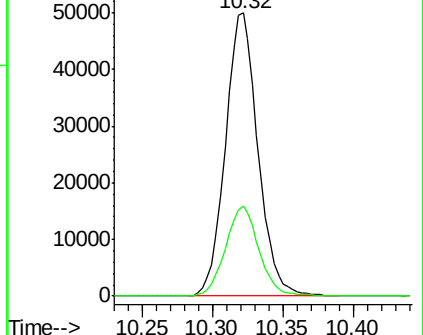
75 100

77 32.7 25.6 38.4



Abundance Ion 75.00 (74.70 to 75.70): VV009284.D (-2859) (-)

Ion 77.00 (76.70 to 77.70): VV009284.D (-2859) (-)



#62

Bromoform

Concen: 23.134 ug/L

RT: 9.78 min Scan# 2702

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

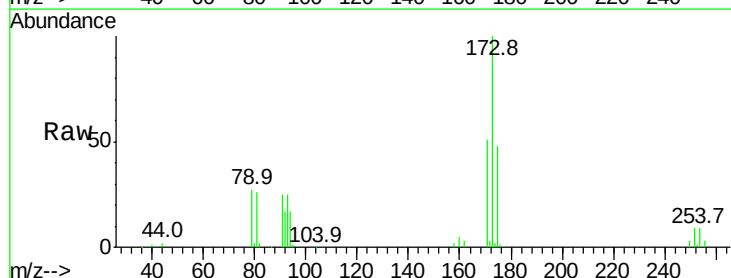
Tgt Ion: 173 Resp: 48349

Ion Ratio Lower Upper

173 100

175 49.9 38.8 58.2

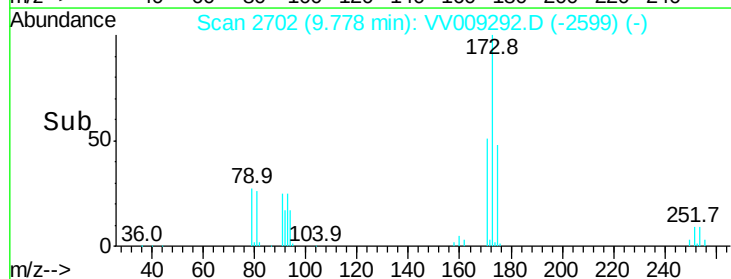
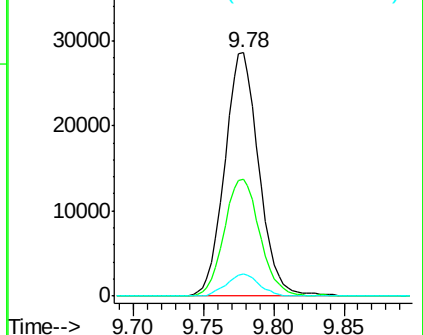
254 8.6 7.0 10.4

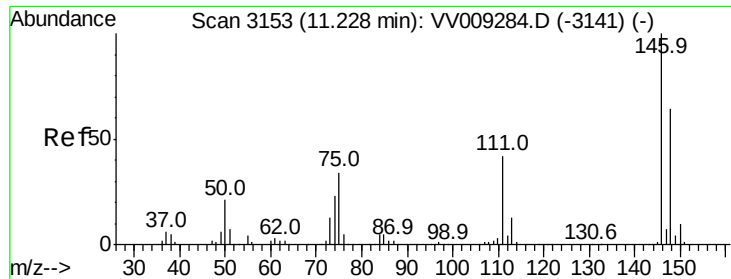


Abundance Ion 173.00 (172.70 to 173.70): VV009284.D (-2690) (-)

Ion 175.00 (174.70 to 175.70): VV009284.D (-2690) (-)

Ion 254.00 (253.70 to 254.70): VV009284.D (-2690) (-)





#63

1,3-Dichlorobenzene

Concen: 23.526 ug/L

RT: 11.23 min Scan# 3153

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02563

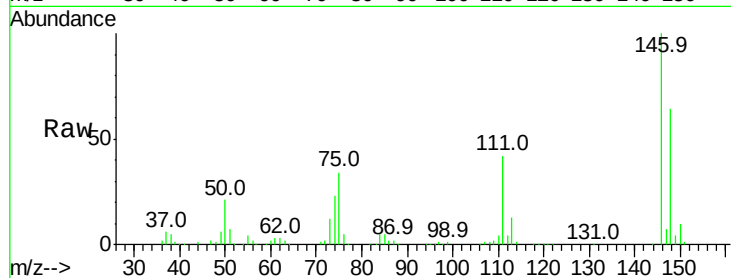
Tgt Ion:146 Resp: 175899

Ion Ratio Lower Upper

146 100

111 42.1 29.3 54.5

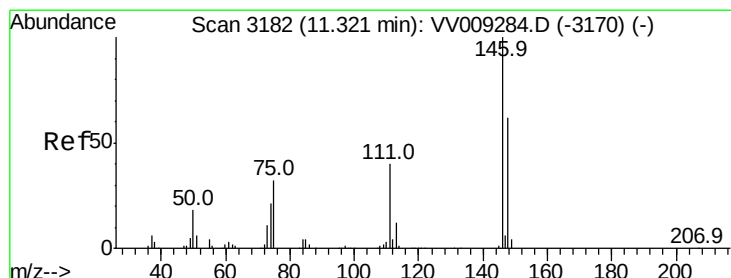
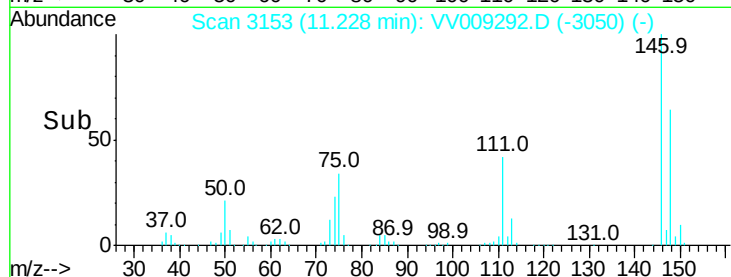
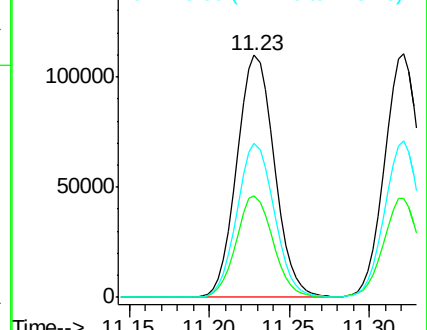
148 63.6 44.9 83.3



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: 23.222 ug/L

RT: 11.32 min Scan# 3182

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

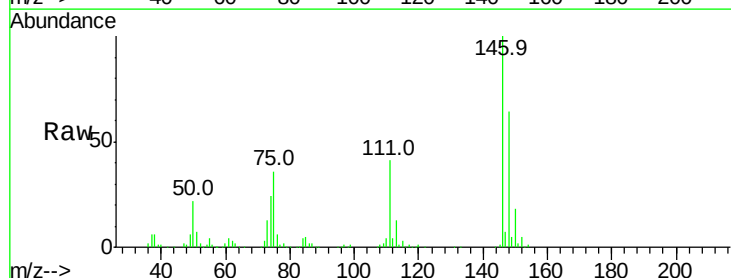
Tgt Ion:146 Resp: 175473

Ion Ratio Lower Upper

146 100

111 40.8 28.2 52.4

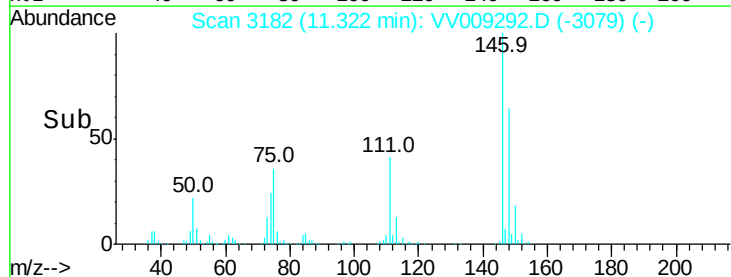
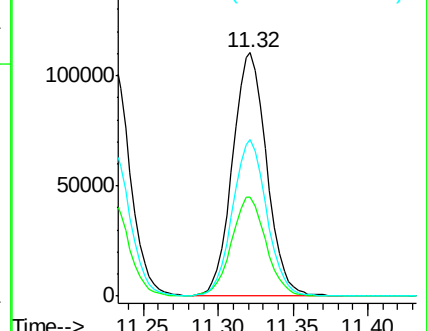
148 64.4 43.6 81.0

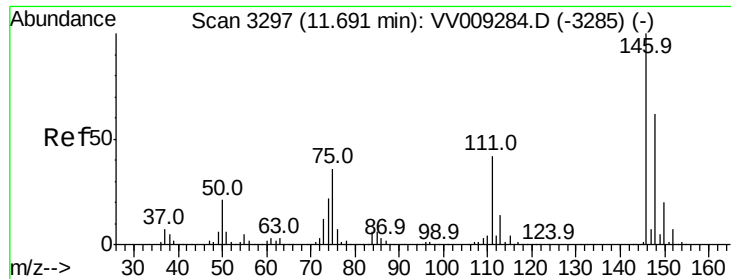


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 23.890 ug/L

RT: 11.69 min Scan# 3297

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampled :

VSTD02563

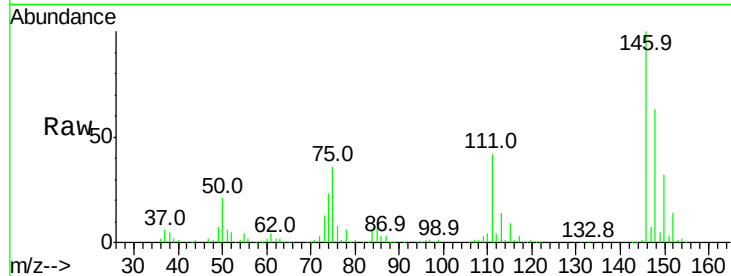
Tgt Ion:146 Resp: 167234

Ion Ratio Lower Upper

146 100

111 42.3 33.9 50.9

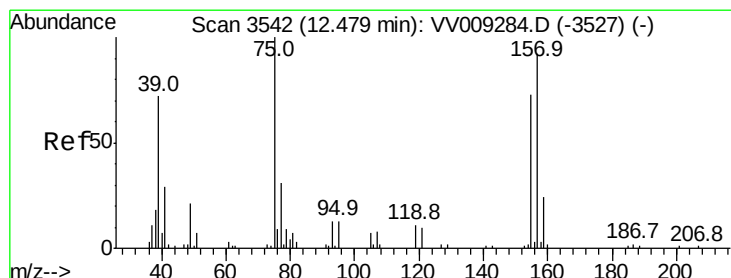
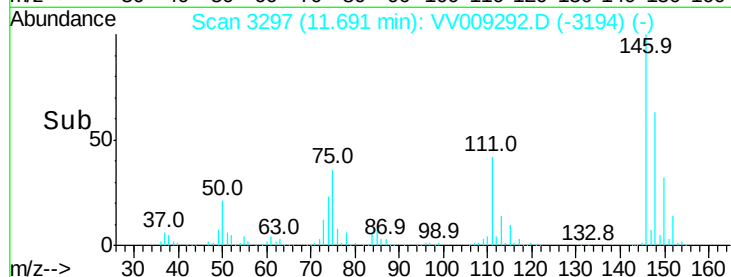
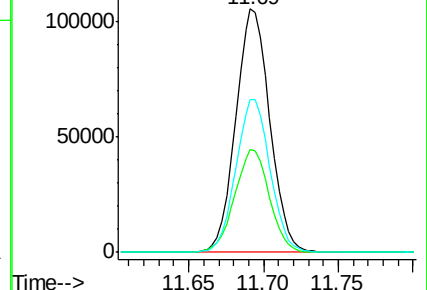
148 62.6 49.9 74.9



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



#66

1,2-Dibromo-3-chloropropane

Concen: 23.610 ug/L

RT: 12.48 min Scan# 3542

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

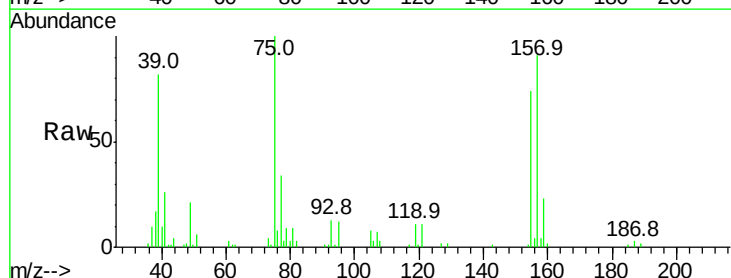
Tgt Ion: 75 Resp: 20883

Ion Ratio Lower Upper

75 100

157 90.8 73.5 110.3

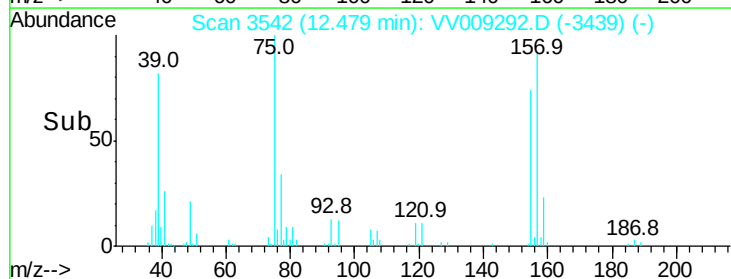
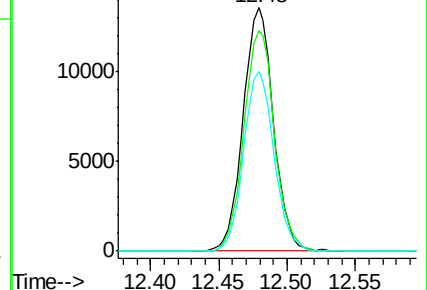
155 73.8 58.2 87.4

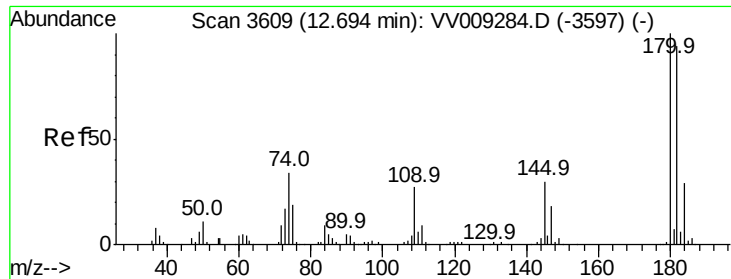


Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 157.00 (156.70 to 157.70): V

Ion 155.00 (154.70 to 155.70): V

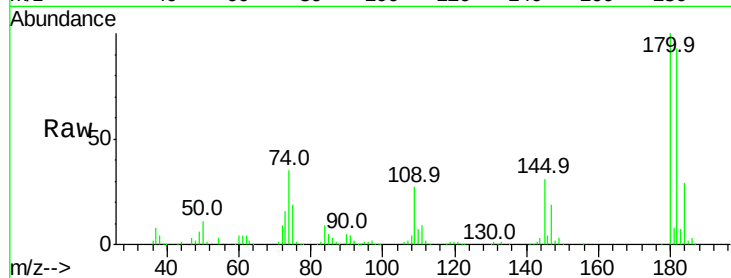




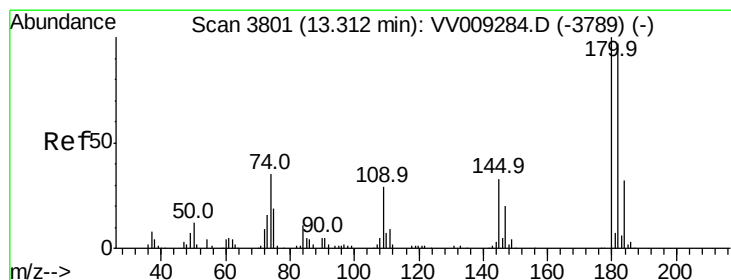
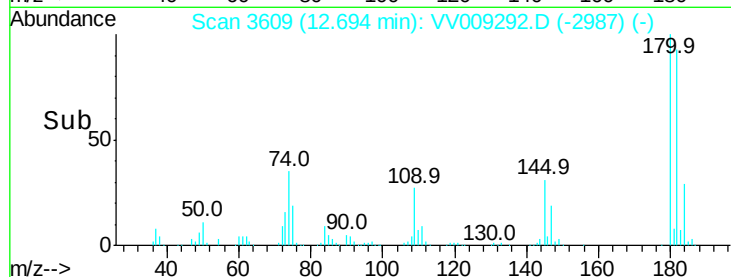
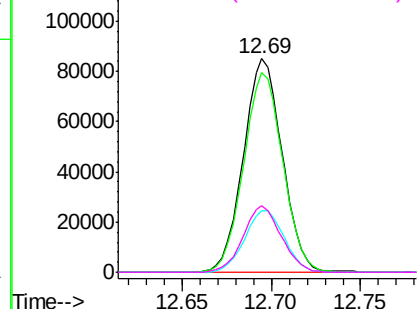
#67  
 1,3,5-Trichlorobenzene  
 Concen: 23.342 ug/L  
 RT: 12.69 min Scan# 3609  
 Delta R.T. 0.00 min  
 Lab File: VV009292.D  
 Acq: 13 Feb 2019 13:51

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02563

Tgt Ion:180 Resp: 129582  
 Ion Ratio Lower Upper  
 180 100  
 182 94.4 75.7 113.5  
 184 29.7 23.4 35.2  
 145 30.6 24.0 36.0

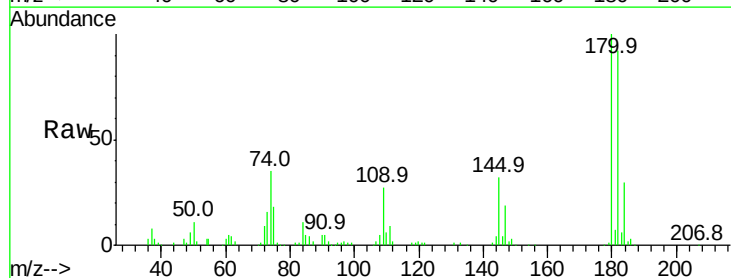


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

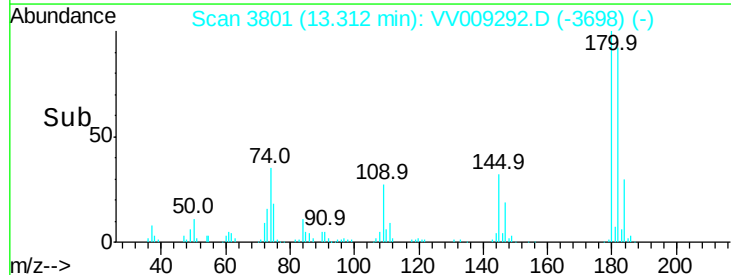
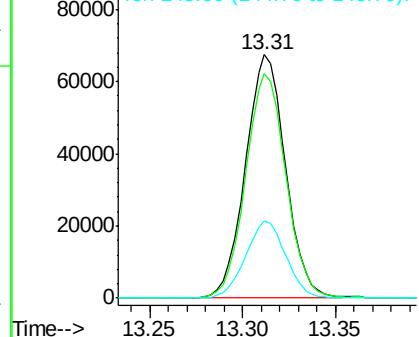


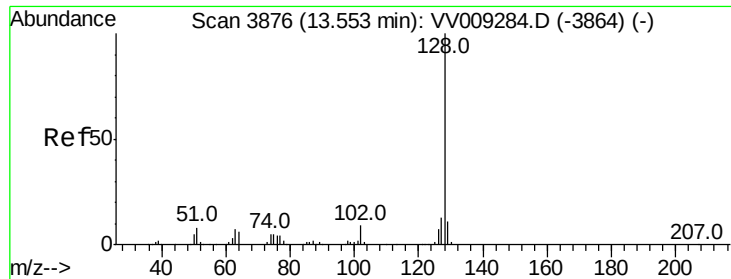
#68  
 1,2,4-trichlorobenzene  
 Concen: 23.444 ug/L  
 RT: 13.31 min Scan# 3801  
 Delta R.T. 0.00 min  
 Lab File: VV009292.D  
 Acq: 13 Feb 2019 13:51

Tgt Ion:180 Resp: 101405  
 Ion Ratio Lower Upper  
 180 100  
 182 92.6 76.4 114.6  
 145 31.8 25.8 38.8



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: 23.528 ug/L

RT: 13.55 min Scan# 3876

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02563

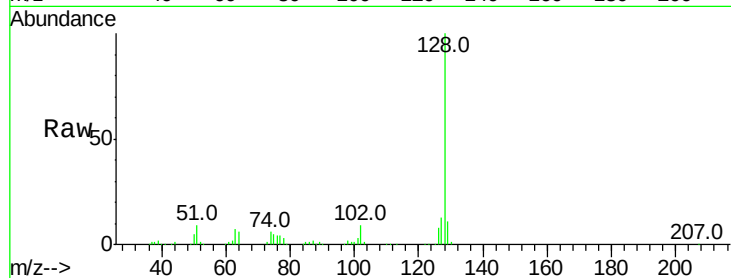
Tgt Ion:128 Resp: 205235

Ion Ratio Lower Upper

128 100

129 11.0 8.8 13.2

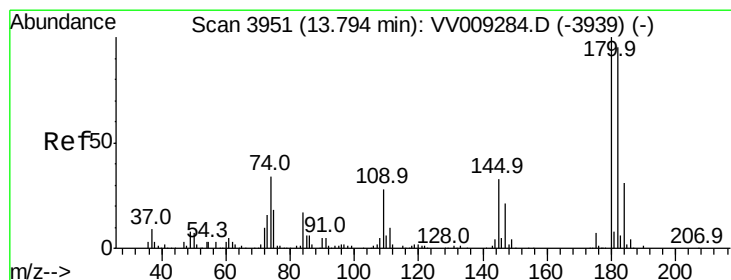
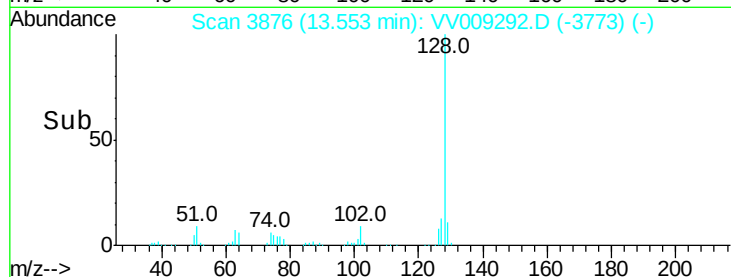
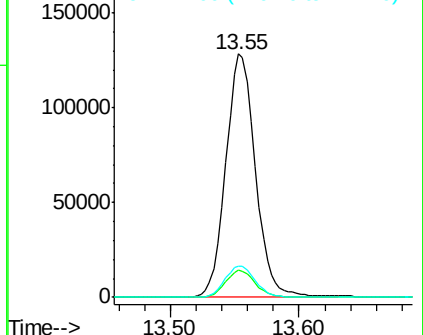
127 13.2 10.6 16.0



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: 24.265 ug/L

RT: 13.80 min Scan# 3952

Delta R.T. 0.00 min

Lab File: VV009292.D

Acq: 13 Feb 2019 13:51

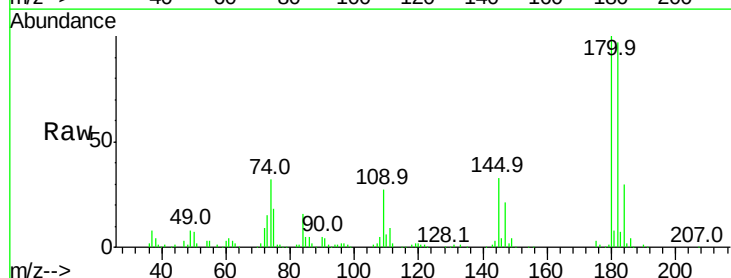
Tgt Ion:180 Resp: 95381

Ion Ratio Lower Upper

180 100

182 97.1 76.3 114.5

145 33.6 27.0 40.4



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

