

Data File : VV012457.D  
Acq On : 30 Aug 2019 15:10  
Operator : SY/MD  
Sample : VSTDCCC005  
Misc : 25mL/MSVOA\_V/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00556

Quant Time: Aug 31 00:12:09 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR082919WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Sat Aug 31 00:07:21 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 244673   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 244409   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 119911   | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 89936    | 4.12     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 82.40% |
| 7) Chloroethane-d5             | 1.58   | 69    | 69051    | 4.38     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 87.60% |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 160595   | 4.49     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 89.80% |
| 20) 2-Butanone-d5              | 3.96   | 46    | 205221   | 46.17    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 92.34% |
| 24) Chloroform-d               | 4.40   | 84    | 168059   | 4.49     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 89.80% |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 81298    | 4.47     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 89.40% |
| 32) Benzene-d6                 | 5.10   | 84    | 325708   | 4.46     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 89.20% |
| 36) 1,2-Dichloropropane-d6     | 6.12   | 67    | 100596   | 4.34     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 86.80% |
| 41) Toluene-d8                 | 7.36   | 98    | 304686   | 4.63     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 92.60% |
| 43) trans-1,3-Dichloropropene- | 7.66   | 79    | 36904    | 4.51     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 90.20% |
| 46) 2-Hexanone-d5              | 8.14   | 63    | 149699   | 46.52    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 93.04% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 72393    | 4.40     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 88.00% |
| 64) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 102593   | 4.40     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 88.00% |

#### Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 162466 | 4.944 ug/L  | 98     |
| 3) Chloromethane               | 1.25 | 50  | 152141 | 4.704 ug/L  | 99     |
| 5) Vinyl chloride              | 1.32 | 62  | 143975 | 4.713 ug/L  | 100    |
| 6) Bromomethane                | 1.54 | 94  | 78895  | 4.755 ug/L  | 98     |
| 8) Chloroethane                | 1.60 | 64  | 77412  | 4.723 ug/L  | 100    |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 193428 | 4.888 ug/L  | 98     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 99414  | 5.055 ug/L  | 99     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 89312  | 4.816 ug/L  | 99     |
| 13) Acetone                    | 2.22 | 43  | 160148 | 49.312 ug/L | 99     |
| 14) Carbon disulfide           | 2.32 | 76  | 276180 | 4.873 ug/L  | 100    |
| 15) Methyl Acetate             | 2.47 | 43  | 37750  | 4.721 ug/L  | 98     |
| 16) Methylene chloride         | 2.53 | 84  | 95165  | 4.489 ug/L  | 97     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 249406 | 4.894 ug/L  | 99     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 115063 | 4.845 ug/L  | 98     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 227103 | 4.885 ug/L  | 99     |
| 21) 2-Butanone                 | 4.04 | 43  | 304157 | 50.945 ug/L | 99     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 119655 | 4.813 ug/L  | 95     |

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Misc : 25mL/MSVOA\_V/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00556

Quant Time: Aug 31 00:12:09 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR082919WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Sat Aug 31 00:07:21 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane         | 4.30  | 128  | 52623    | 4.874  | ug/L  | 96       |
| 25) Chloroform                 | 4.42  | 83   | 226989   | 4.661  | ug/L  | 100      |
| 27) 1,2-Dichloroethane         | 5.18  | 62   | 135903   | 4.976  | ug/L  | 97       |
| 29) 1,1,1-Trichloroethane      | 4.66  | 97   | 188528   | 4.762  | ug/L  | 97       |
| 30) Cyclohexane                | 4.72  | 56   | 198233   | 4.967  | ug/L  | 97       |
| 31) Carbon tetrachloride       | 4.87  | 117  | 167553   | 4.811  | ug/L  | 98       |
| 33) Benzene                    | 5.14  | 78   | 499713   | 4.939  | ug/L  | 100      |
| 34) Trichloroethene            | 5.96  | 95   | 123542   | 4.793  | ug/L  | 99       |
| 35) Methylcyclohexane          | 6.17  | 83   | 198063   | 5.050  | ug/L  | 100      |
| 37) 1,2-Dichloropropane        | 6.22  | 63   | 129156   | 4.895  | ug/L  | 100      |
| 38) Bromodichloromethane       | 6.55  | 83   | 155202   | 4.730  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene    | 7.07  | 75   | 166273   | 4.870  | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone       | 7.28  | 43   | 758141   | 50.696 | ug/L  | 98       |
| 42) Toluene                    | 7.43  | 91   | 525469   | 5.074  | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene  | 7.69  | 75   | 128861   | 4.859  | ug/L  | 98       |
| 45) 1,1,2-Trichloroethane      | 7.88  | 97   | 81683    | 4.667  | ug/L  | 98       |
| 47) Tetrachloroethene          | 8.02  | 164  | 102564   | 4.970  | ug/L  | 98       |
| 48) 2-Hexanone                 | 8.19  | 43   | 545637   | 53.571 | ug/L  | 97       |
| 49) Dibromochloromethane       | 8.29  | 129  | 98360    | 4.880  | ug/L  | 99       |
| 50) 1,2-Dibromoethane          | 8.40  | 107  | 73609    | 4.761  | ug/L  | 96       |
| 51) Chlorobenzene              | 8.92  | 112  | 313304   | 4.774  | ug/L  | 99       |
| 52) Ethylbenzene               | 9.05  | 91   | 548707   | 5.013  | ug/L  | 99       |
| 53) m,p-xylene                 | 9.18  | 106  | 208988   | 5.209  | ug/L  | 97       |
| 54) o-xylene                   | 9.59  | 106  | 200952   | 5.130  | ug/L  | 96       |
| 55) Styrene                    | 9.60  | 104  | 347842   | 5.290  | ug/L  | 99       |
| 56) Isopropylbenzene           | 9.97  | 105  | 532767   | 5.165  | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.28 | 83   | 96796    | 4.701  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 70626    | 4.819  | ug/L  | 99       |
| 61) Bromoform                  | 9.77  | 173  | 51295    | 4.600  | ug/L  | 99       |
| 62) 1,3-Dichlorobenzene        | 11.22 | 146  | 249225   | 4.967  | ug/L  | 98       |
| 63) 1,4-Dichlorobenzene        | 11.32 | 146  | 245243   | 4.878  | ug/L  | 100      |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 230091   | 4.863  | ug/L  | 97       |
| 66) 1,2-Dibromo-3-chloropropan | 12.47 | 75   | 14272    | 4.481  | ug/L  | 93       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 184022   | 4.915  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 134620   | 4.904  | ug/L  | 98       |
| 69) Naphthalene                | 13.55 | 128  | 186101   | 4.685  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 132027   | 5.007  | ug/L  | 97       |

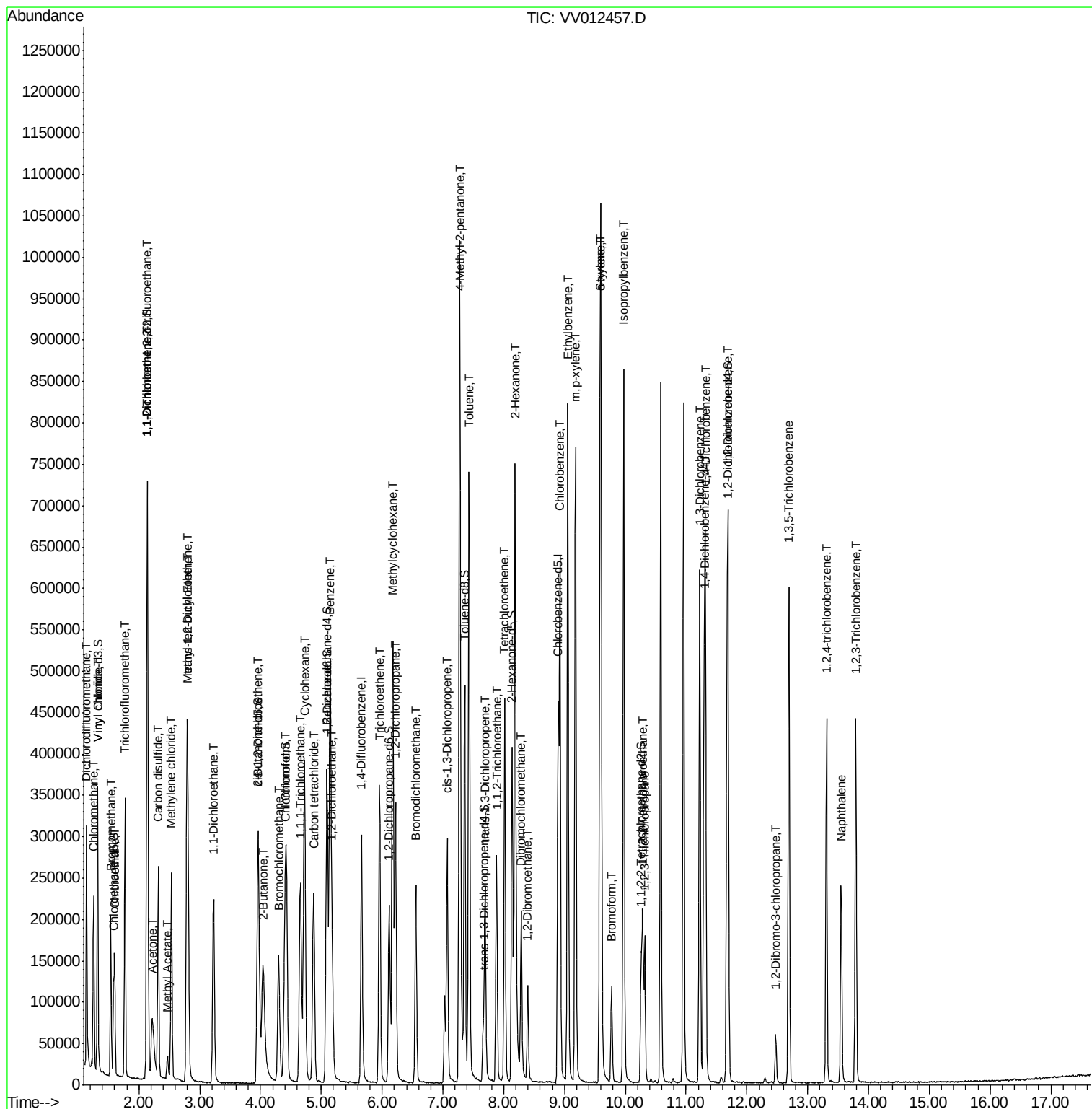
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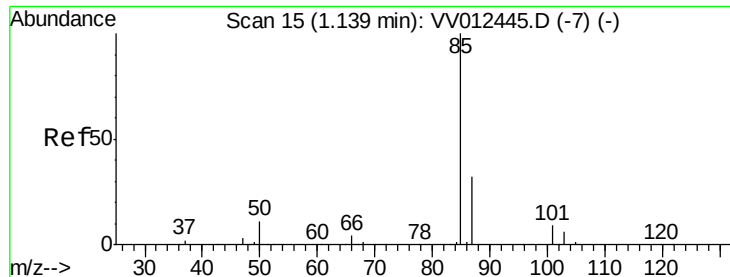
Data File : VV012457.D

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Acq On       : 30 Aug 2019 15:10
Operator     : SY/MD
Sample       : VSTDCCC005
Misc         : 25mL/MSVOA_V/WATER
ALS Vial     : 15 Sample Multip
```

**Instrument :**  
MSVOA\_V  
**ClientSampleId :**  
VSTD00556

Quant Time: Aug 31 00:12:09 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR082919WMA.M  
Quant Title : TRACE VOA SOM01.0  
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Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 4.944 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

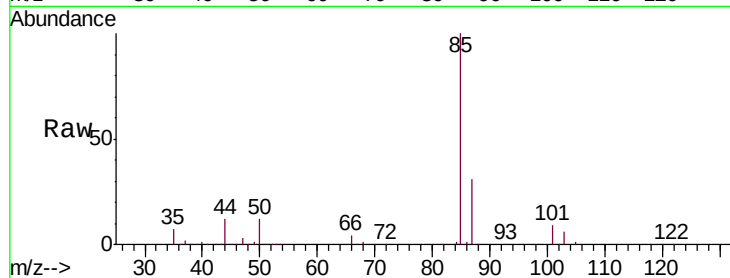
VSTD00556

Tgt Ion: 85 Resp: 162466

Ion Ratio Lower Upper

85 100

87 31.6 26.3 39.5



Abundance Ion 85.00 (84.70 to 85.70): VV012445.D (-7) (-)

Ion 87.00 (86.70 to 87.70): VV012445.D (-7) (-)

1.14

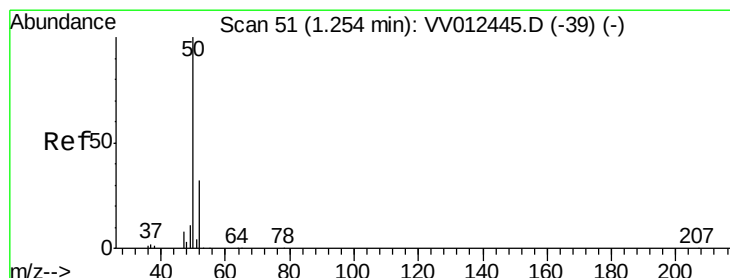
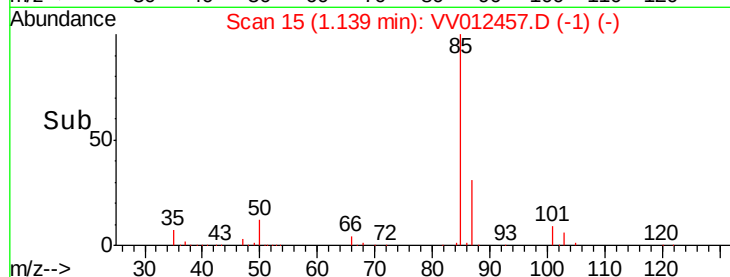
150000

100000

50000

0

Time-->



#3

Chloromethane

Concen: 4.704 ug/L

RT: 1.25 min Scan# 51

Delta R.T. 0.00 min

Lab File: VV012457.D

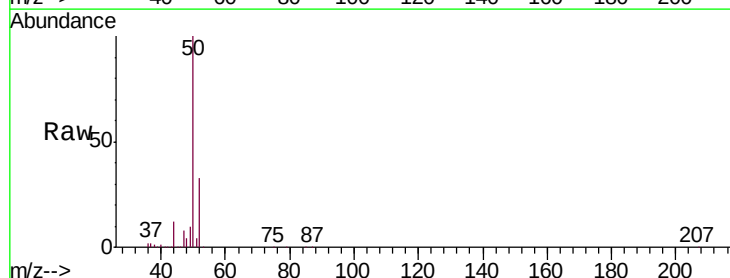
Acq: 30 Aug 2019 15:10

Tgt Ion: 50 Resp: 152141

Ion Ratio Lower Upper

50 100

52 32.8 22.5 41.9



Abundance Ion 50.05 (49.75 to 50.75): VV012445.D (-39) (-)

Ion 52.05 (51.75 to 52.75): VV012445.D (-39) (-)

1.25

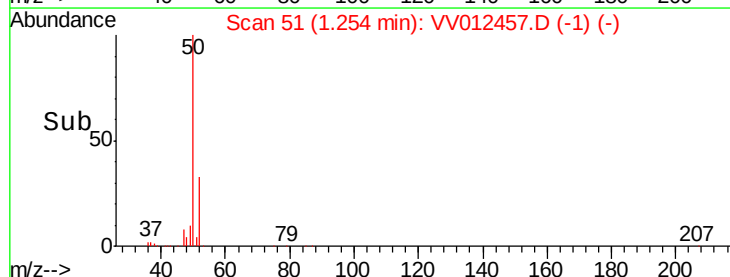
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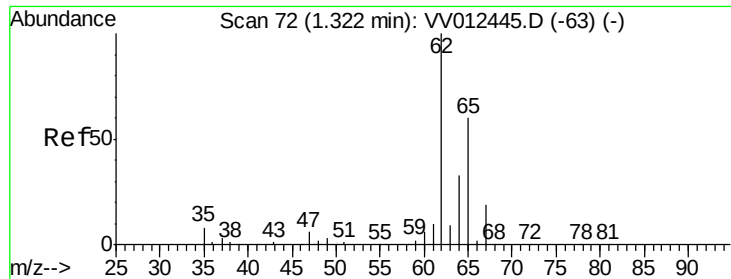
100000

50000

0

Time-->





#5

Vinyl chloride

Concen: 4.713 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

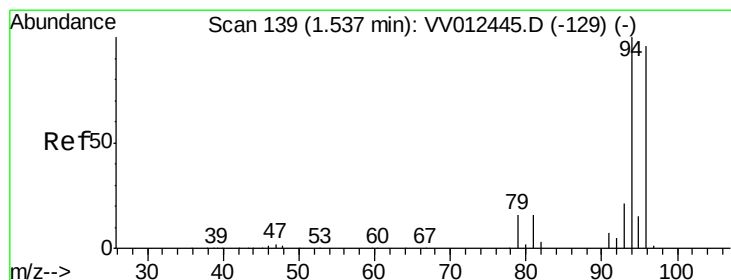
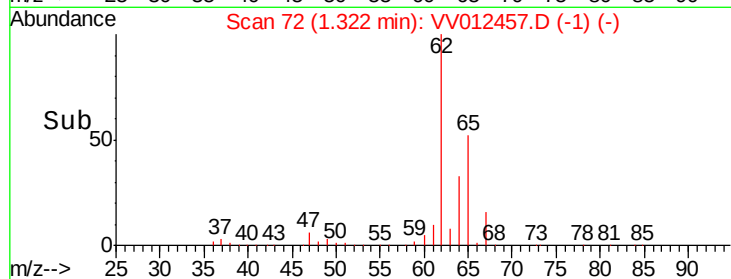
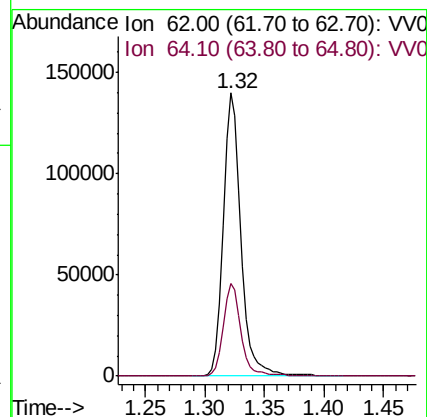
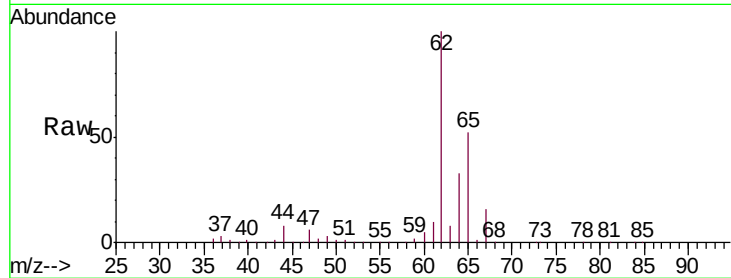
VSTD00556

Tgt Ion: 62 Resp: 143975

Ion Ratio Lower Upper

62 100

64 32.7 22.7 42.3



#6

Bromomethane

Concen: 4.755 ug/L

RT: 1.54 min Scan# 139

Delta R.T. 0.00 min

Lab File: VV012457.D

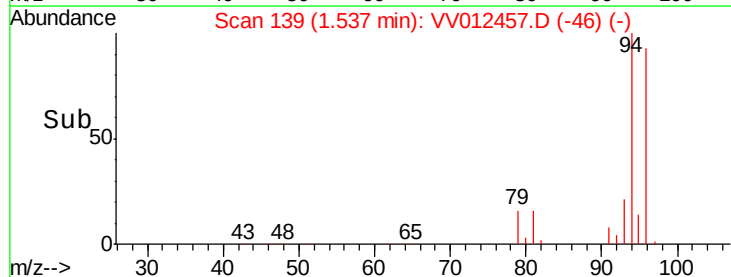
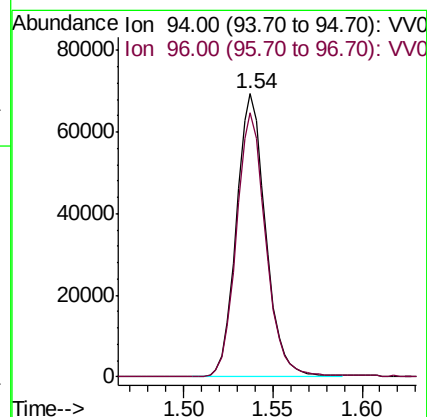
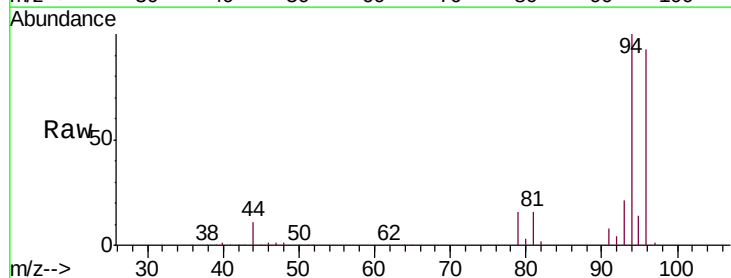
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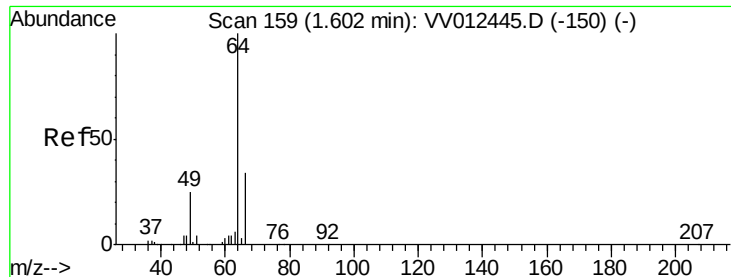
Tgt Ion: 94 Resp: 78895

Ion Ratio Lower Upper

94 100

96 93.2 64.0 119.0





#8

Chloroethane

Concen: 4.723 ug/L

RT: 1.60 min Scan# 159

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

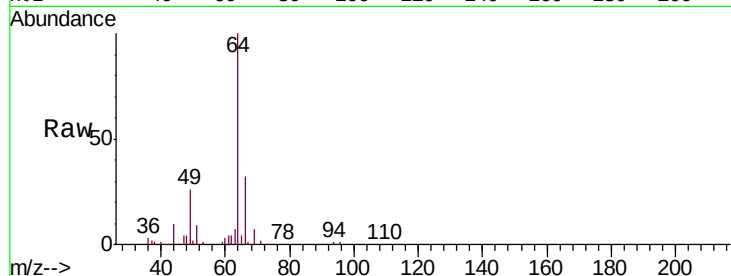
VSTD00556

Tgt Ion: 64 Resp: 77412

Ion Ratio Lower Upper

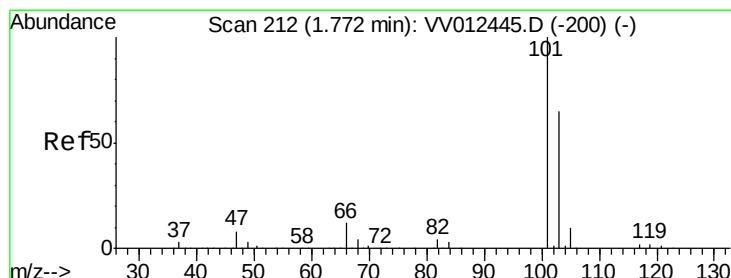
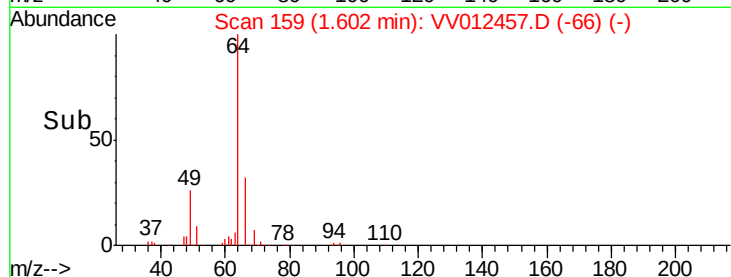
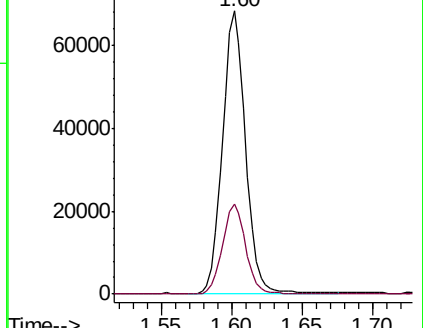
64 100

66 31.9 22.5 41.7



Abundance Ion 64.10 (63.80 to 64.80): VV012445.D (-150) (-)

Ion 66.05 (65.75 to 66.75): VV012457.D (-66) (-)



#9

Trichlorofluoromethane

Concen: 4.888 ug/L

RT: 1.77 min Scan# 212

Delta R.T. 0.00 min

Lab File: VV012457.D

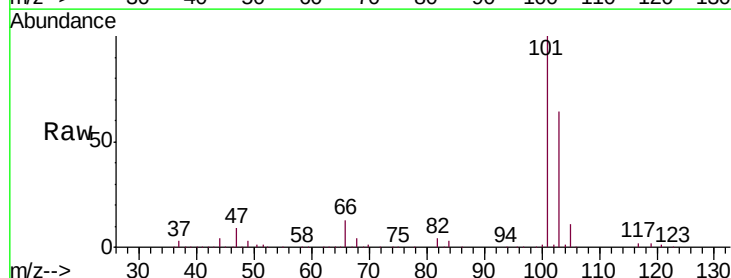
Acq: 30 Aug 2019 15:10

Tgt Ion: 101 Resp: 193428

Ion Ratio Lower Upper

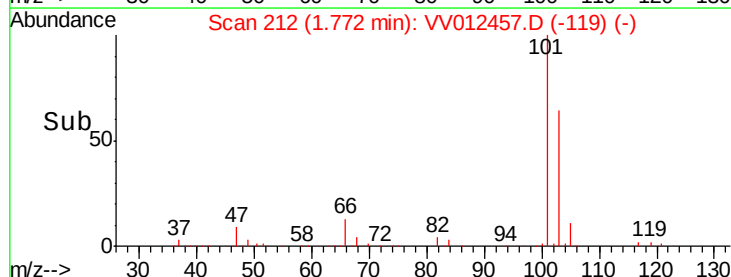
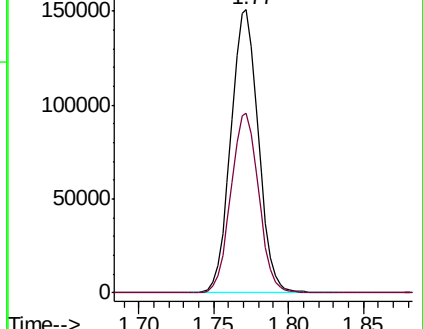
101 100

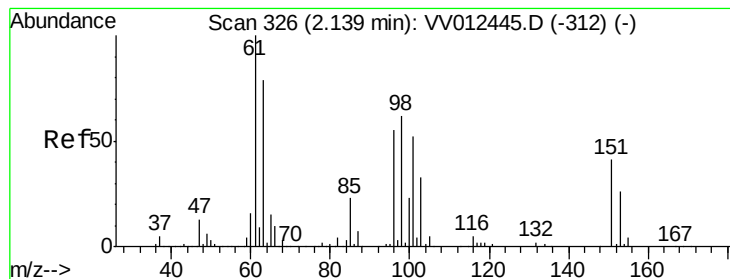
103 64.3 53.0 79.4



Abundance Ion 101.00 (100.70 to 101.70): VV012445.D (-200) (-)

Ion 103.00 (102.70 to 103.70): VV012457.D (-119) (-)





#10

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

Concen: 5.055 ug/L

RT: 2.14 min Scan# 327

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00556

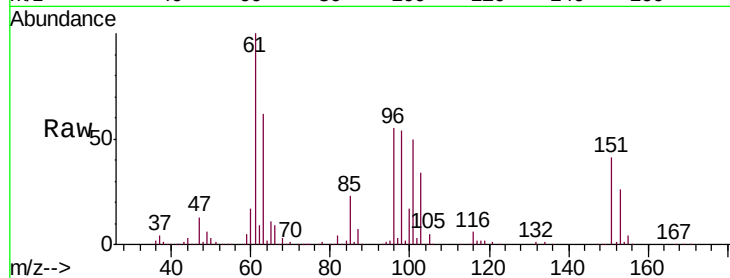
Tgt Ion: 101 Resp: 99414

Ion Ratio Lower Upper

101 100

85 44.4 35.4 53.2

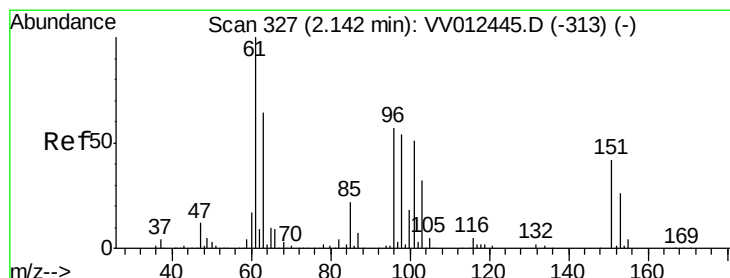
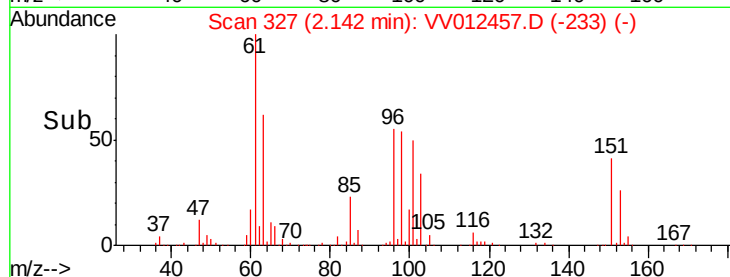
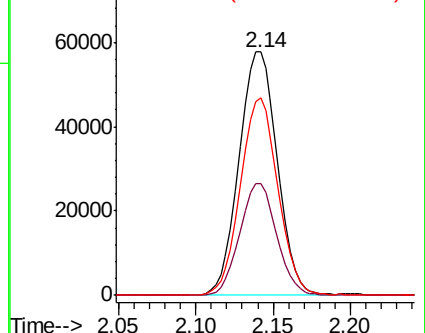
151 79.6 64.4 96.6



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: 4.816 ug/L

RT: 2.14 min Scan# 327

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

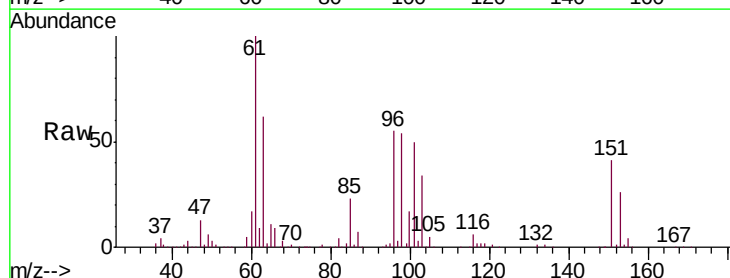
Tgt Ion: 96 Resp: 89312

Ion Ratio Lower Upper

96 100

61 180.5 127.8 237.4

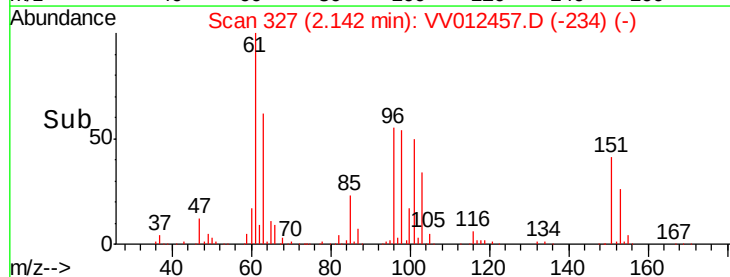
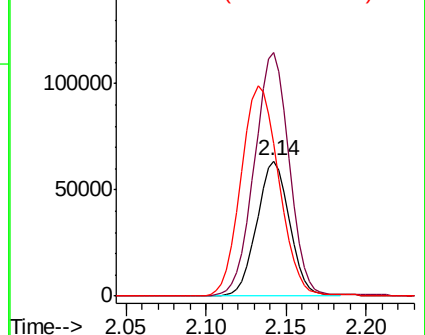
63 112.8 78.2 145.2

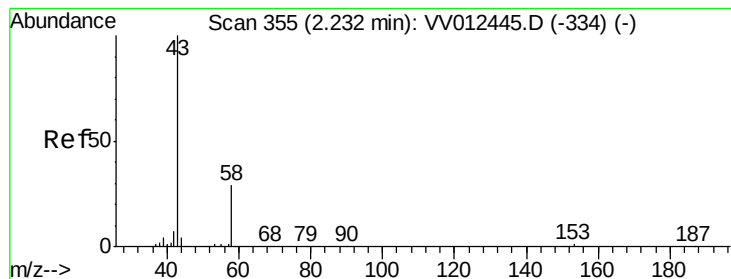


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 49.312 ug/L

RT: 2.22 min Scan# 352

Delta R.T. -0.01 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

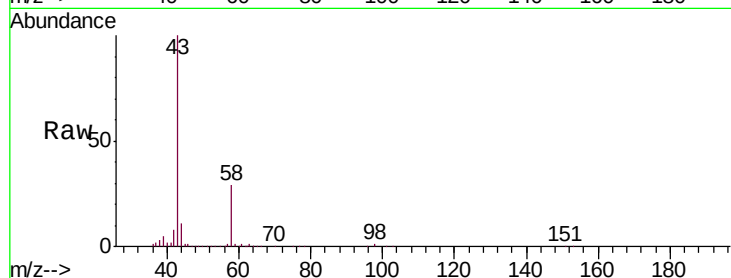
VSTD00556

Tgt Ion: 43 Resp: 160148

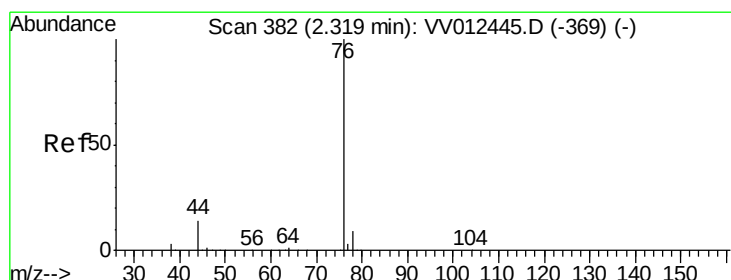
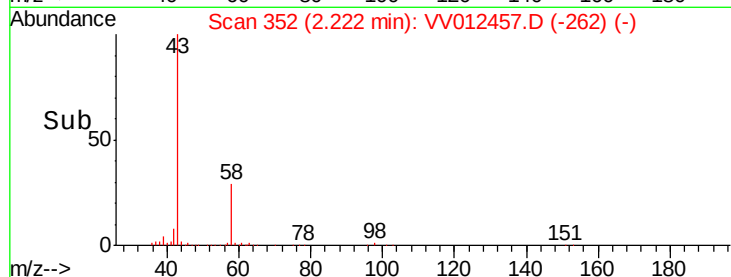
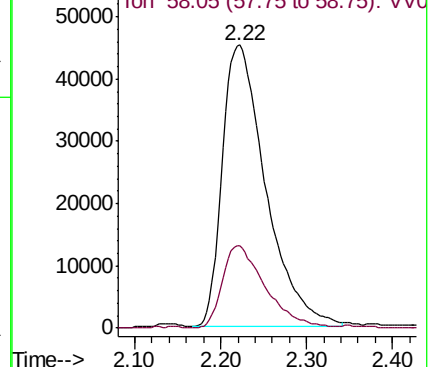
Ion Ratio Lower Upper

43 100

58 29.0 0.0 56.8



Abundance Ion 43.05 (42.75 to 43.75): VV012445.D (-334) (-)



#14

Carbon disulfide

Concen: 4.873 ug/L

RT: 2.32 min Scan# 382

Delta R.T. 0.00 min

Lab File: VV012457.D

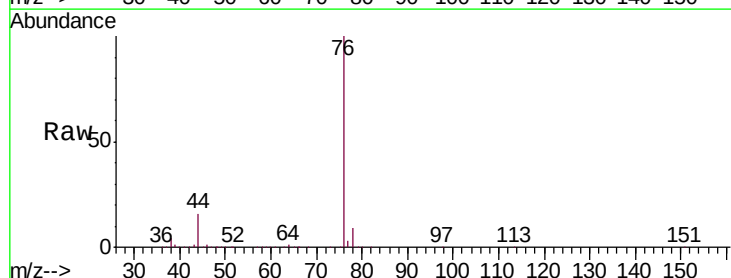
Acq: 30 Aug 2019 15:10

Tgt Ion: 76 Resp: 276180

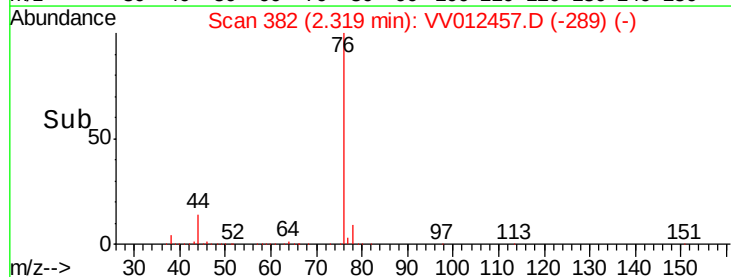
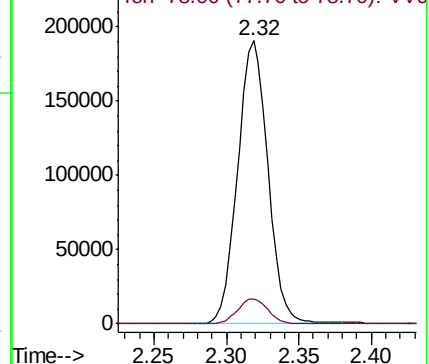
Ion Ratio Lower Upper

76 100

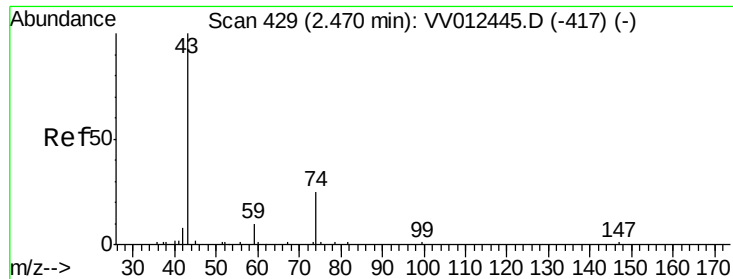
78 9.0 7.2 10.8



Abundance Ion 76.05 (75.75 to 76.75): VV012445.D (-369) (-)



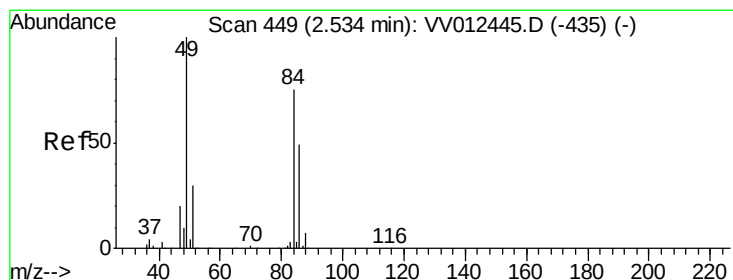
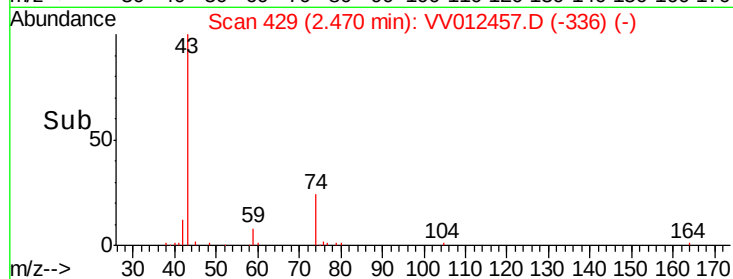
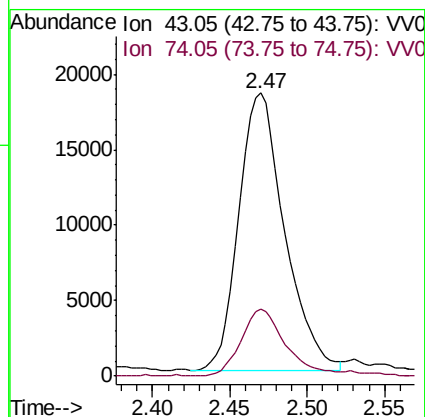
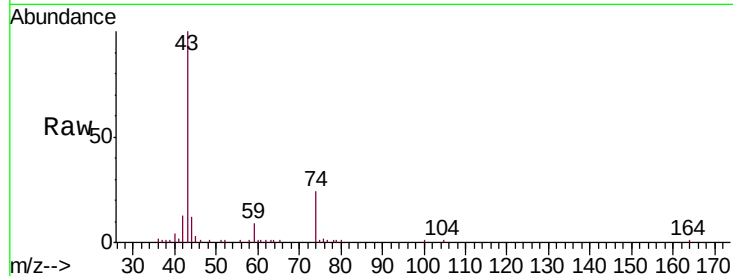




#15  
Methyl Acetate  
Concen: 4.721 ug/L  
RT: 2.47 min Scan# 429  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

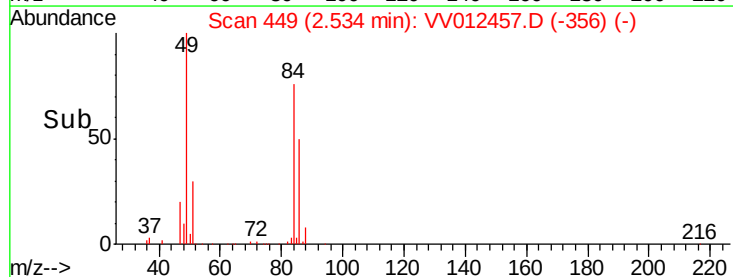
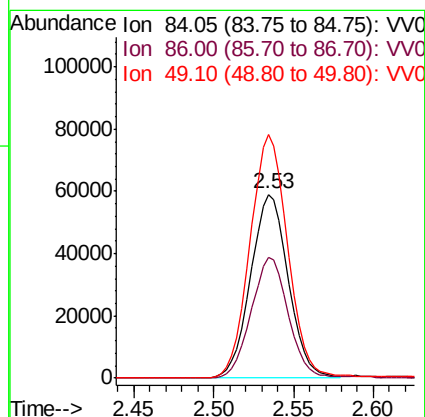
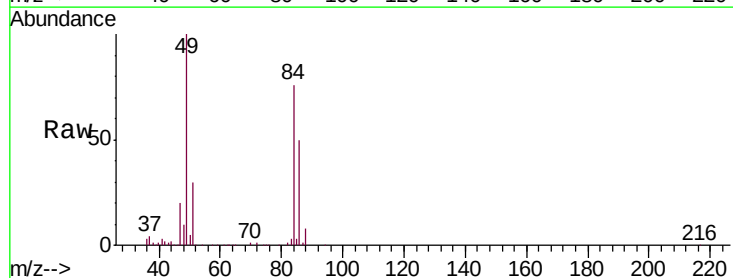
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00556

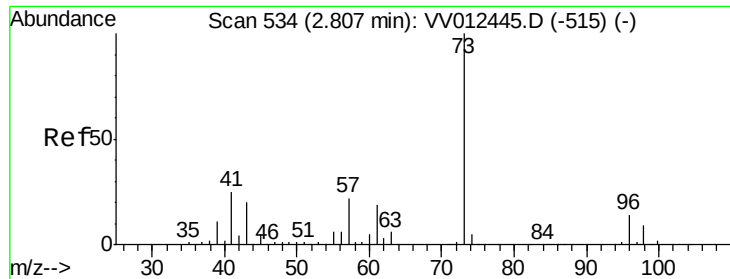
Tgt Ion: 43 Resp: 37750  
Ion Ratio Lower Upper  
43 100  
74 23.5 18.1 27.1



#16  
Methylene chloride  
Concen: 4.489 ug/L  
RT: 2.53 min Scan# 449  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

Tgt Ion: 84 Resp: 95165  
Ion Ratio Lower Upper  
84 100  
86 65.8 45.2 84.0  
49 132.3 95.1 176.7

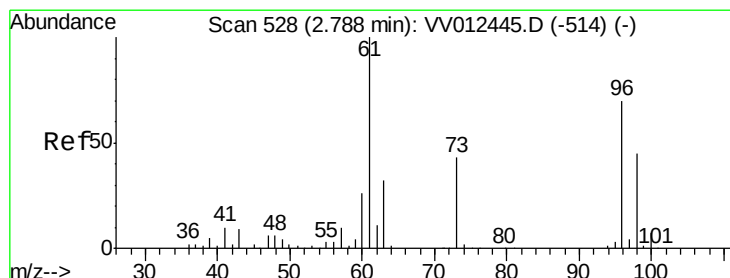
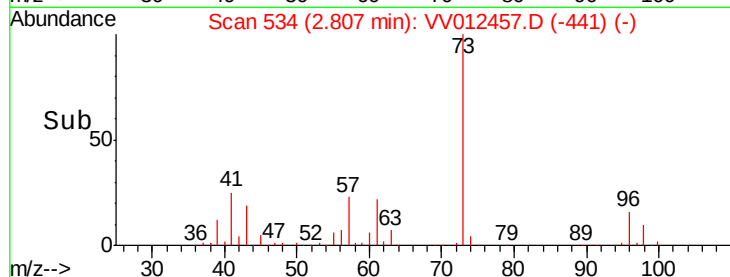
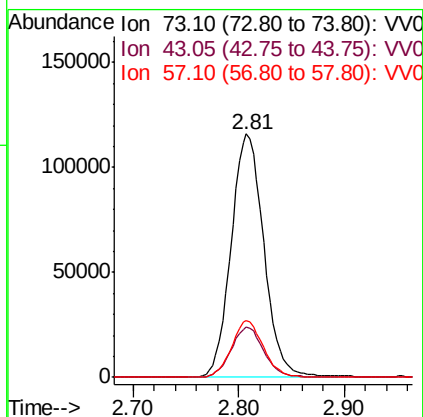
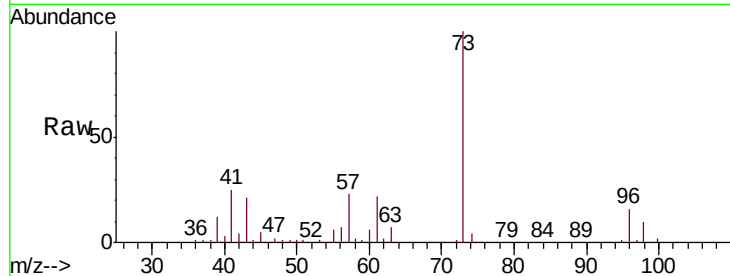




#17  
Methyl tert-butyl Ether  
Concen: 4.894 ug/L  
RT: 2.81 min Scan# 534  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

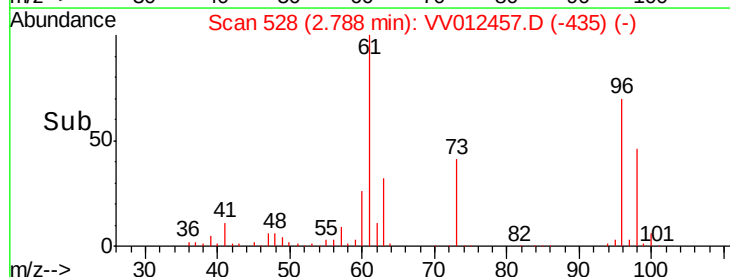
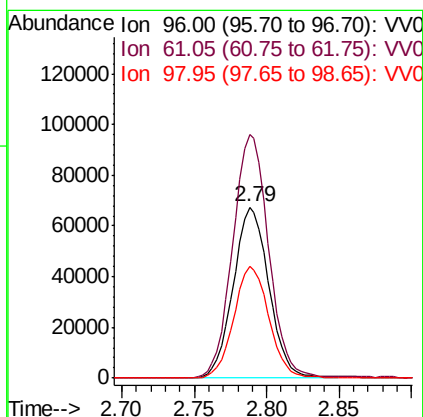
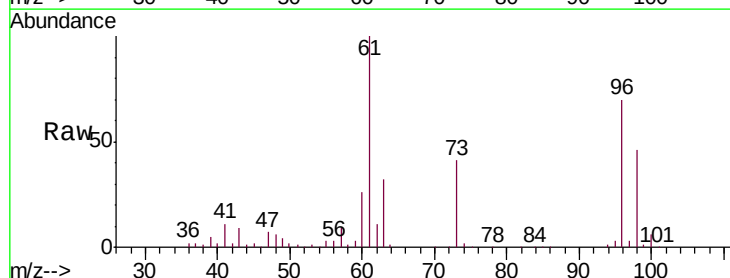
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00556

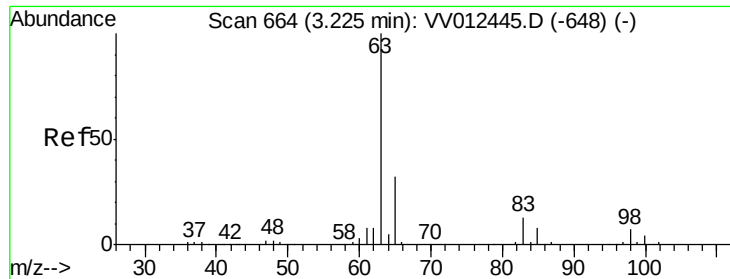
Tgt Ion: 73 Resp: 249406  
Ion Ratio Lower Upper  
73 100  
43 20.3 16.1 24.1  
57 22.6 18.8 28.2



#18  
trans-1,2-Dichloroethene  
Concen: 4.845 ug/L  
RT: 2.79 min Scan# 528  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

Tgt Ion: 96 Resp: 115063  
Ion Ratio Lower Upper  
96 100  
61 142.7 101.2 188.0  
98 65.1 44.1 81.9

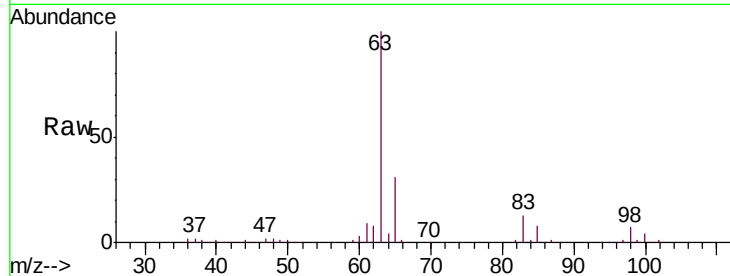




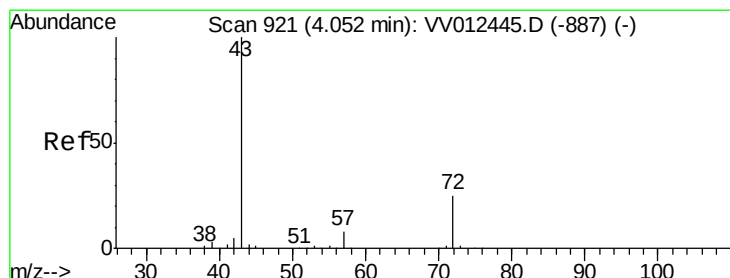
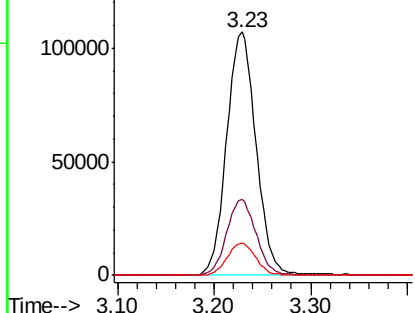
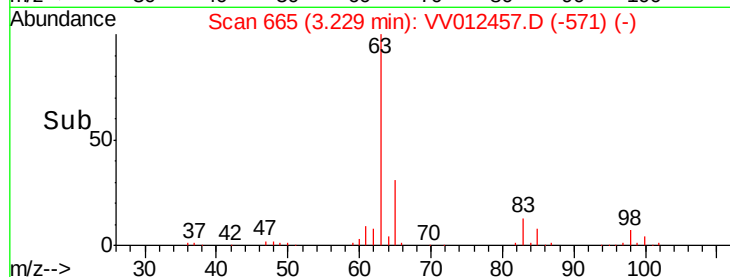
#19  
 1,1-Dichloroethane  
 Concen: 4.885 ug/L  
 RT: 3.23 min Scan# 665  
 Delta R.T. 0.00 min  
 Lab File: VV012457.D  
 Acq: 30 Aug 2019 15:10

Instrument :  
 MSVOA\_V  
 ClientSampleID :  
 VSTD00556

Tgt Ion: 63 Resp: 227103  
 Ion Ratio Lower Upper  
 63 100  
 65 31.4 21.6 40.2  
 83 13.1 9.0 16.8

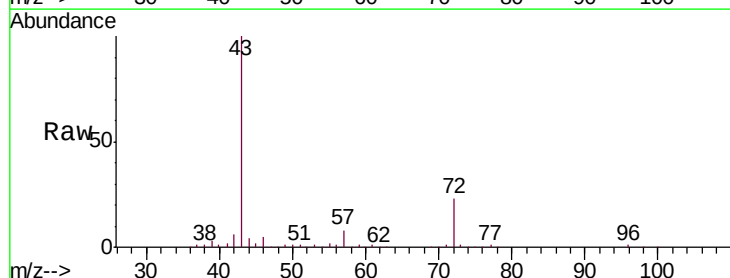


Abundance Ion 63.10 (62.80 to 63.80): VV0  
 Ion 65.10 (64.80 to 65.80): VV0  
 Ion 83.05 (82.75 to 83.75): VV0

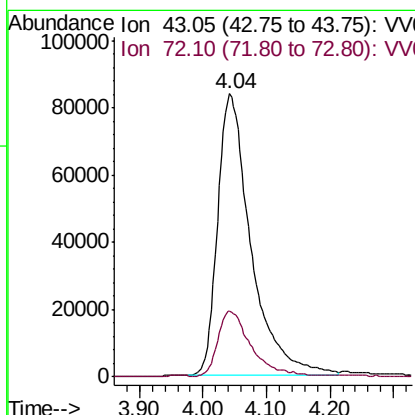
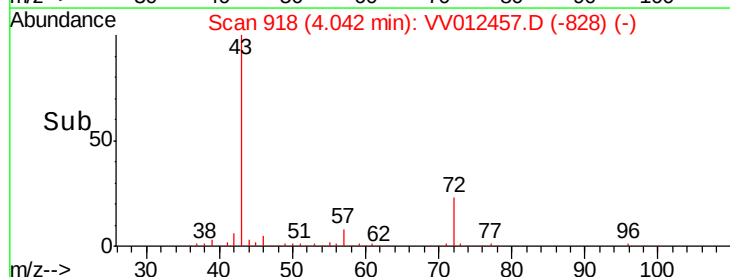


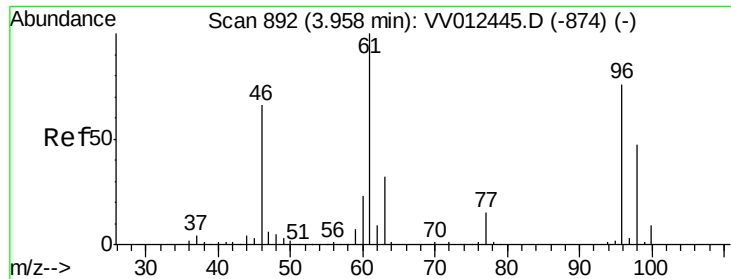
#21  
 2-Butanone  
 Concen: 50.945 ug/L  
 RT: 4.04 min Scan# 918  
 Delta R.T. -0.01 min  
 Lab File: VV012457.D  
 Acq: 30 Aug 2019 15:10

Tgt Ion: 43 Resp: 304157  
 Ion Ratio Lower Upper  
 43 100  
 72 23.0 11.8 35.3



Abundance Ion 43.05 (42.75 to 43.75): VV0  
 Ion 72.10 (71.80 to 72.80): VV0



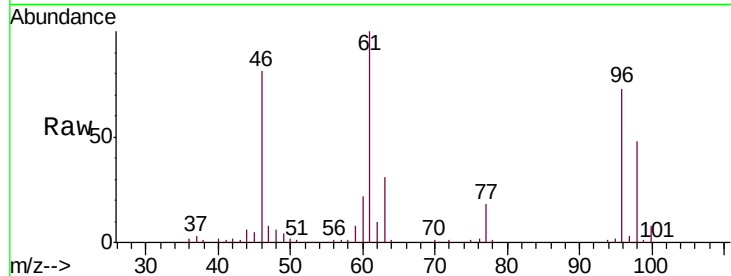


#22

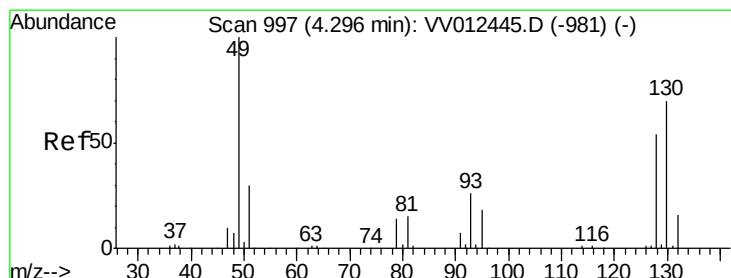
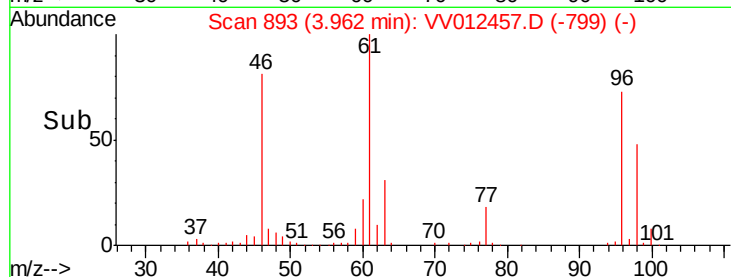
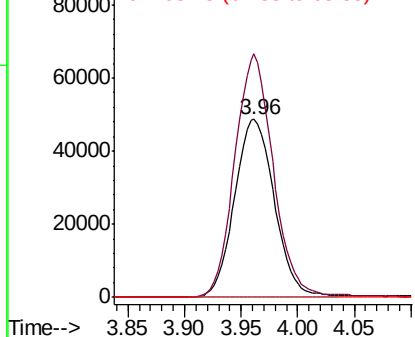
cis-1,2-Dichloroethene  
 Concen: 4.813 ug/L  
 RT: 3.96 min Scan# 893  
 Delta R.T. 0.00 min  
 Lab File: VV012457.D  
 Acq: 30 Aug 2019 15:10

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00556

Tgt Ion: 96 Resp: 119655  
 Ion Ratio Lower Upper  
 96 100  
 61 136.8 91.5 169.9  
 68 0.0 0.0 0.0



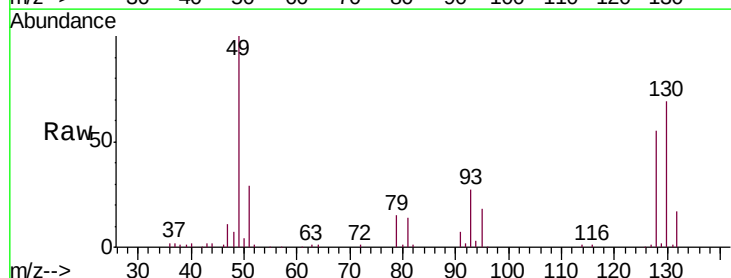
Abundance Ion 96.00 (95.70 to 96.70): VV0  
 Ion 61.05 (60.75 to 61.75): VV0  
 Ion 68.15 (67.85 to 68.85): VV0



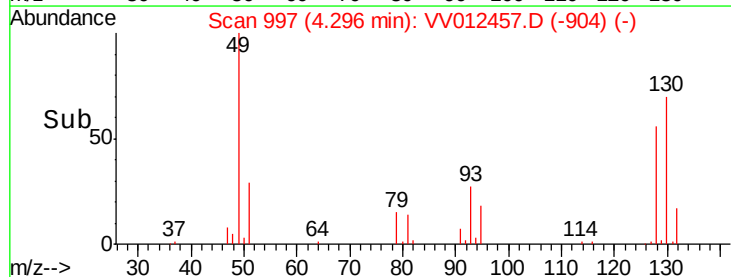
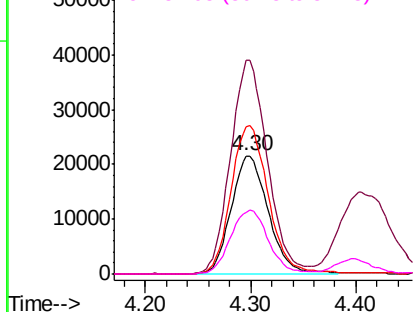
#23

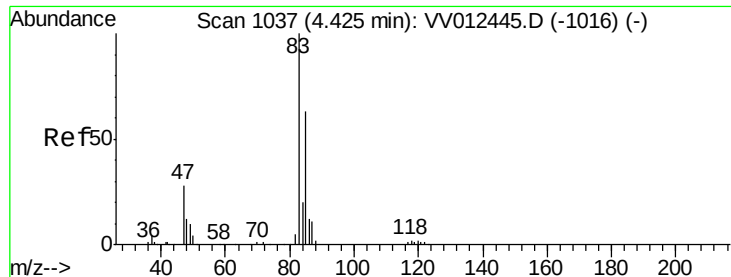
Bromochloromethane  
 Concen: 4.874 ug/L  
 RT: 4.30 min Scan# 997  
 Delta R.T. 0.00 min  
 Lab File: VV012457.D  
 Acq: 30 Aug 2019 15:10

Tgt Ion: 128 Resp: 52623  
 Ion Ratio Lower Upper  
 128 100  
 49 180.7 127.7 237.3  
 130 124.8 84.1 156.1  
 51 52.5 48.0 72.0



Abundance Ion 127.90 (127.60 to 128.60): V  
 Ion 49.10 (48.80 to 49.80): VV0  
 Ion 129.95 (129.65 to 130.65): V  
 Ion 51.05 (50.75 to 51.75): VV0

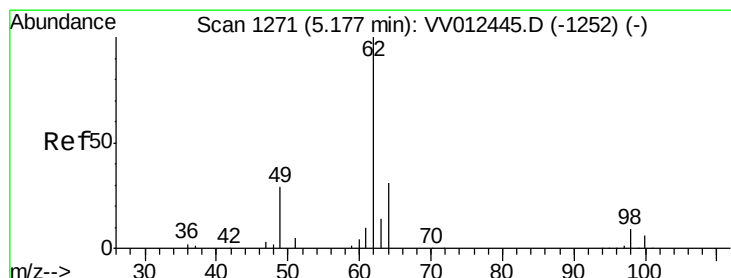
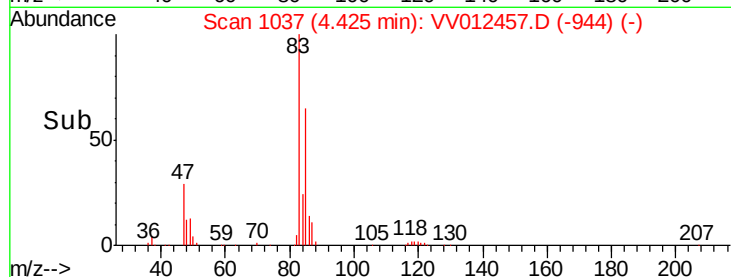
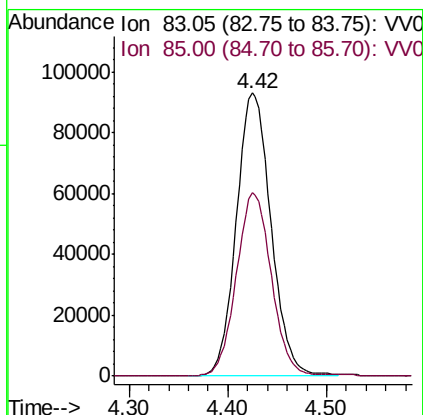
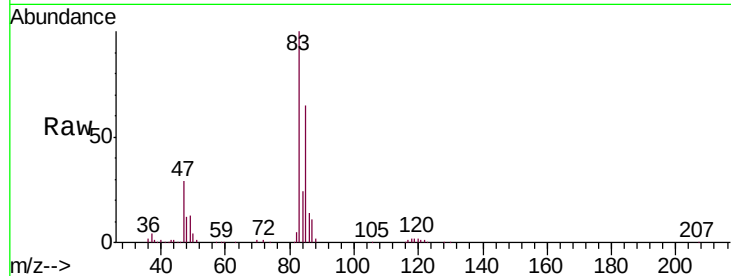




#25  
Chloroform  
Concen: 4.661 ug/L  
RT: 4.42 min Scan# 1037  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

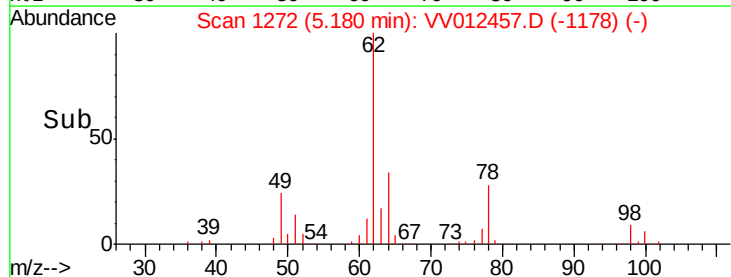
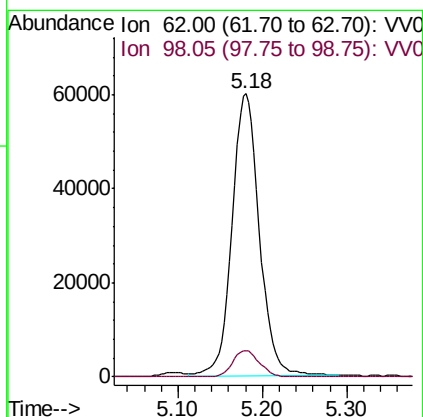
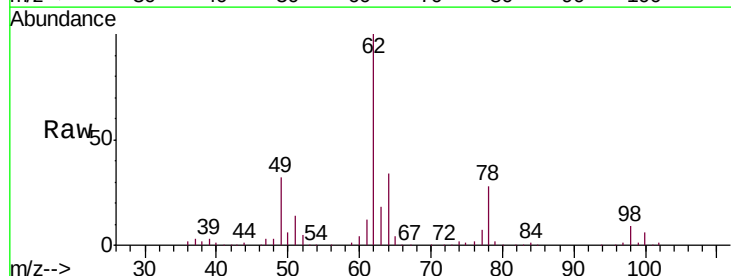
Instrument :  
MSVOA\_V  
ClientSampled :  
VSTD00556

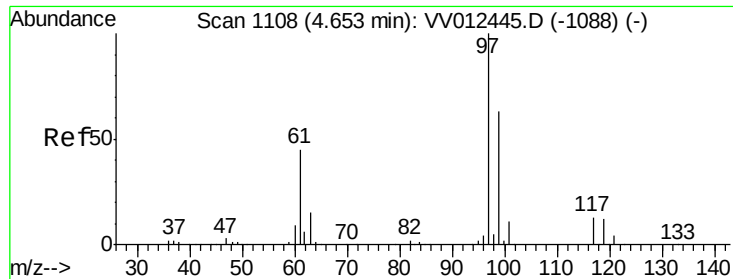
Tgt Ion: 83 Resp: 226989  
Ion Ratio Lower Upper  
83 100  
85 64.7 45.4 84.4



#27  
1,2-Dichloroethane  
Concen: 4.976 ug/L  
RT: 5.18 min Scan# 1272  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

Tgt Ion: 62 Resp: 135903  
Ion Ratio Lower Upper  
62 100  
98 9.3 8.3 12.5

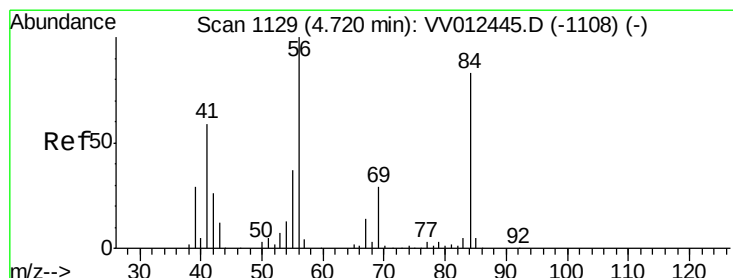
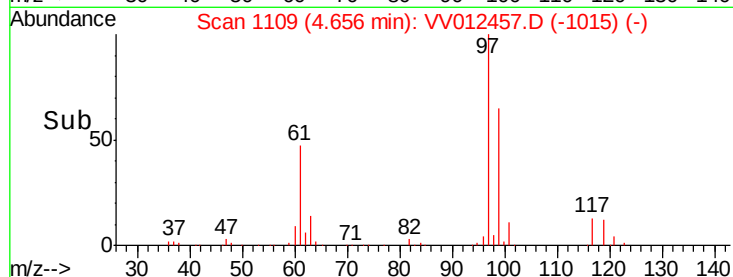
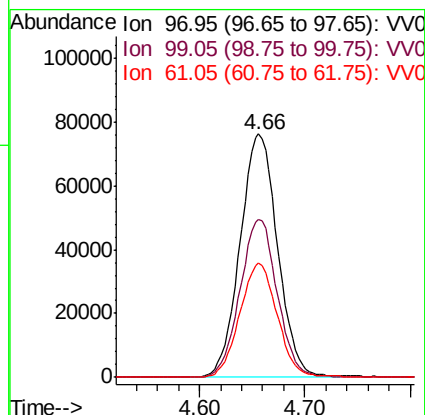
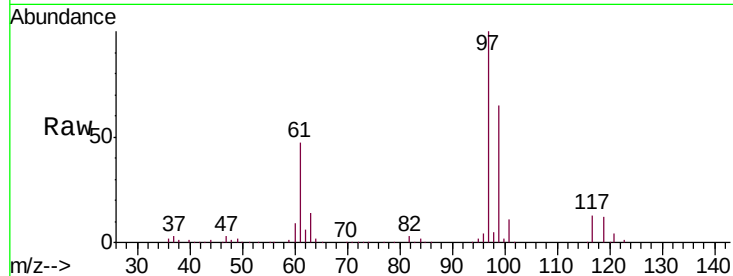




#29  
 1,1,1-Trichloroethane  
 Concen: 4.762 ug/L  
 RT: 4.66 min Scan# 1109  
 Delta R.T. 0.00 min  
 Lab File: VV012457.D  
 Acq: 30 Aug 2019 15:10

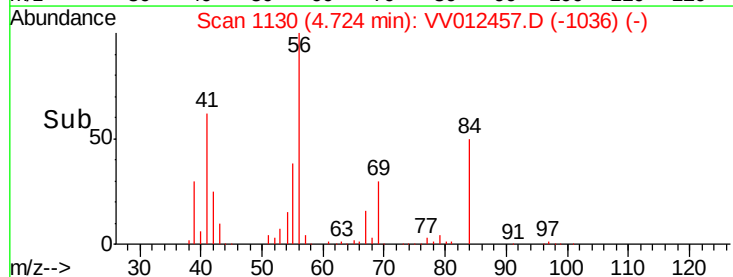
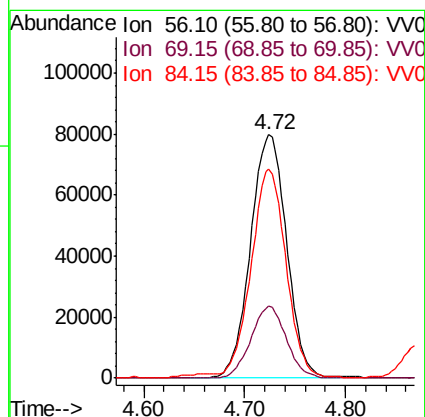
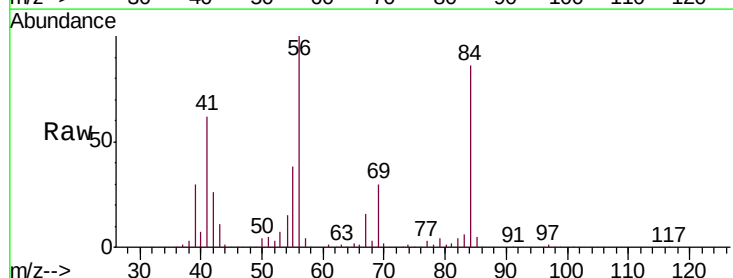
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00556

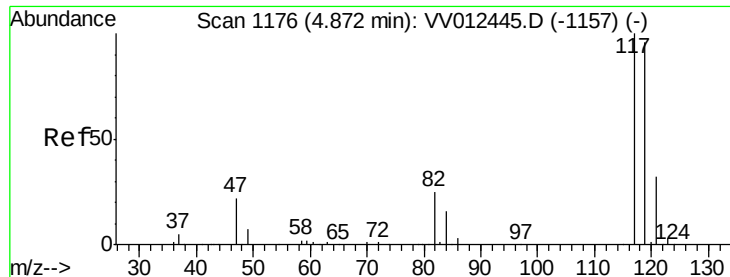
Tgt Ion: 97 Resp: 188528  
 Ion Ratio Lower Upper  
 97 100  
 99 64.8 49.8 74.6  
 61 47.0 36.7 55.1



#30  
 Cyclohexane  
 Concen: 4.967 ug/L  
 RT: 4.72 min Scan# 1130  
 Delta R.T. 0.00 min  
 Lab File: VV012457.D  
 Acq: 30 Aug 2019 15:10

Tgt Ion: 56 Resp: 198233  
 Ion Ratio Lower Upper  
 56 100  
 69 28.8 24.4 36.6  
 84 82.6 67.8 101.6

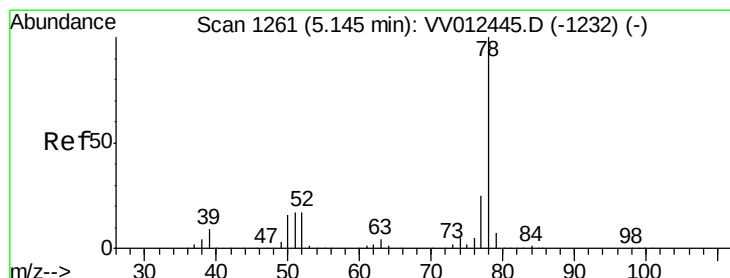
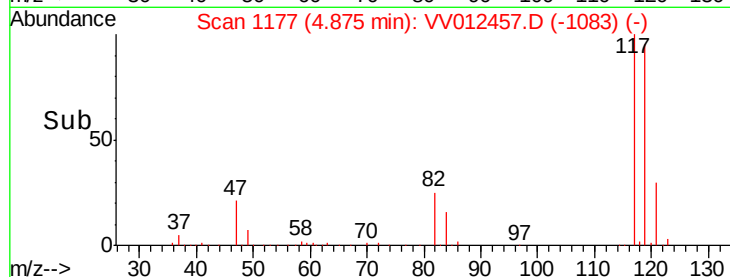
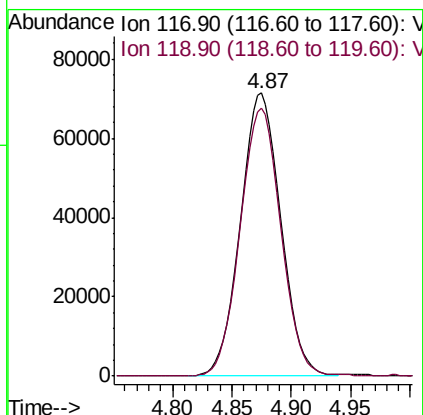
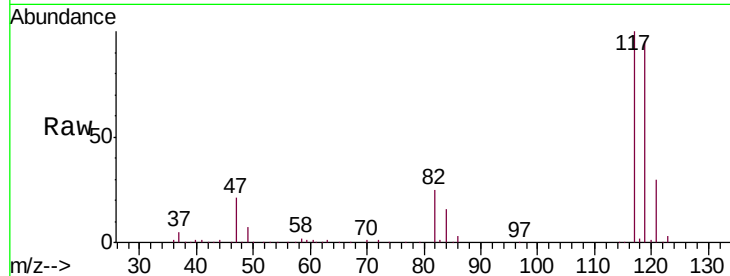




#31  
Carbon tetrachloride  
Concen: 4.811 ug/L  
RT: 4.87 min Scan# 1177  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

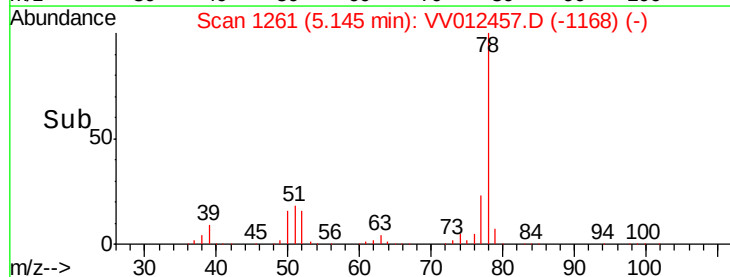
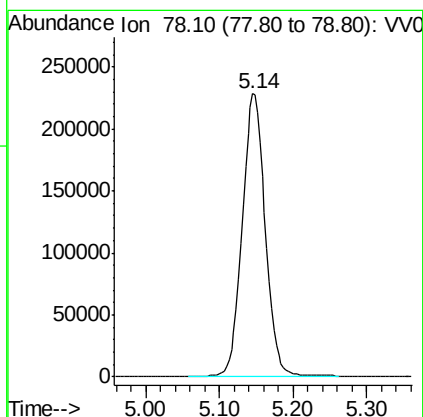
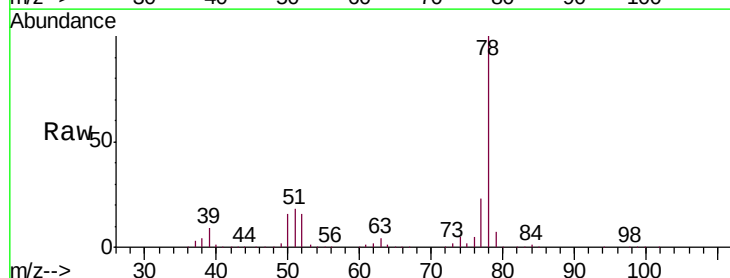
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00556

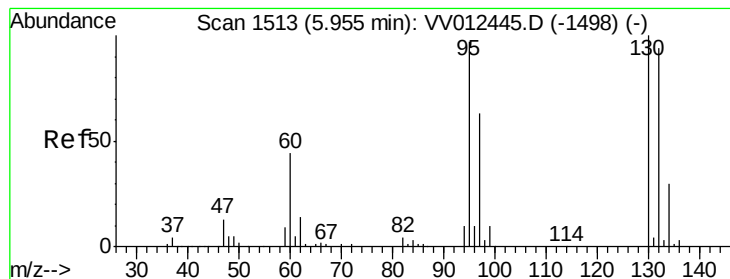
Tgt Ion:117 Resp: 167553  
Ion Ratio Lower Upper  
117 100  
119 95.4 77.8 116.8



#33  
Benzene  
Concen: 4.939 ug/L  
RT: 5.14 min Scan# 1261  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

Tgt Ion: 78 Resp: 499713





#34

Trichloroethene

Concen: 4.793 ug/L

RT: 5.96 min Scan# 1514

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00556

Tgt Ion: 95 Resp: 123542

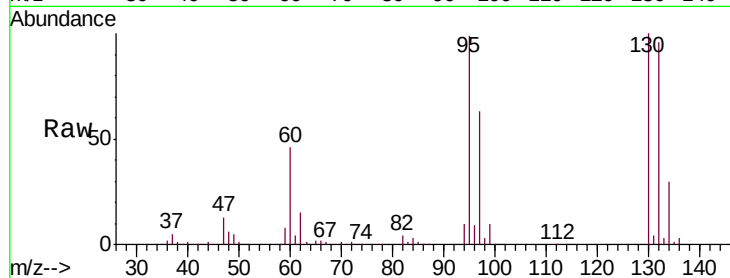
Ion Ratio Lower Upper

95 100

97 63.7 45.8 85.2

132 97.6 68.3 126.9

130 101.5 72.0 133.8

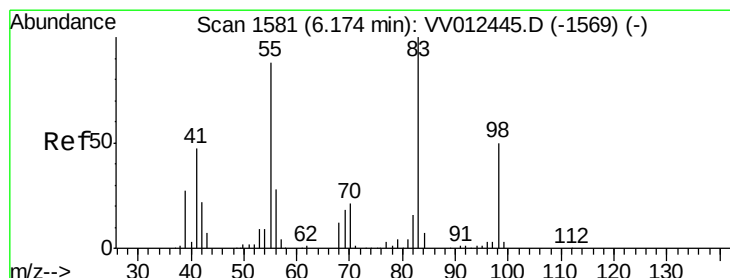
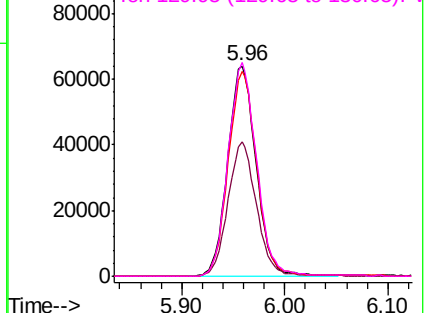
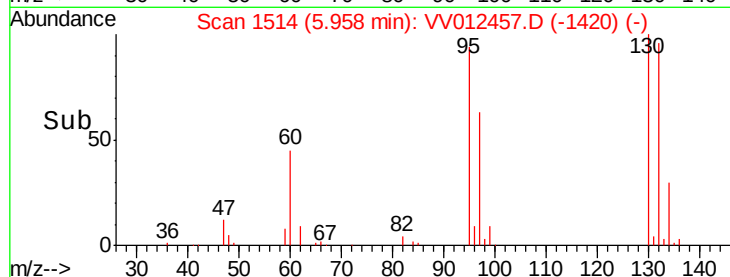


Abundance Ion 95.00 (94.70 to 95.70): VV012445.D (-1498) (-)

Ion 96.95 (96.65 to 97.65): VV012445.D (-1498) (-)

Ion 131.95 (131.65 to 132.65): VV012445.D (-1498) (-)

Ion 129.95 (129.65 to 130.65): VV012445.D (-1498) (-)



#35

Methylcyclohexane

Concen: 5.050 ug/L

RT: 6.17 min Scan# 1581

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

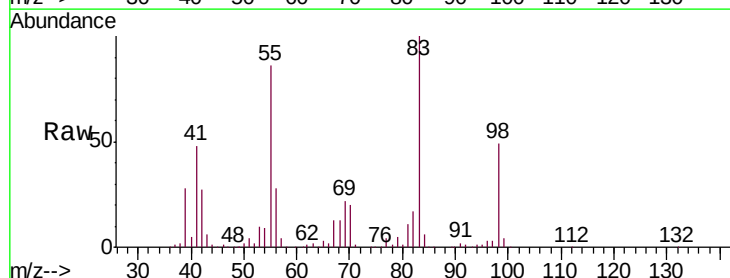
Tgt Ion: 83 Resp: 198063

Ion Ratio Lower Upper

83 100

55 84.5 67.8 101.6

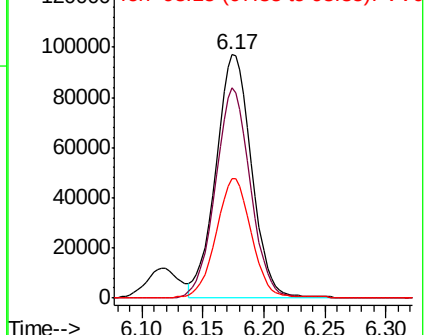
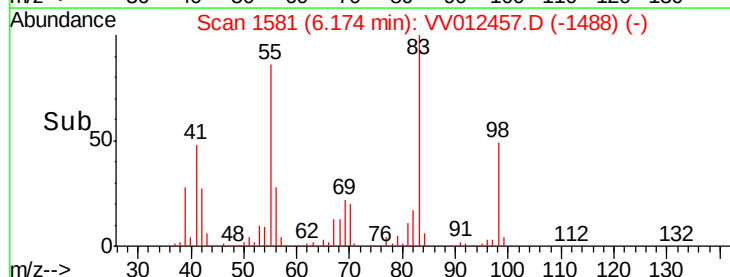
98 49.0 39.2 58.8



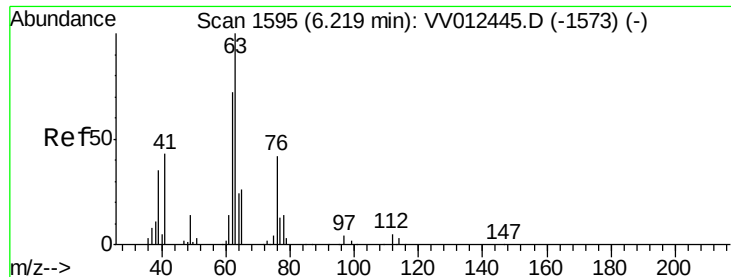
Abundance Ion 83.15 (82.85 to 83.85): VV012445.D (-1569) (-)

Ion 55.10 (54.80 to 55.80): VV012445.D (-1569) (-)

Ion 98.15 (97.85 to 98.85): VV012445.D (-1569) (-)



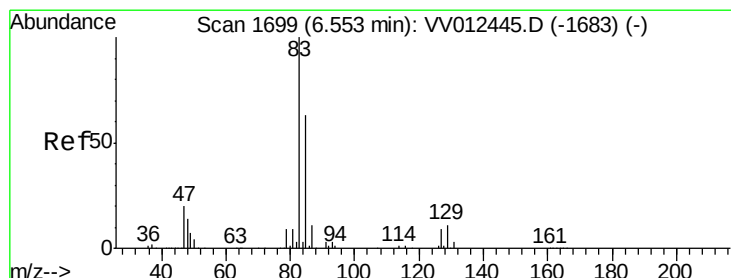
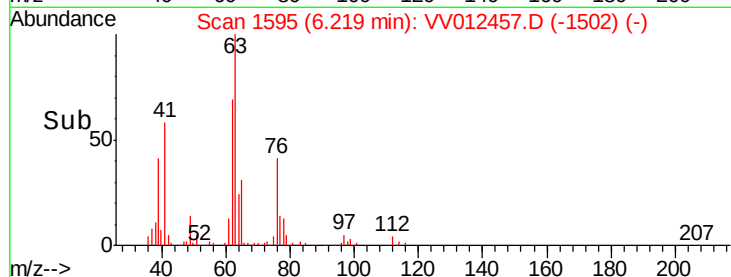
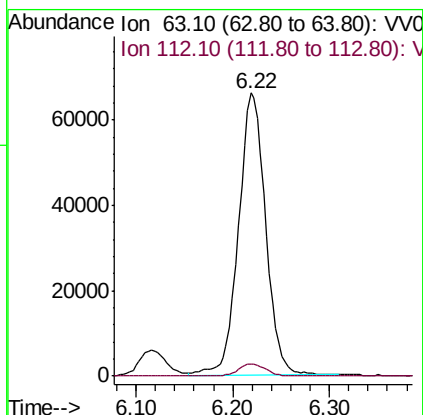
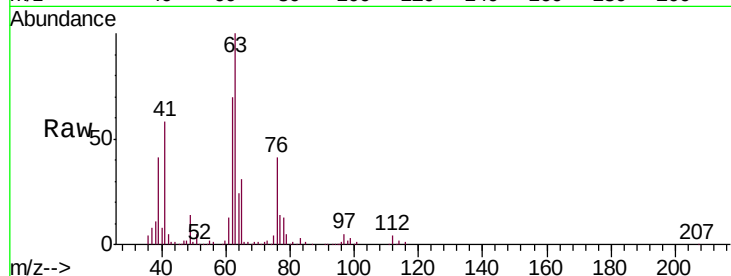




#37  
 1,2-Dichloropropane  
 Concen: 4.895 ug/L  
 RT: 6.22 min Scan# 1595  
 Delta R.T. 0.00 min  
 Lab File: VV012457.D  
 Acq: 30 Aug 2019 15:10

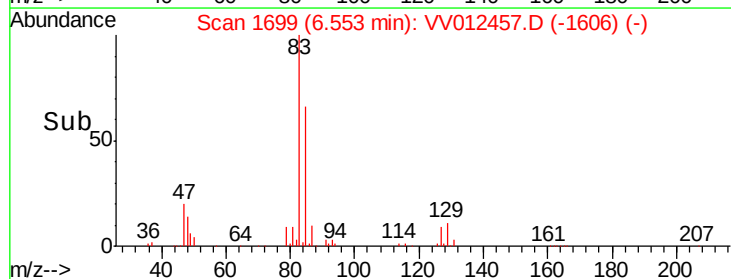
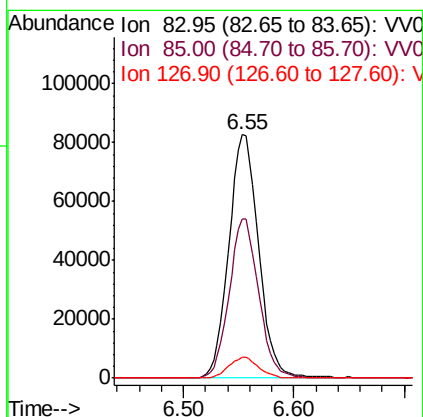
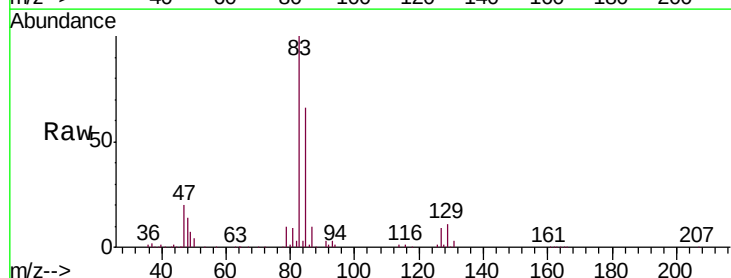
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00556

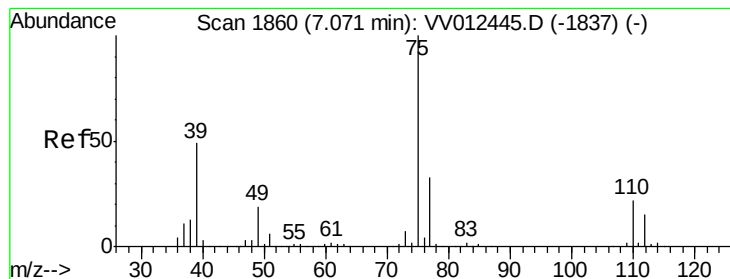
Tgt Ion: 63 Resp: 129156  
 Ion Ratio Lower Upper  
 63 100  
 112 4.6 3.7 5.5



#38  
 Bromodichloromethane  
 Concen: 4.730 ug/L  
 RT: 6.55 min Scan# 1699  
 Delta R.T. 0.00 min  
 Lab File: VV012457.D  
 Acq: 30 Aug 2019 15:10

Tgt Ion: 83 Resp: 155202  
 Ion Ratio Lower Upper  
 83 100  
 85 65.6 45.4 84.4  
 127 8.5 6.4 9.6





#39

cis-1,3-Dichloropropene

Concen: 4.870 ug/L

RT: 7.07 min Scan# 1860

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

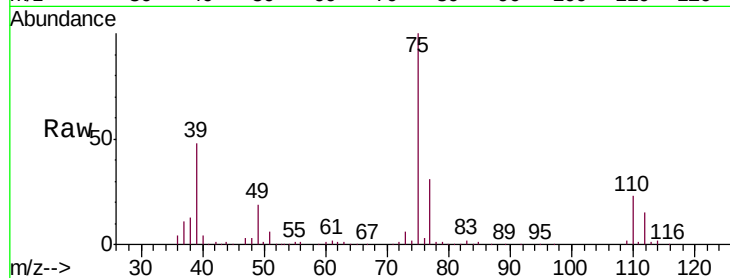
VSTD00556

Tgt Ion: 75 Resp: 166273

Ion Ratio Lower Upper

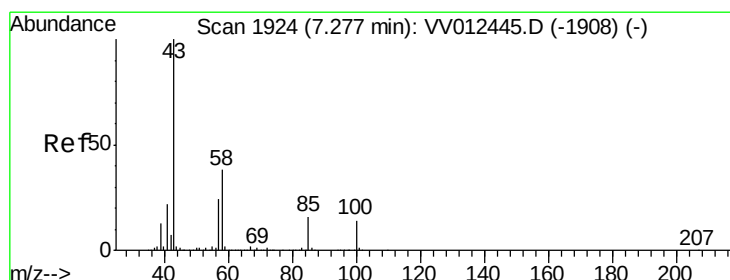
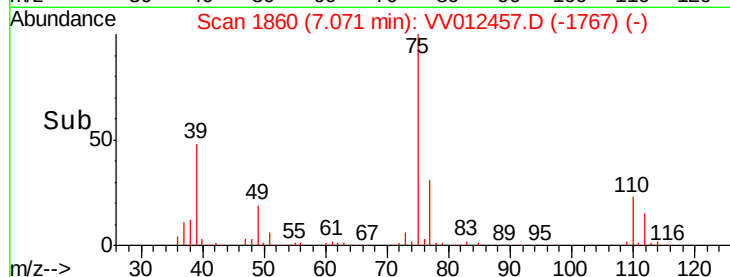
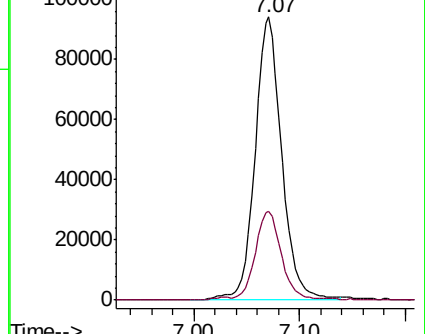
75 100

77 31.5 21.8 40.6



Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 77.05 (76.75 to 77.75): VV0



#40

4-Methyl-2-pentanone

Concen: 50.696 ug/L

RT: 7.28 min Scan# 1924

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

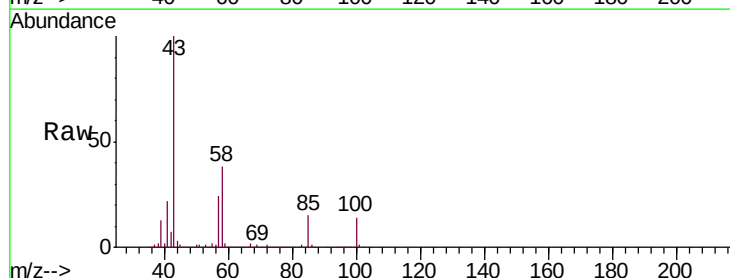
Tgt Ion: 43 Resp: 758141

Ion Ratio Lower Upper

43 100

58 38.4 29.7 44.5

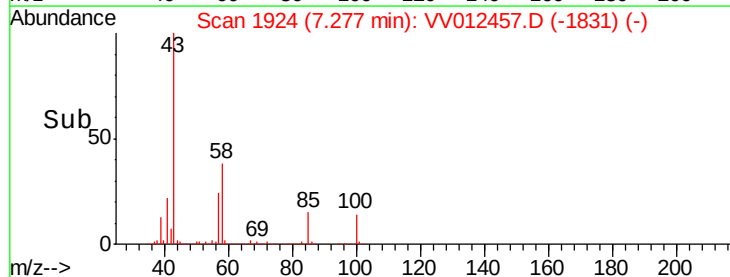
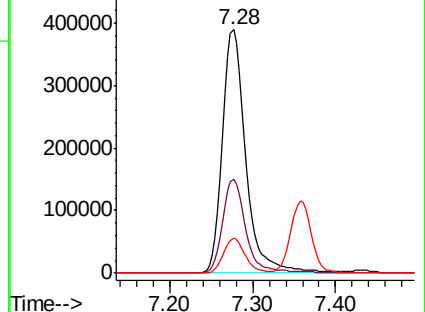
100 13.4 10.8 16.2

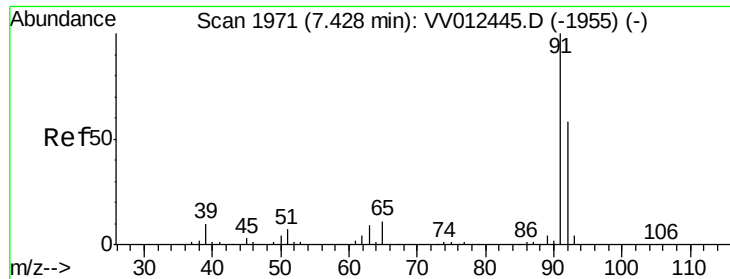


Abundance Ion 43.05 (42.75 to 43.75): VV0

Ion 58.05 (57.75 to 58.75): VV0

Ion 100.15 (99.85 to 100.85): VV0





#42

Toluene

Concen: 5.074 ug/L

RT: 7.43 min Scan# 1972

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

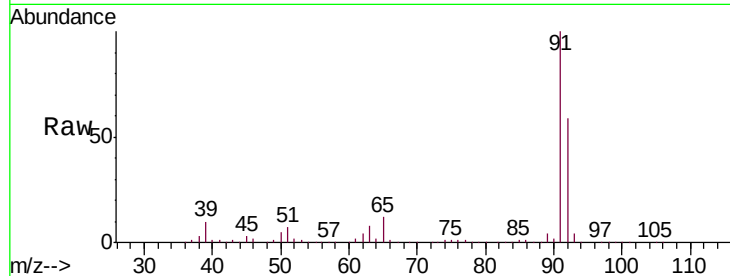
VSTD00556

Tgt Ion: 91 Resp: 525469

Ion Ratio Lower Upper

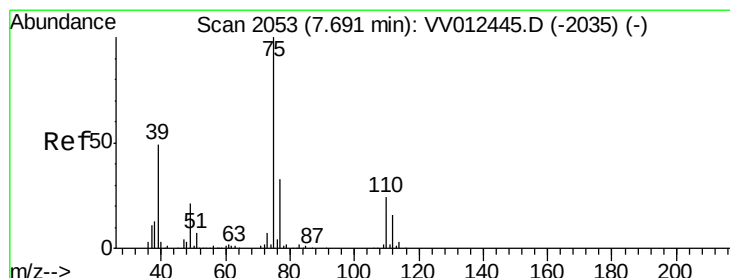
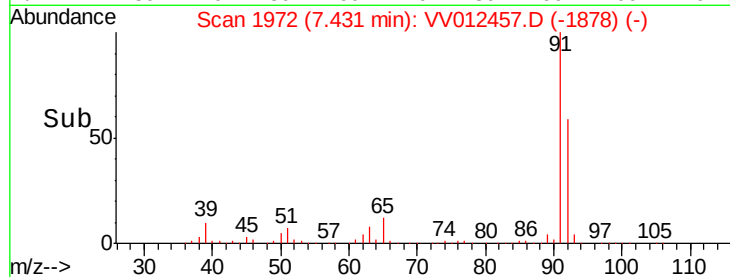
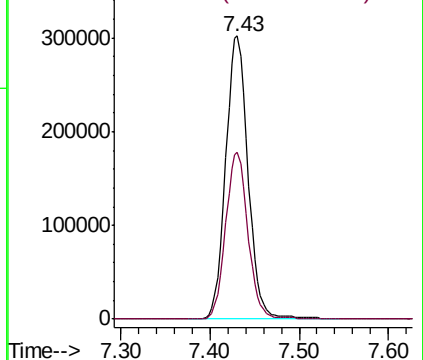
91 100

92 58.8 41.2 76.6



Abundance Ion 91.15 (90.85 to 91.85): VV0

Ion 92.15 (91.85 to 92.85): VV0



#44

trans-1,3-Dichloropropene

Concen: 4.859 ug/L

RT: 7.69 min Scan# 2054

Delta R.T. 0.00 min

Lab File: VV012457.D

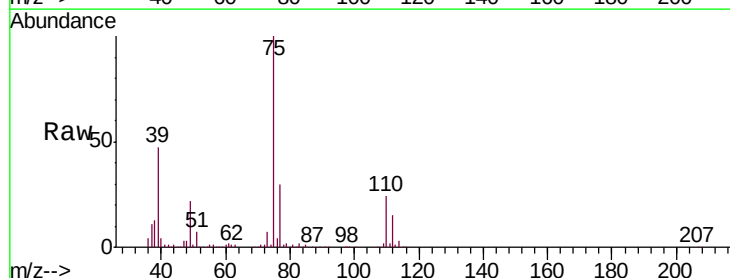
Acq: 30 Aug 2019 15:10

Tgt Ion: 75 Resp: 128861

Ion Ratio Lower Upper

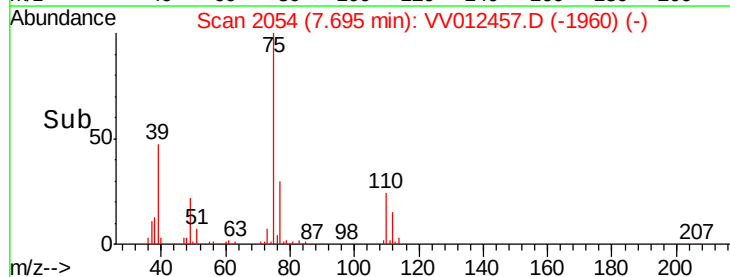
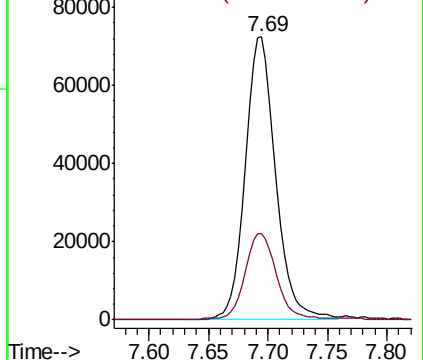
75 100

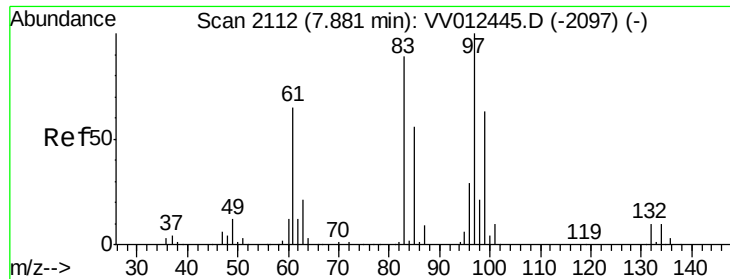
77 30.4 20.6 38.4



Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 77.05 (76.75 to 77.75): VV0

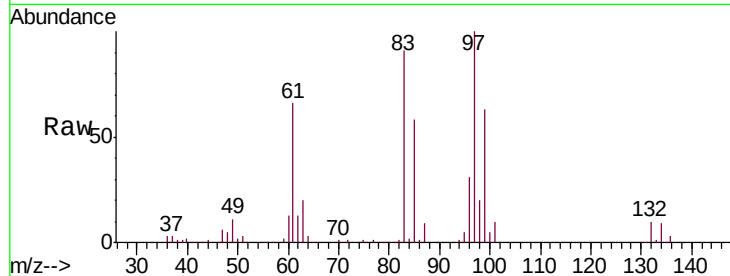




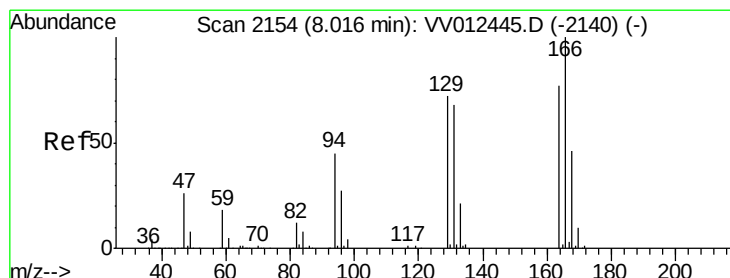
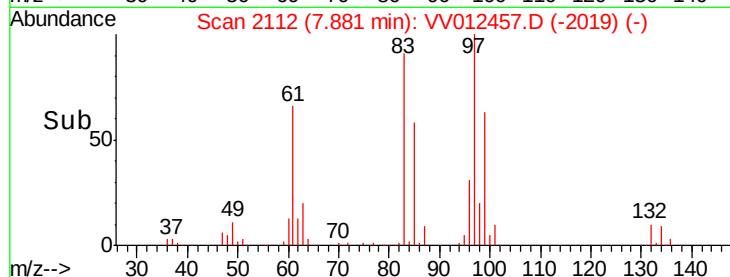
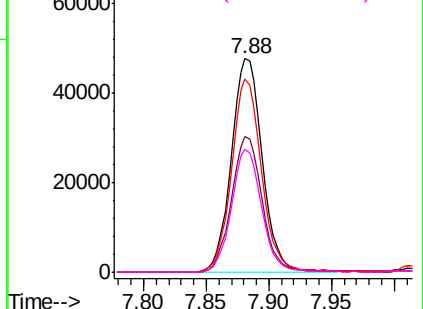
#45  
 1,1,2-Trichloroethane  
 Concen: 4.667 ug/L  
 RT: 7.88 min Scan# 2112  
 Delta R.T. 0.00 min  
 Lab File: VV012457.D  
 Acq: 30 Aug 2019 15:10

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00556

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 81683 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 63.4  | 43.3  | 80.3  |
| 83       | 90.8  | 61.2  | 113.6 |
| 85       | 57.6  | 40.0  | 74.4  |

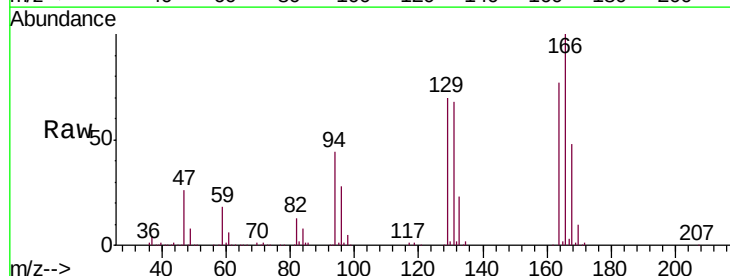


Abundance Ion 96.95 (96.65 to 97.65): VV0  
 Ion 99.05 (98.75 to 99.75): VV0  
 Ion 82.95 (82.65 to 83.65): VV0  
 Ion 85.00 (84.70 to 85.70): VV0

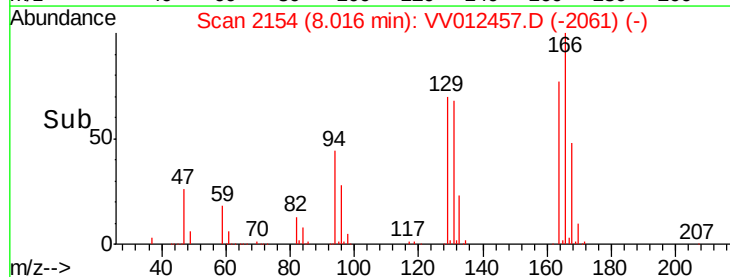
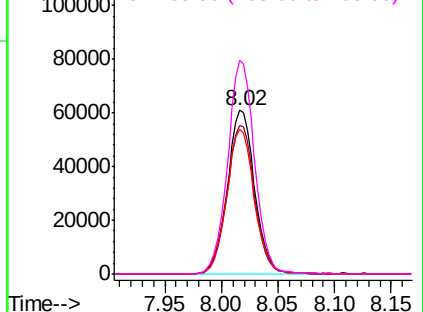


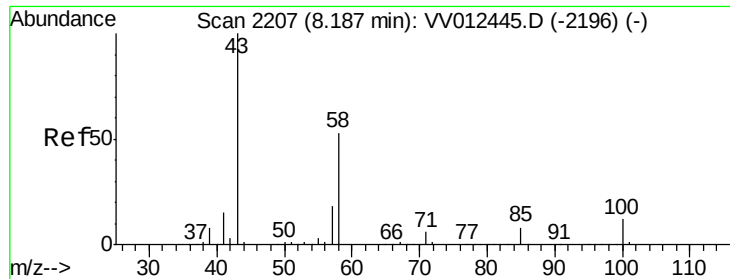
#47  
 Tetrachloroethene  
 Concen: 4.970 ug/L  
 RT: 8.02 min Scan# 2154  
 Delta R.T. 0.00 min  
 Lab File: VV012457.D  
 Acq: 30 Aug 2019 15:10

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 102564 |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 129      | 90.8  | 65.6  | 121.8  |
| 131      | 88.7  | 63.3  | 117.5  |
| 166      | 130.4 | 89.4  | 166.0  |



Abundance Ion 163.90 (163.60 to 164.60): V  
 Ion 128.95 (128.65 to 129.65): V  
 Ion 130.95 (130.65 to 131.65): V  
 Ion 165.90 (165.60 to 166.60): V

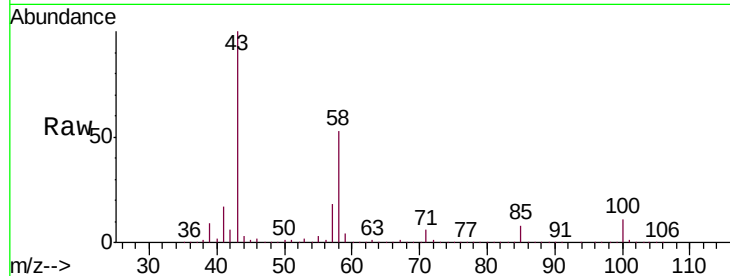




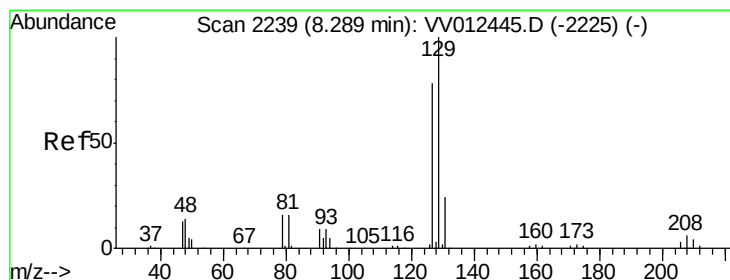
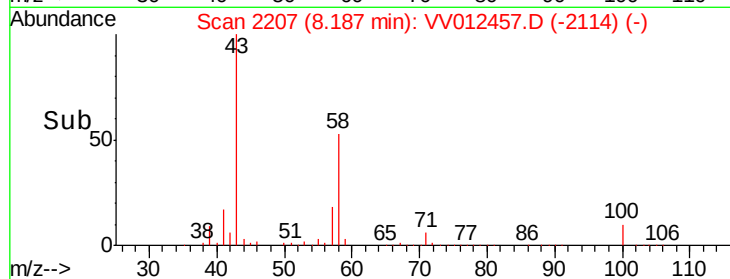
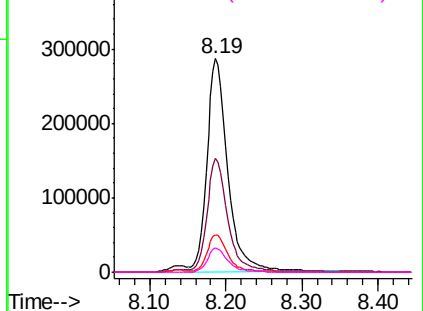
#48  
2-Hexanone  
Concen: 53.571 ug/L  
RT: 8.19 min Scan# 2207  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00556

Tgt Ion: 43 Resp: 545637  
Ion Ratio Lower Upper  
43 100  
58 52.0 43.6 65.4  
57 17.2 14.2 21.2  
100 11.4 8.9 13.3

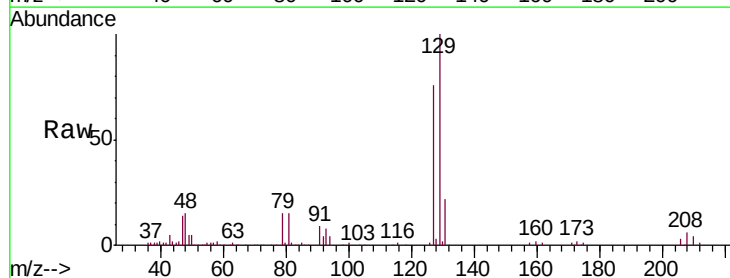


Abundance Ion 43.05 (42.75 to 43.75): VV0  
Ion 58.05 (57.75 to 58.75): VV0  
Ion 57.20 (56.90 to 57.90): VV0  
Ion 100.15 (99.85 to 100.85): VV0

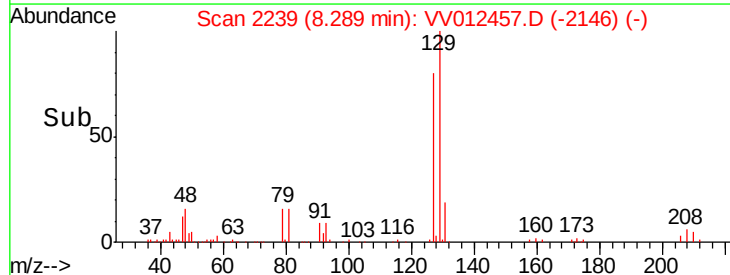
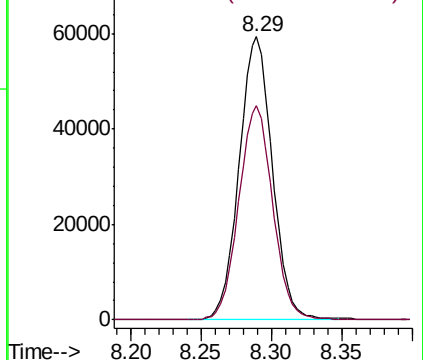


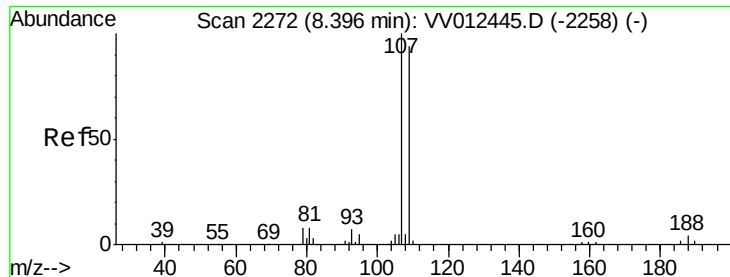
#49  
Dibromochloromethane  
Concen: 4.880 ug/L  
RT: 8.29 min Scan# 2239  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

Tgt Ion: 129 Resp: 98360  
Ion Ratio Lower Upper  
129 100  
127 75.5 53.6 99.6



Abundance Ion 128.95 (128.65 to 129.65): V  
Ion 126.90 (126.60 to 127.60): V

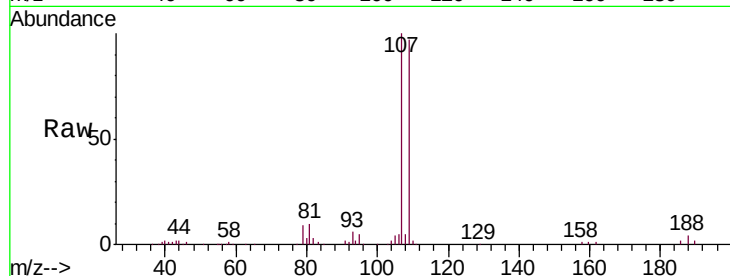




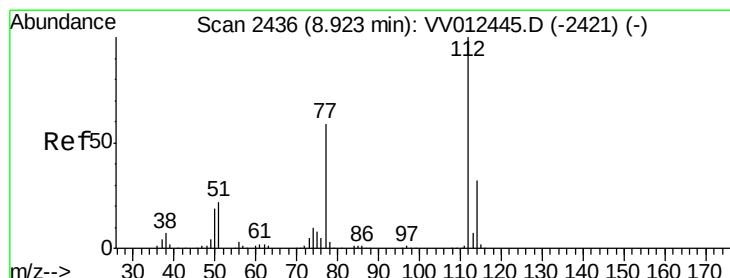
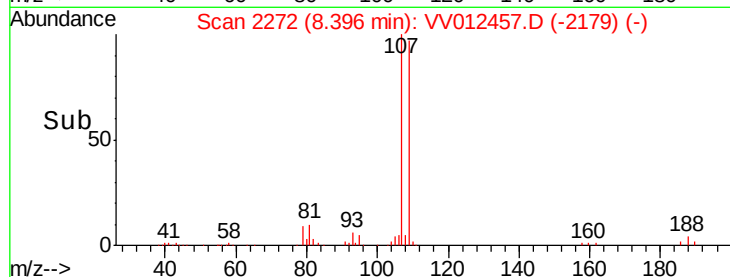
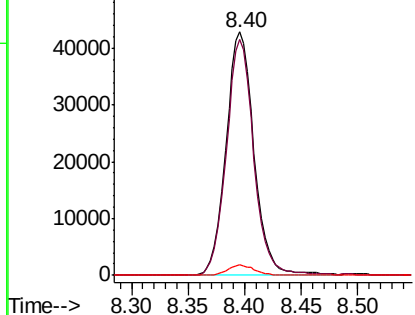
#50  
1,2-Dibromoethane  
Concen: 4.761 ug/L  
RT: 8.40 min Scan# 2272  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00556

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 109     | 96.7  | 65.0  | 120.8 |
| 188     | 4.1   | 2.8   | 4.2   |

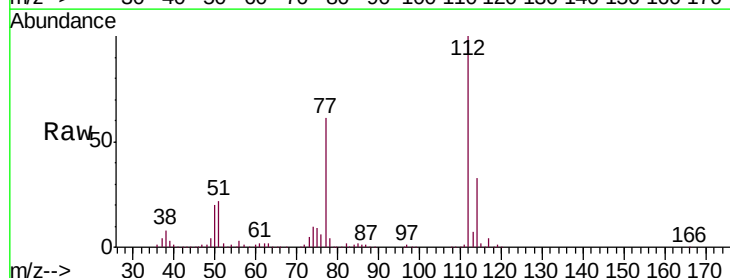


Abundance Ion 106.95 (106.65 to 107.65): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 187.90 (187.60 to 188.60): V

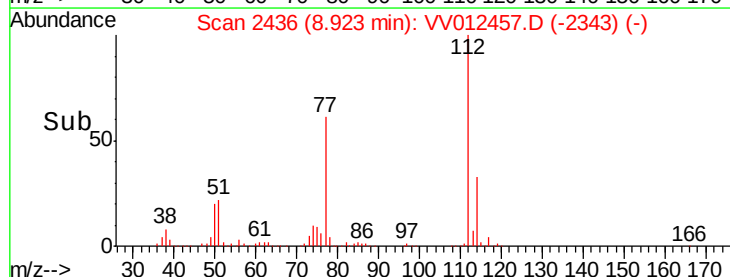
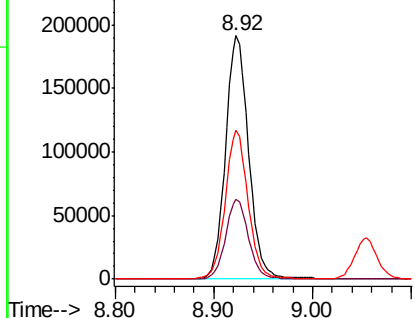


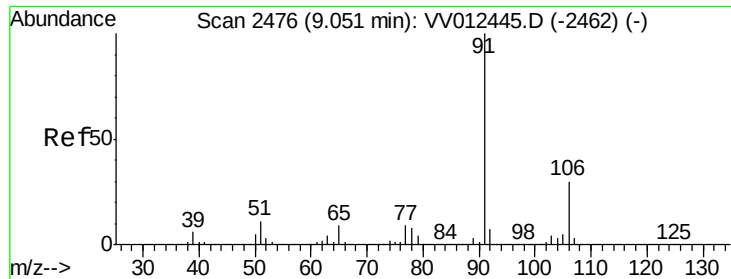
#51  
Chlorobenzene  
Concen: 4.774 ug/L  
RT: 8.92 min Scan# 2436  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 114     | 33.0  | 22.7  | 42.3  |
| 77      | 61.0  | 49.0  | 73.6  |



Abundance Ion 112.10 (111.80 to 112.80): V  
Ion 114.05 (113.75 to 114.75): V  
Ion 77.10 (76.80 to 77.80): V





#52

Ethylbenzene

Concen: 5.013 ug/L

RT: 9.05 min Scan# 2477

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

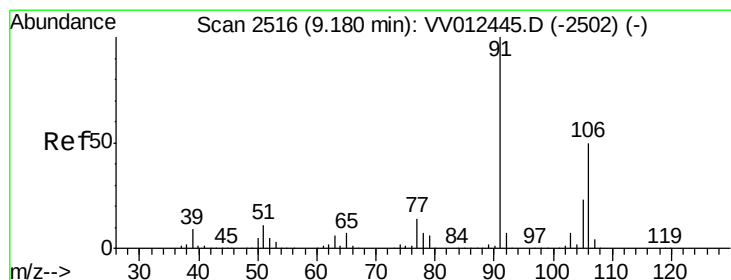
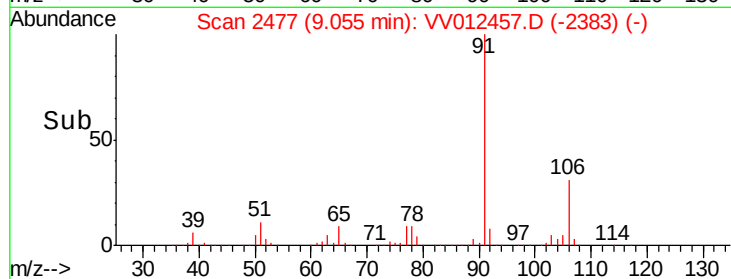
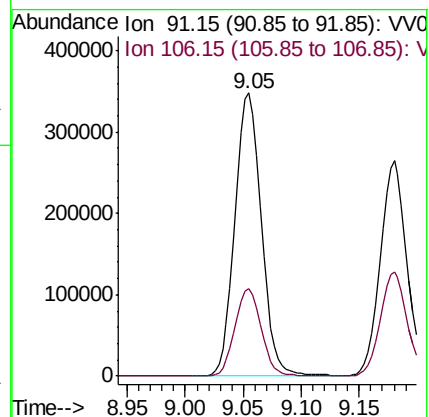
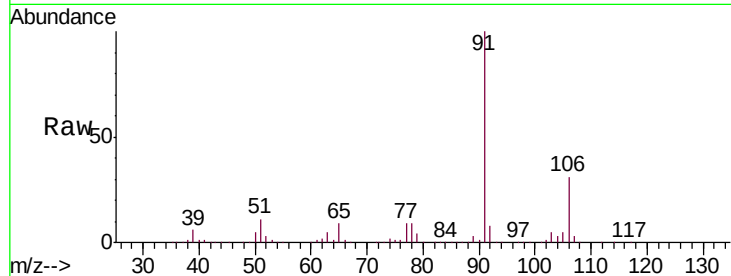
VSTD00556

Tgt Ion: 91 Resp: 548707

Ion Ratio Lower Upper

91 100

106 30.9 21.1 39.3



#53

m,p-xylene

Concen: 5.209 ug/L

RT: 9.18 min Scan# 2516

Delta R.T. 0.00 min

Lab File: VV012457.D

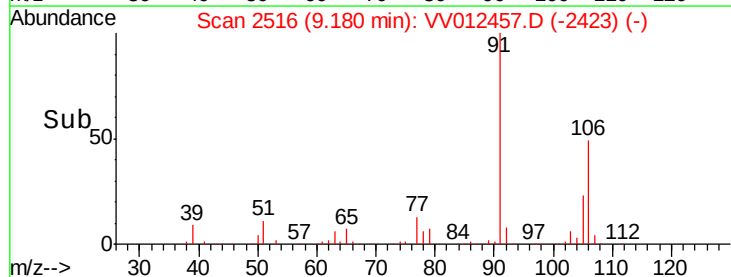
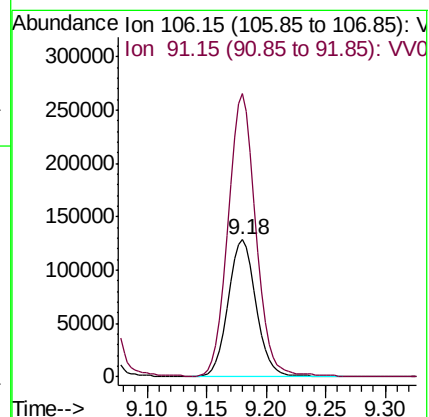
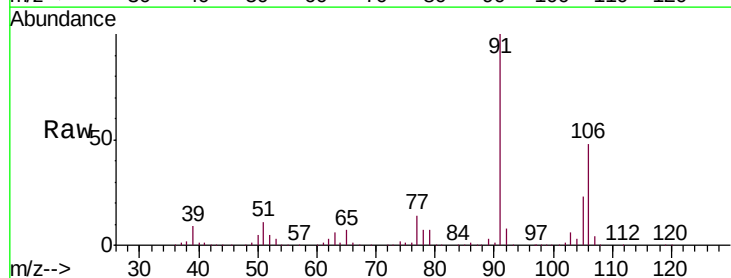
Acq: 30 Aug 2019 15:10

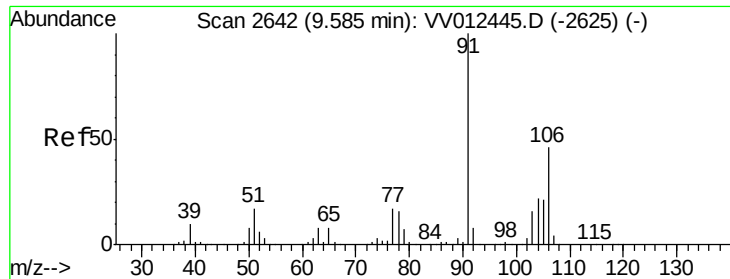
Tgt Ion: 106 Resp: 208988

Ion Ratio Lower Upper

106 100

91 206.3 141.3 262.3

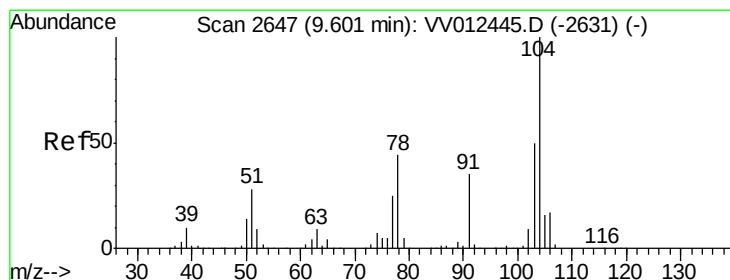
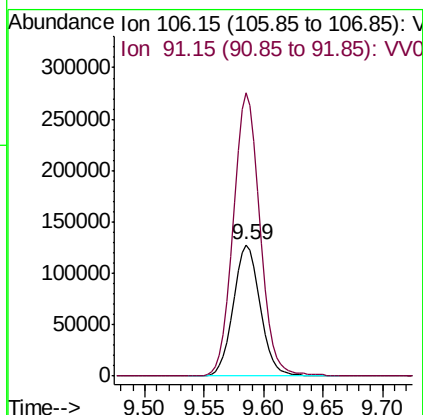
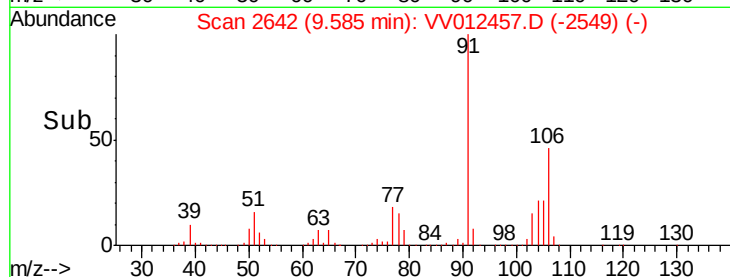
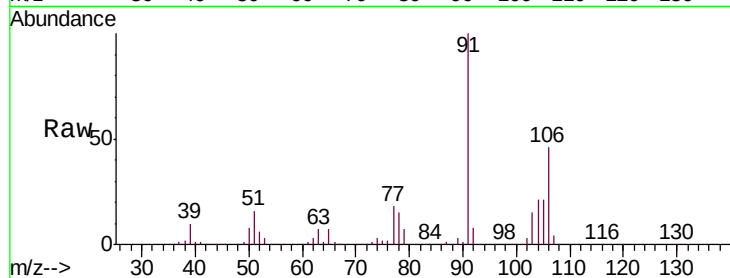




#54  
o-xylene  
Concen: 5.130 ug/L  
RT: 9.59 min Scan# 2642  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

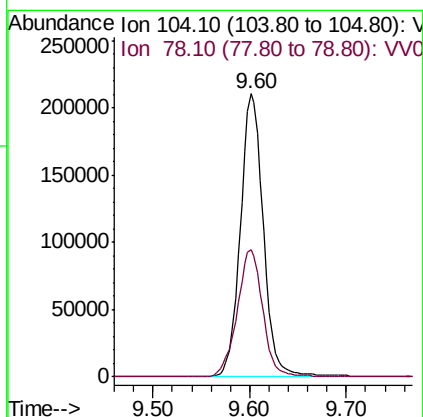
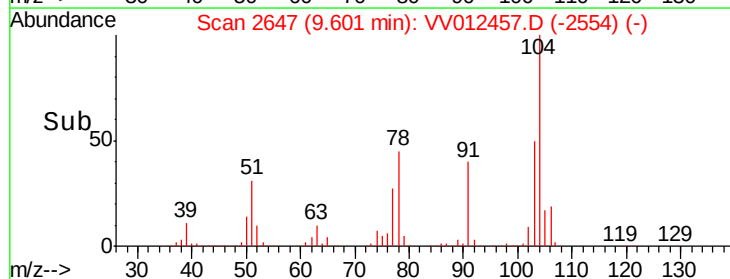
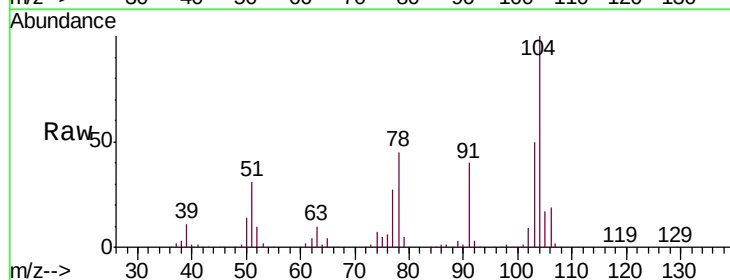
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00556

Tgt Ion:106 Resp: 200952  
Ion Ratio Lower Upper  
106 100  
91 215.2 155.6 289.0

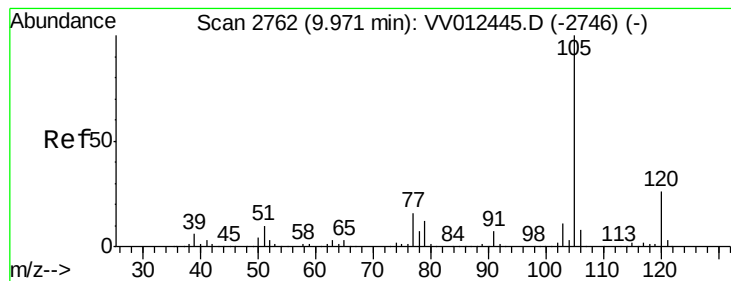


#55  
Styrene  
Concen: 5.290 ug/L  
RT: 9.60 min Scan# 2647  
Delta R.T. 0.00 min  
Lab File: VV012457.D  
Acq: 30 Aug 2019 15:10

Tgt Ion:104 Resp: 347842  
Ion Ratio Lower Upper  
104 100  
78 45.0 31.8 59.0







#56

Isopropylbenzene

Concen: 5.165 ug/L

RT: 9.97 min Scan# 2763

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00556

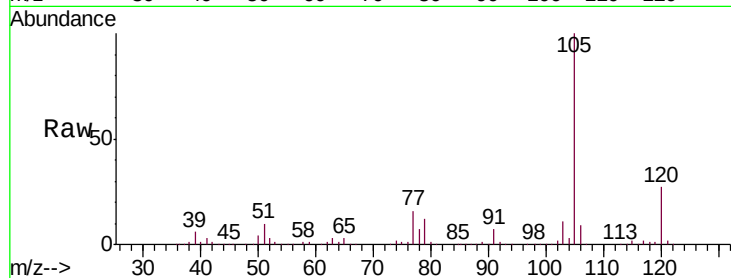
Tgt Ion: 105 Resp: 532767

Ion Ratio Lower Upper

105 100

120 26.3 20.6 31.0

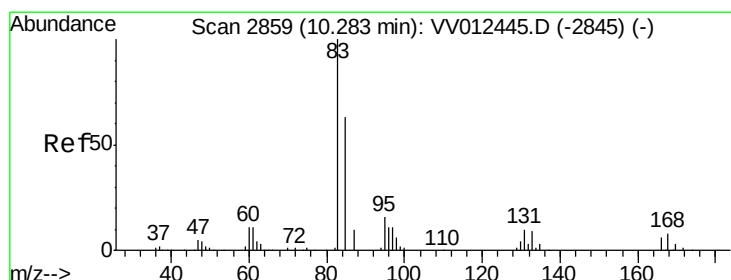
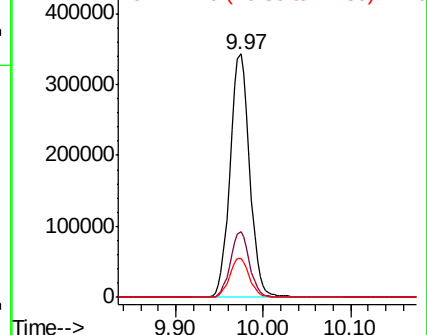
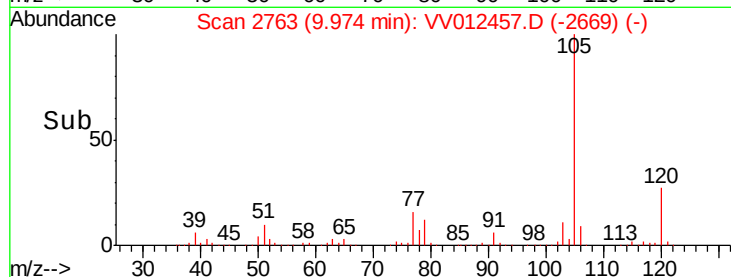
77 16.2 12.7 19.1



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 4.701 ug/L

RT: 10.28 min Scan# 2859

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

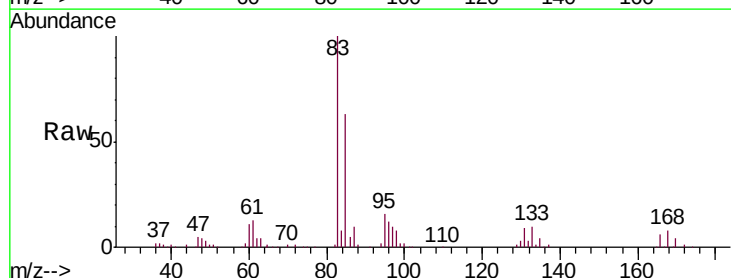
Tgt Ion: 83 Resp: 96796

Ion Ratio Lower Upper

83 100

85 63.3 45.0 83.6

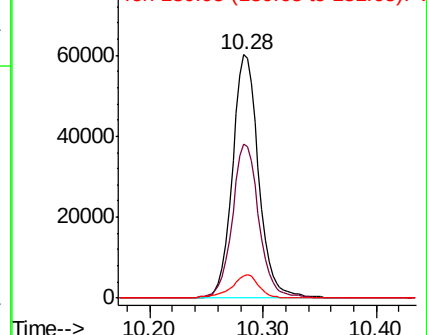
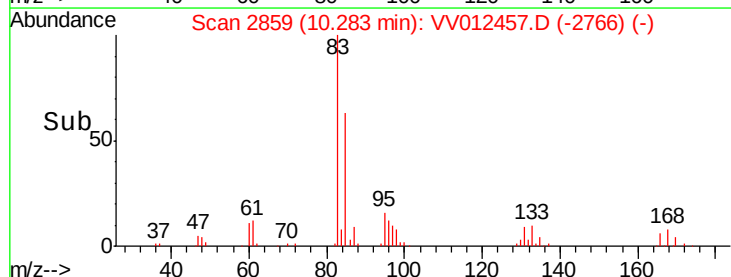
131 9.2 7.4 11.2

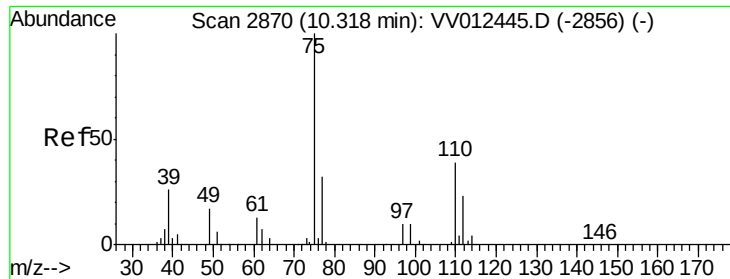


Abundance Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 130.95 (130.65 to 131.65): V

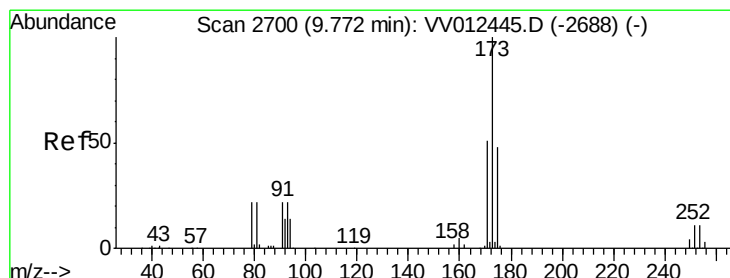
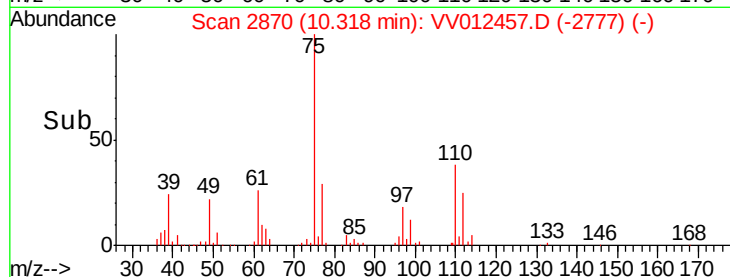
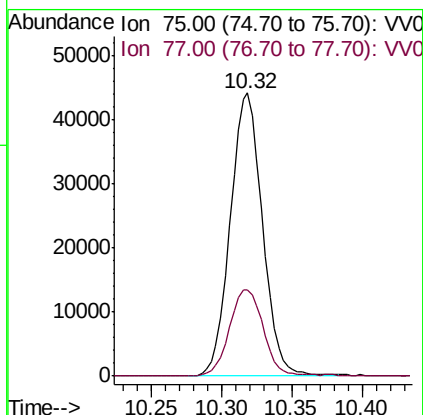
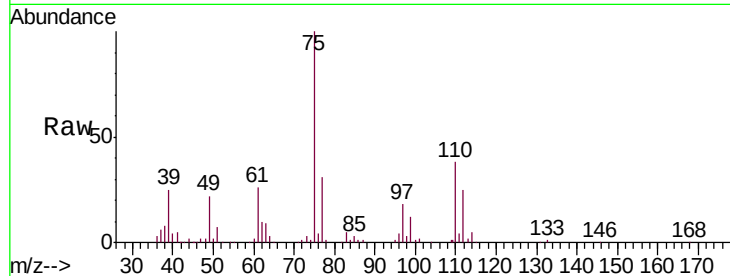




#59  
 1,2,3-Trichloropropane  
 Concen: 4.819 ug/L  
 RT: 10.32 min Scan# 2870  
 Delta R.T. 0.00 min  
 Lab File: VV012457.D  
 Acq: 30 Aug 2019 15:10

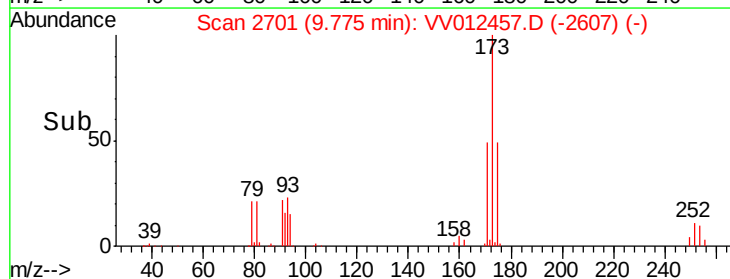
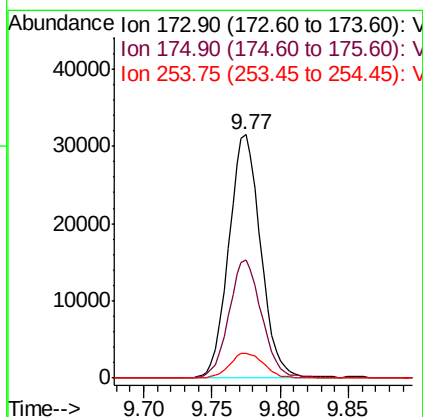
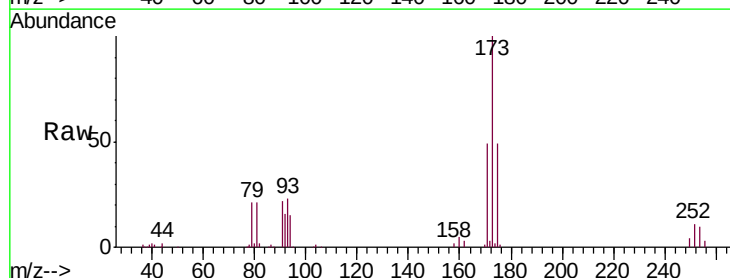
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00556

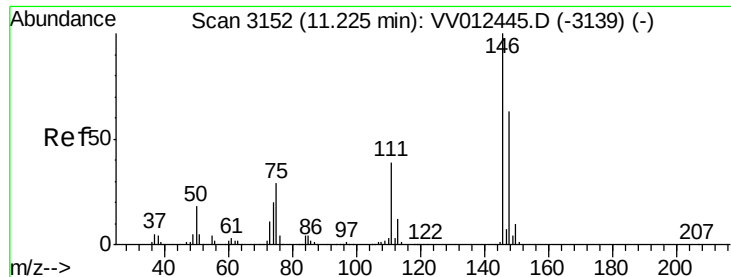
Tgt Ion: 75 Resp: 70626  
 Ion Ratio Lower Upper  
 75 100  
 77 32.3 25.2 37.8



#61  
 Bromoform  
 Concen: 4.600 ug/L  
 RT: 9.77 min Scan# 2701  
 Delta R.T. 0.00 min  
 Lab File: VV012457.D  
 Acq: 30 Aug 2019 15:10

Tgt Ion: 173 Resp: 51295  
 Ion Ratio Lower Upper  
 173 100  
 175 49.7 39.0 58.6  
 254 10.9 8.4 12.6





#62

1,3-Dichlorobenzene

Concen: 4.967 ug/L

RT: 11.22 min Scan# 3152

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00556

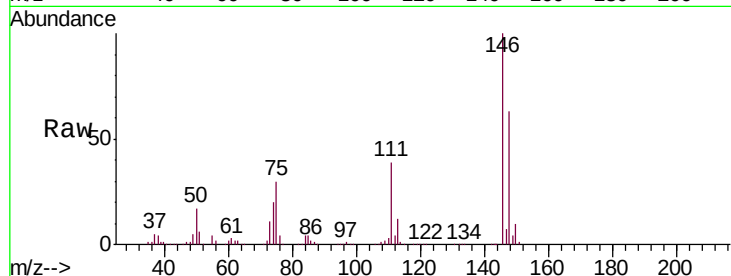
Tgt Ion:146 Resp: 249225

Ion Ratio Lower Upper

146 100

111 39.3 27.6 51.4

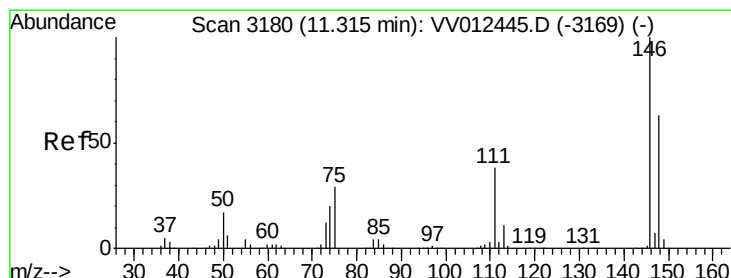
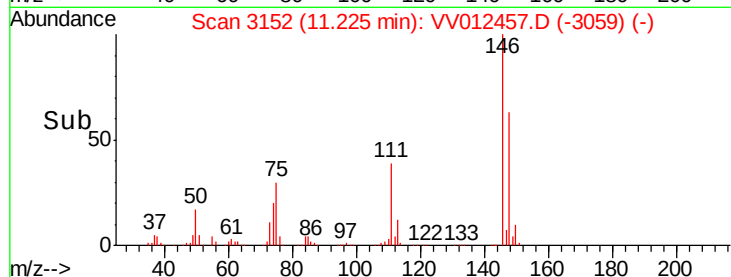
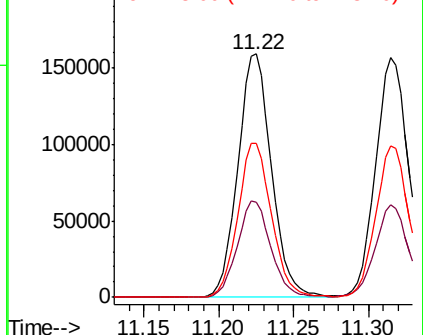
148 63.3 45.8 85.2



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 4.878 ug/L

RT: 11.32 min Scan# 3180

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

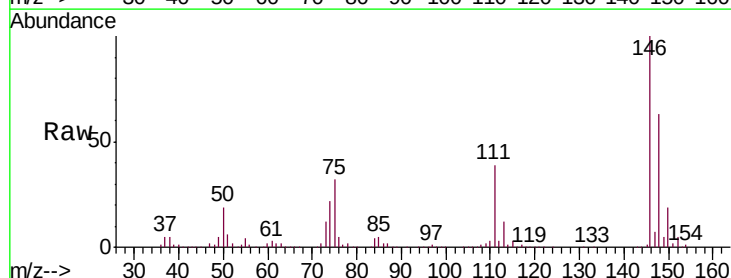
Tgt Ion:146 Resp: 245243

Ion Ratio Lower Upper

146 100

111 38.7 26.8 49.8

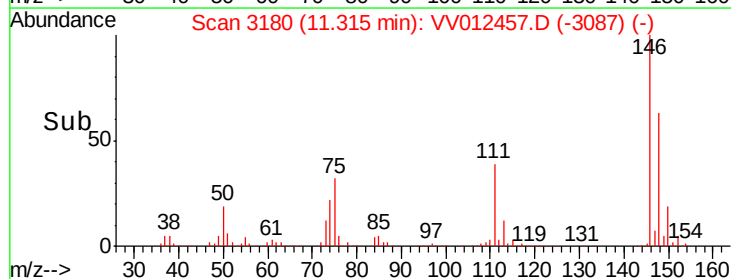
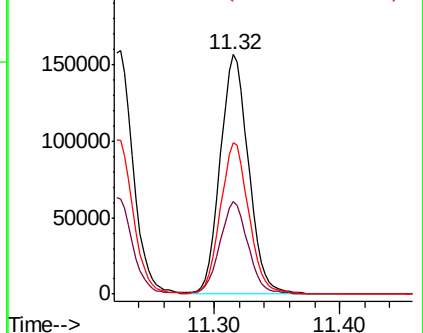
148 63.4 44.5 82.7

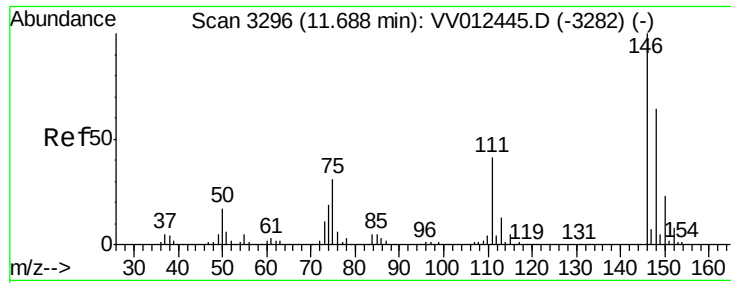


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 4.863 ug/L

RT: 11.69 min Scan# 3296

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00556

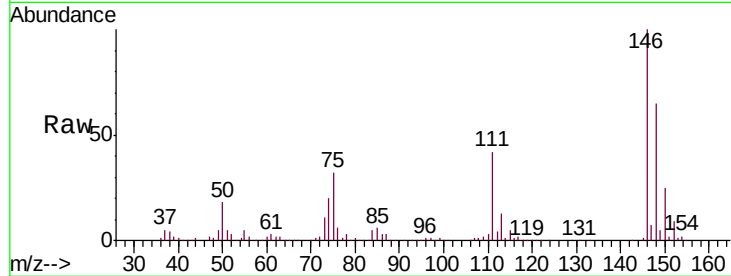
Tgt Ion:146 Resp: 230091

Ion Ratio Lower Upper

146 100

111 41.7 32.5 48.7

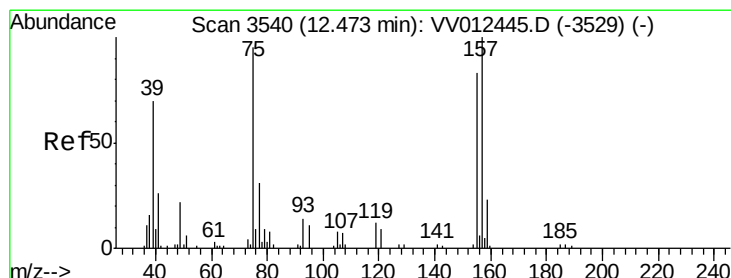
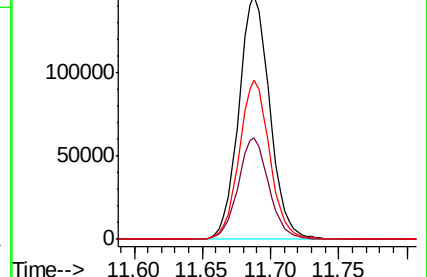
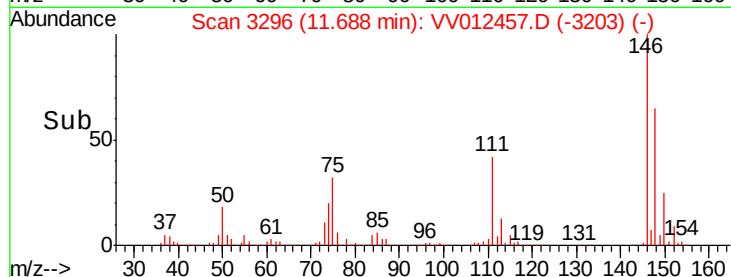
148 65.2 50.2 75.4



Abundance Ion 145.95 (145.65 to 146.65): 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: 4.481 ug/L

RT: 12.47 min Scan# 3540

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

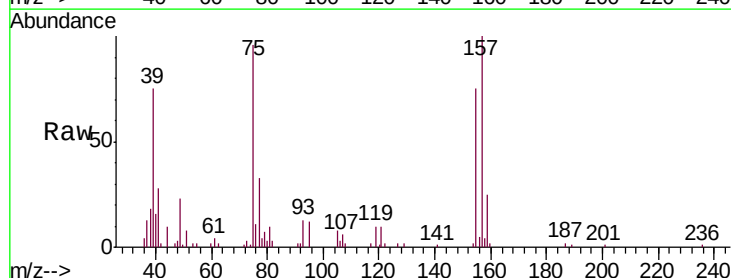
Tgt Ion: 75 Resp: 14272

Ion Ratio Lower Upper

75 100

155 78.4 68.6 102.8

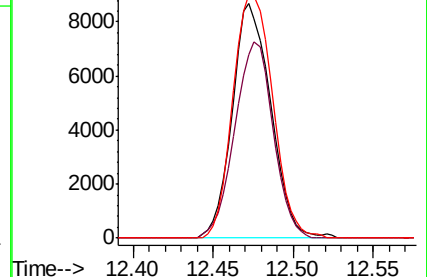
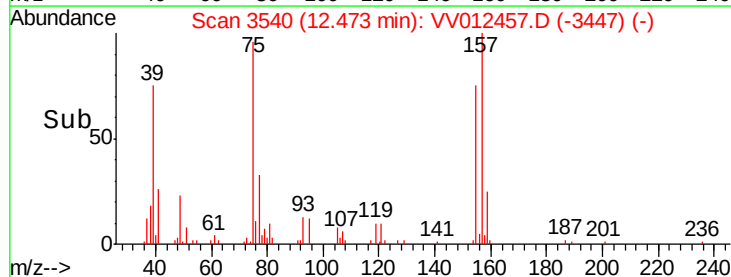
157 103.9 88.6 133.0

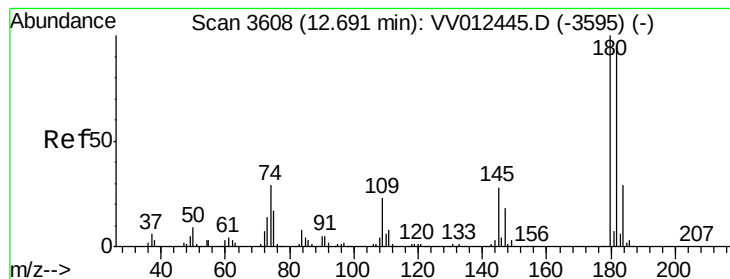


Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V





#67

1,3,5-Trichlorobenzene

Concen: 4.915 ug/L

RT: 12.69 min Scan# 3608

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00556

Tgt Ion:180 Resp: 184022

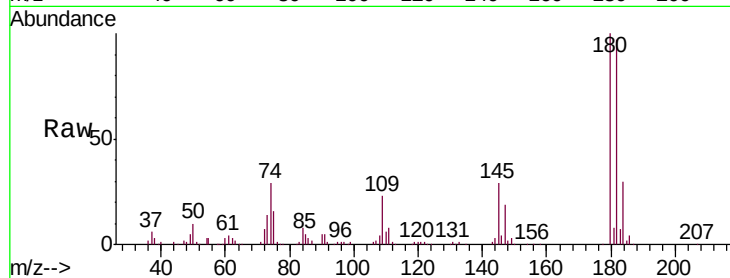
Ion Ratio Lower Upper

180 100

182 95.5 76.6 115.0

184 29.9 24.8 37.2

145 28.5 22.8 34.2

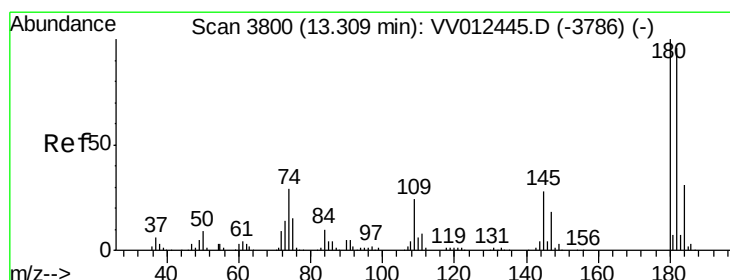
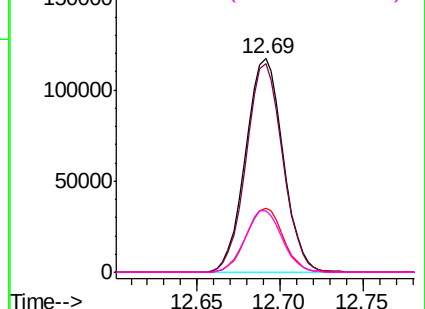
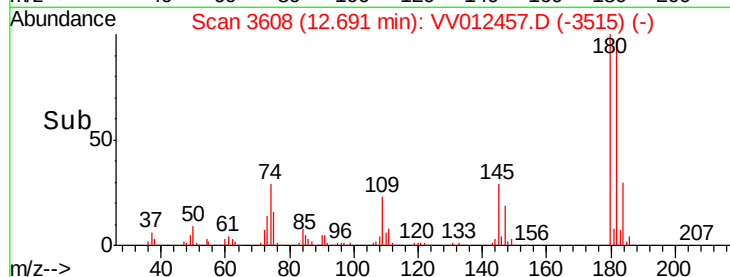


Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68

1,2,4-trichlorobenzene

Concen: 4.904 ug/L

RT: 13.31 min Scan# 3800

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

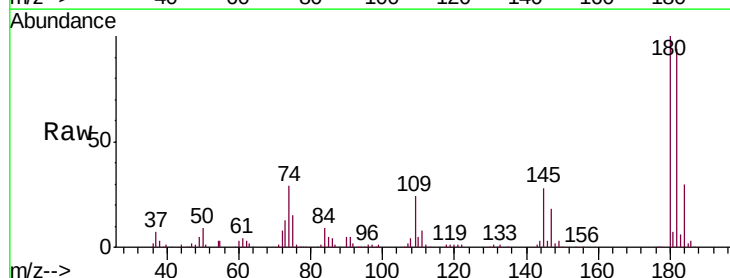
Tgt Ion:180 Resp: 134620

Ion Ratio Lower Upper

180 100

182 94.8 78.1 117.1

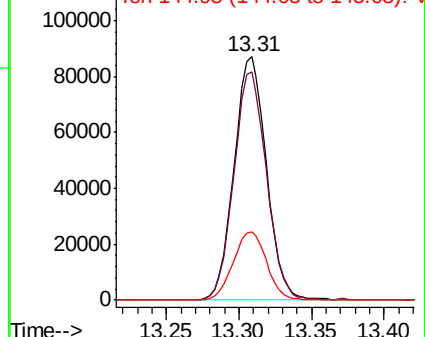
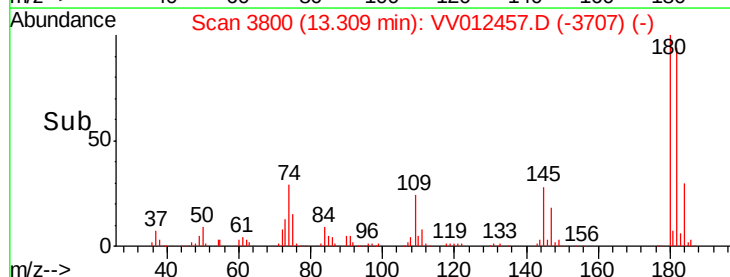
145 29.1 23.4 35.0

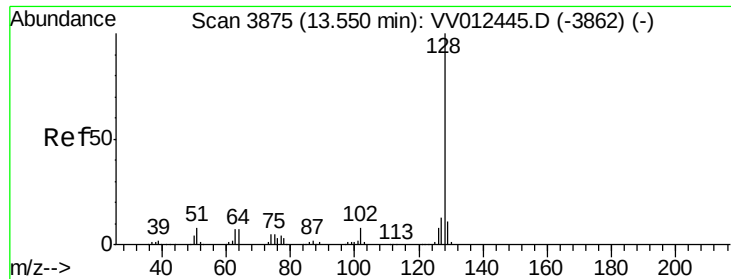


Abundance Ion 179.90 (179.60 to 180.60): V

Ion 182.00 (181.70 to 182.70): V

Ion 144.95 (144.65 to 145.65): V





#69

Naphthalene

Concen: 4.685 ug/L

RT: 13.55 min Scan# 3875

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00556

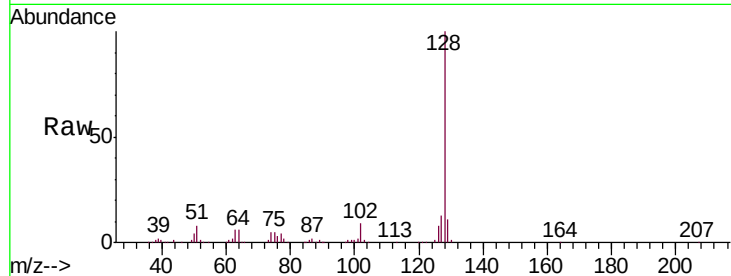
Tgt Ion:128 Resp: 186101

Ion Ratio Lower Upper

128 100

129 11.0 8.6 13.0

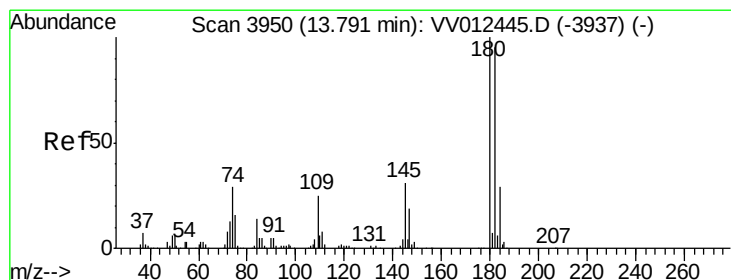
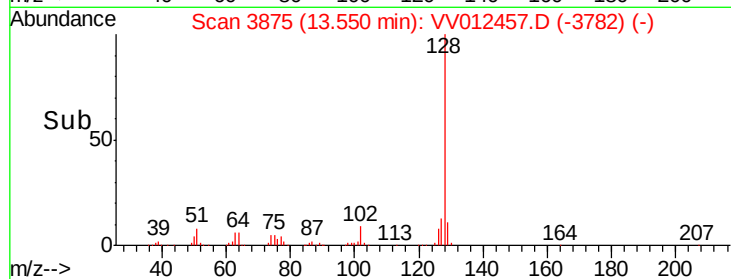
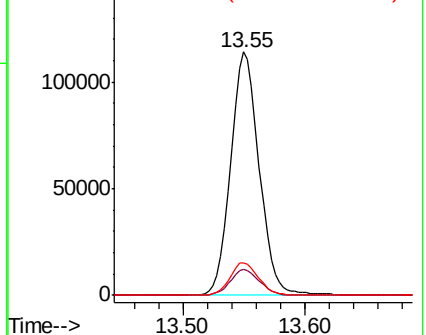
127 13.5 10.7 16.1



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 5.007 ug/L

RT: 13.79 min Scan# 3950

Delta R.T. 0.00 min

Lab File: VV012457.D

Acq: 30 Aug 2019 15:10

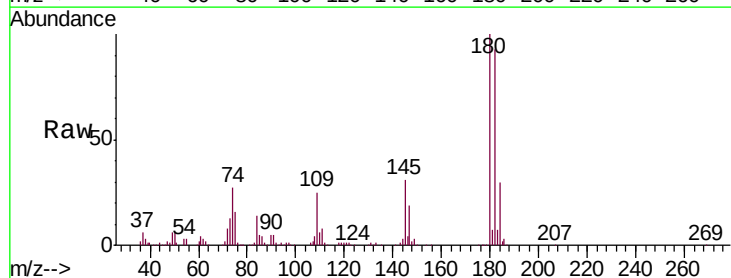
Tgt Ion:180 Resp: 132027

Ion Ratio Lower Upper

180 100

182 93.9 77.5 116.3

145 30.7 25.0 37.6



Abundance Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

