

Data File : VV014587.D  
Acq On : 17 Feb 2020 11:13  
Operator : SY/MD  
Sample : VSTD00561  
Misc : 5.0mL/MSVOA\_V/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005202

Quant Time: Feb 18 05:47:39 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVLM021720W.M  
Quant Title : VOC Analysis  
QLast Update : Tue Feb 18 05:45:10 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 317766   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 301847   | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 153811   | 50.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |       |     |       |      |      |      |
|--------------------------------|-------|-----|-------|------|------|------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 5555  | 3.53 | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.59  | 69  | 4086  | 3.70 | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.13  | 63  | 10177 | 4.13 | ug/L | 0.00 |
| 21) 2-Butanone-d5              | 3.94  | 46  | 8128  | 6.47 | ug/L | 0.02 |
| 24) Chloroform-d               | 4.40  | 84  | 16562 | 4.35 | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.08  | 65  | 10931 | 4.67 | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.09  | 84  | 34626 | 4.33 | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.11  | 67  | 10710 | 4.39 | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.35  | 98  | 32428 | 4.39 | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.66  | 79  | 5223  | 3.96 | ug/L | 0.00 |
| 47) 2-Hexanone-d5              | 8.14  | 63  | 6746  | 6.56 | ug/L | 0.00 |
| 56) 1,1,2,2-Tetrachloroethane- | 10.25 | 84  | 13944 | 4.34 | ug/L | 0.00 |
| 66) 1,2-Dichlorobenzene-d4     | 11.67 | 152 | 13196 | 4.59 | ug/L | 0.00 |

#### Target Compounds

|                                |      |     |       |       |      | Qvalue |
|--------------------------------|------|-----|-------|-------|------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 12059 | 4.907 | ug/L | 99     |
| 3) Chloromethane               | 1.26 | 50  | 10679 | 4.461 | ug/L | 99     |
| 5) Vinyl chloride              | 1.33 | 62  | 7999  | 4.340 | ug/L | 98     |
| 6) Bromomethane                | 1.54 | 94  | 4249  | 4.873 | ug/L | 99     |
| 8) Chloroethane                | 1.60 | 64  | 3955  | 4.306 | ug/L | 89     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 13804 | 5.277 | ug/L | 98     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 5811  | 4.744 | ug/L | 97     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 5665  | 4.837 | ug/L | 99     |
| 13) Acetone                    | 2.19 | 43  | 9672  | 9.008 | ug/L | 91     |
| 14) Carbon disulfide           | 2.32 | 76  | 25342 | 4.505 | ug/L | 99     |
| 15) Methyl Acetate             | 2.46 | 43  | 8610  | 4.251 | ug/L | 96     |
| 16) Methylene chloride         | 2.54 | 84  | 11523 | 5.104 | ug/L | 96     |
| 17) trans-1,2-Dichloroethene   | 2.79 | 96  | 9825  | 4.705 | ug/L | 91     |
| 18) Methyl tert-butyl Ether    | 2.80 | 73  | 32457 | 4.871 | ug/L | 96     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 17784 | 4.763 | ug/L | 97     |
| 20) cis-1,2-Dichloroethene     | 3.96 | 96  | 11947 | 5.065 | ug/L | 99     |
| 22) 2-Butanone                 | 4.02 | 43  | 10634 | 6.760 | ug/L | 99     |
| 23) Bromochloromethane         | 4.30 | 128 | 5751  | 5.096 | ug/L | 91     |
| 25) Chloroform                 | 4.42 | 83  | 20621 | 5.347 | ug/L | 99     |
| 27) 1,2-Dichloroethane         | 5.18 | 62  | 14707 | 5.124 | ug/L | 97     |
| 29) Cyclohexane                | 4.72 | 56  | 15568 | 4.425 | ug/L | 95     |
| 30) 1,1,1-Trichloroethane      | 4.65 | 97  | 17899 | 5.258 | ug/L | 98     |
| 31) Carbon tetrachloride       | 4.87 | 117 | 15422 | 5.109 | ug/L | 99     |
| 33) Benzene                    | 5.14 | 78  | 42241 | 4.918 | ug/L | 100    |
| 34) Trichloroethene            | 5.96 | 95  | 11737 | 5.116 | ug/L | 98     |
| 35) Methylcyclohexane          | 6.17 | 83  | 17803 | 4.797 | ug/L | 99     |
| 37) 1,2-Dichloropropane        | 6.22 | 63  | 9598  | 4.411 | ug/L | 98     |
| 38) Bromodichloromethane       | 6.55 | 83  | 15636 | 5.240 | ug/L | 97     |
| 39) cis-1,3-Dichloropropene    | 7.07 | 75  | 15942 | 4.329 | ug/L | 96     |
| 40) 4-Methyl-2-pentanone       | 7.27 | 43  | 23433 | 8.405 | ug/L | 99     |

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Misc : 5.0mL/MSVOA\_V/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005202

Quant Time: Feb 18 05:47:39 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVLM021720W.M  
Quant Title : VOC Analysis  
QLast Update : Tue Feb 18 05:45:10 2020  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| 42) Toluene                    | 7.43  | 91   | 45877    | 4.945 | ug/L   | 100      |
| 44) trans-1,3-Dichloropropene  | 7.69  | 75   | 15779    | 4.777 | ug/L   | 99       |
| 45) 1,1,2-Trichloroethane      | 7.88  | 97   | 10658    | 5.005 | ug/L   | 96       |
| 46) Tetrachloroethene          | 8.01  | 164  | 9352     | 5.336 | ug/L   | 93       |
| 48) 2-Hexanone                 | 8.19  | 43   | 17861    | 8.367 | ug/L   | 94       |
| 49) Dibromochloromethane       | 8.29  | 129  | 12889    | 5.294 | ug/L   | 99       |
| 50) 1,2-Dibromoethane          | 8.39  | 107  | 11759    | 5.106 | ug/L # | 99       |
| 51) Chlorobenzene              | 8.92  | 112  | 31572    | 5.182 | ug/L   | 98       |
| 52) Ethylbenzene               | 9.05  | 91   | 52628    | 5.050 | ug/L   | 98       |
| 53) m,p-Xylene                 | 9.18  | 106  | 20596    | 5.125 | ug/L   | 97       |
| 54) o-Xylene                   | 9.58  | 106  | 19827    | 5.148 | ug/L   | 96       |
| 55) Styrene                    | 9.60  | 104  | 33139    | 5.043 | ug/L   | 98       |
| 57) 1,1,2,2-Tetrachloroethane  | 10.28 | 83   | 16987    | 5.101 | ug/L   | 99       |
| 59) Bromoform                  | 9.77  | 173  | 8852     | 5.184 | ug/L   | 97       |
| 60) Isopropylbenzene           | 9.97  | 105  | 51611    | 5.041 | ug/L   | 96       |
| 61) 1,2,3-Trichloropropane     | 10.31 | 75   | 13508    | 5.040 | ug/L   | 99       |
| 62) 1,3,5-Trimethylbenzene     | 10.58 | 105  | 43322    | 4.952 | ug/L   | 99       |
| 63) 1,2,4-Trimethylbenzene     | 10.95 | 105  | 41076    | 4.769 | ug/L   | 98       |
| 64) 1,3-Dichlorobenzene        | 11.22 | 146  | 25473    | 5.268 | ug/L   | 96       |
| 65) 1,4-Dichlorobenzene        | 11.31 | 146  | 26226    | 5.278 | ug/L   | 99       |
| 67) 1,2-Dichlorobenzene        | 11.68 | 146  | 24975    | 5.304 | ug/L   | 98       |
| 68) 1,2-Dibromo-3-chloropropan | 12.47 | 75   | 4033     | 5.331 | ug/L   | 92       |
| 69) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 17708    | 5.179 | ug/L   | 98       |
| 70) 1,2,4-trichlorobenzene     | 13.31 | 180  | 14853    | 4.746 | ug/L   | 98       |
| 71) Naphthalene                | 13.55 | 128  | 40230    | 3.925 | ug/L   | 98       |
| 72) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 14624    | 4.795 | ug/L   | 99       |

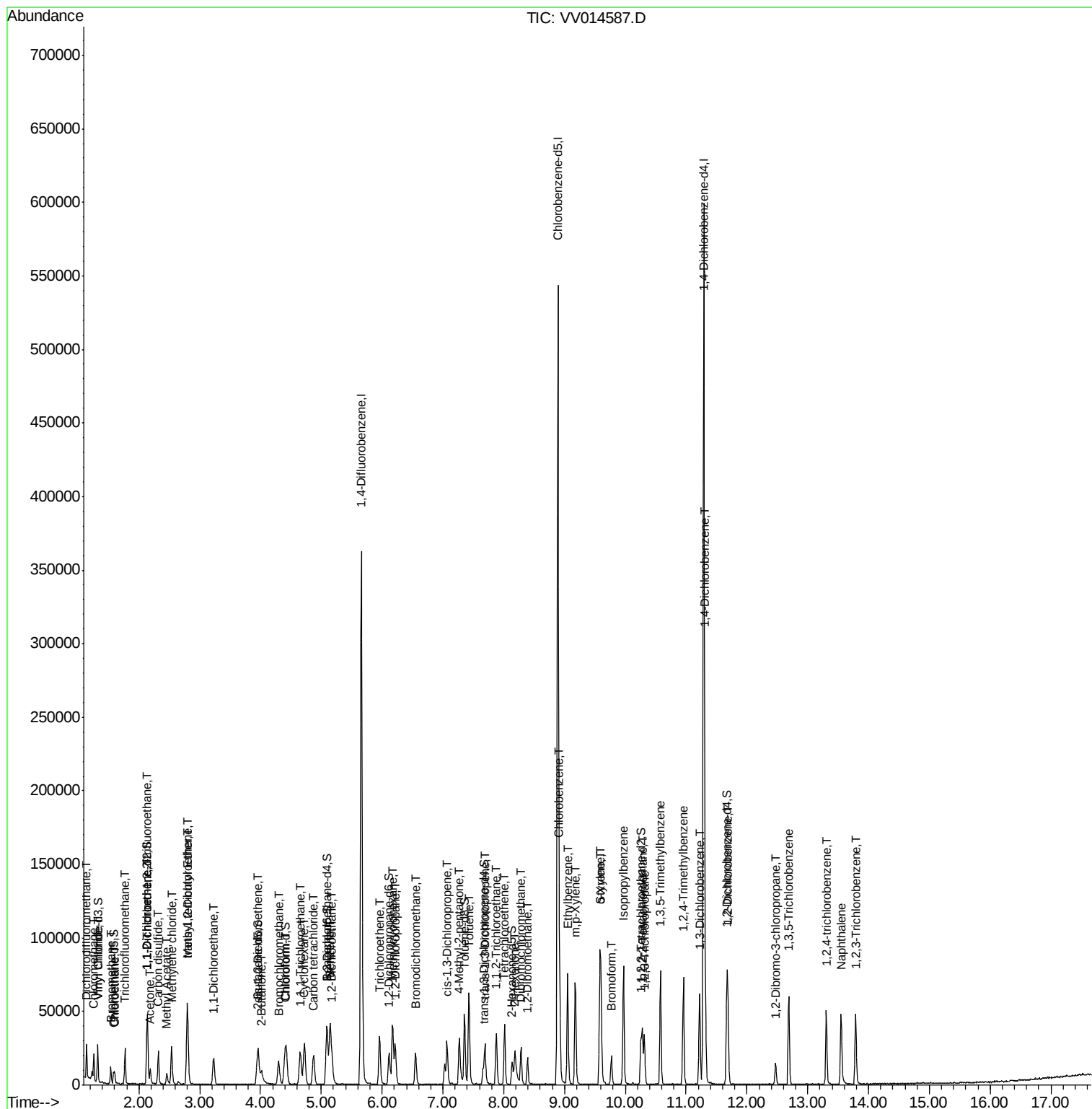
(#) = qualifier out of range (m) = manual integration (+) = signals summed

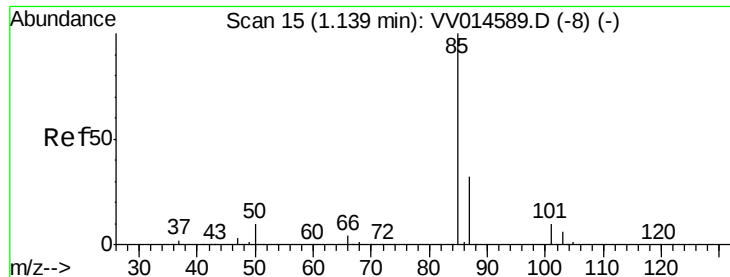
Data File : VV014587.D

```
Acq On       : 17 Feb 2020   11:13
Operator    : SY/MD
Sample      : VSTD00561
Misc       : 5.0mL/MSV0A_V/WATER
ALS Vial    : 2      Sample Multiplier: 1
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**Instrument :**  
MSVOA\_V  
**ClientSampleId :**  
VSTD005202

Quant Time: Feb 18 05:47:39 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVLM021720W.M  
Quant Title : VOC Analysis  
QLast Update : Tue Feb 18 05:45:10 2020  
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 4.907 ug/L

RT: 1.14 min Scan# 15

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

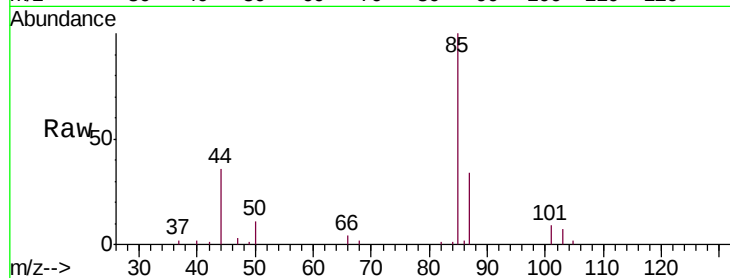
VSTD005202

Tgt Ion: 85 Resp: 12059

Ion Ratio Lower Upper

85 100

87 33.6 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VV014589.D (-8) (-)

Ion 87.00 (86.70 to 87.70): VV014589.D (-8) (-)

1.14

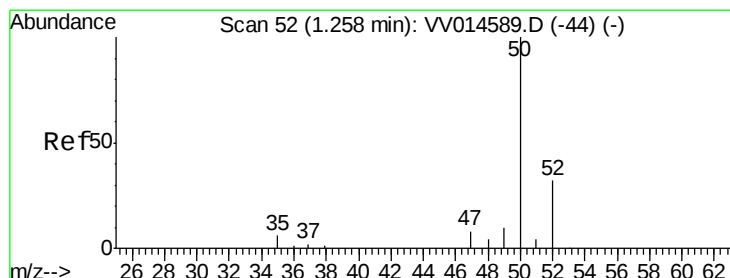
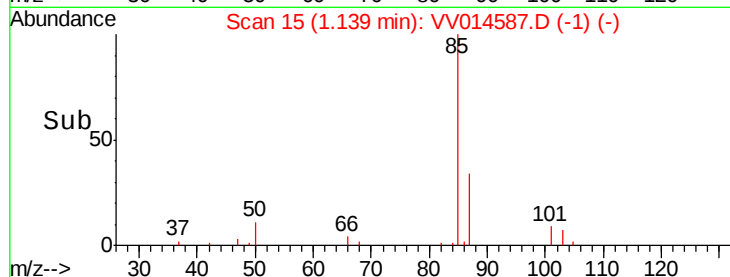
15000

10000

5000

0

Time-->



#3

Chloromethane

Concen: 4.461 ug/L

RT: 1.26 min Scan# 52

Delta R.T. -0.00 min

Lab File: VV014587.D

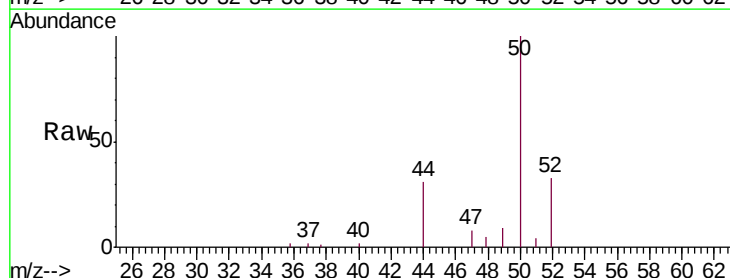
Acq: 17 Feb 2020 11:13

Tgt Ion: 50 Resp: 10679

Ion Ratio Lower Upper

50 100

52 32.9 22.6 42.0



Abundance Ion 50.00 (49.70 to 50.70): VV014589.D (-44) (-)

Ion 52.00 (51.70 to 52.70): VV014589.D (-44) (-)

1.26

12000

10000

8000

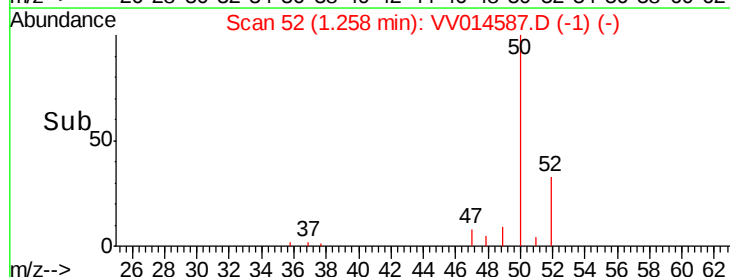
6000

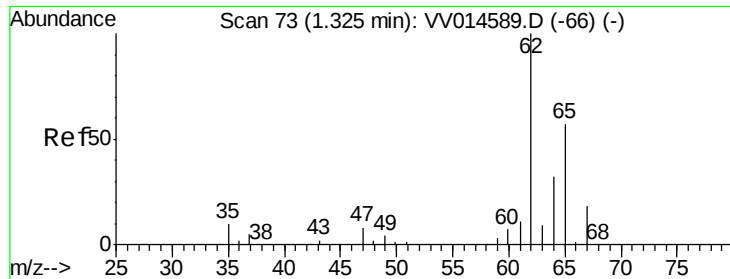
4000

2000

0

Time-->





#5

Vinyl chloride

Concen: 4.340 ug/L

RT: 1.33 min Scan# 73

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

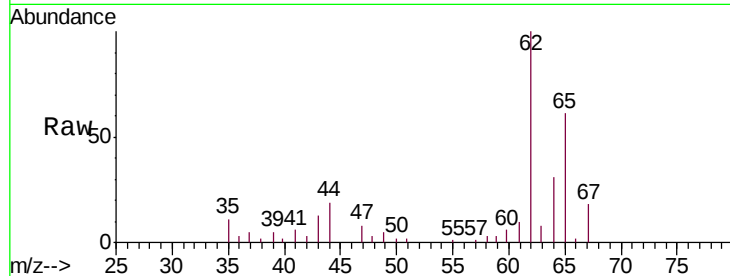
VSTD005202

Tgt Ion: 62 Resp: 7999

Ion Ratio Lower Upper

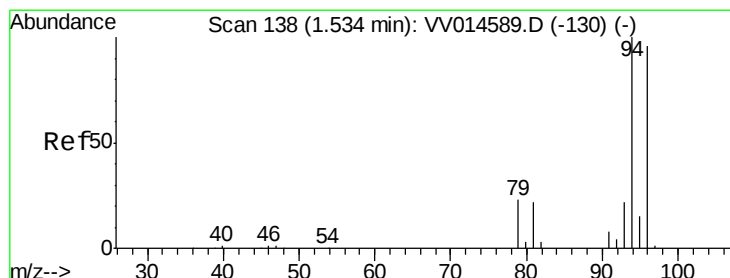
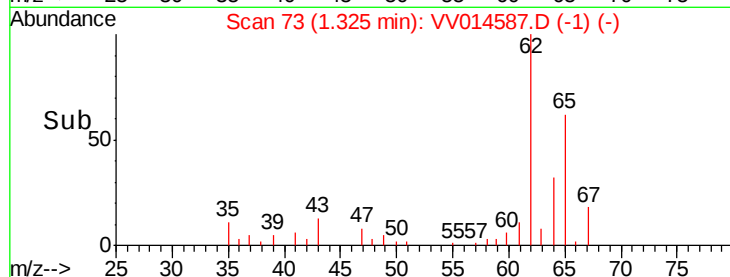
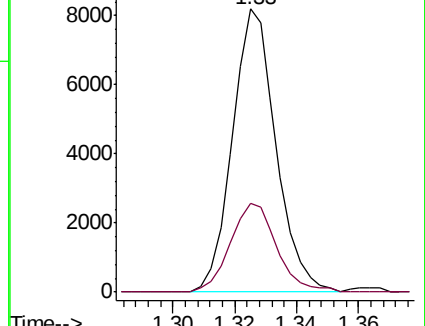
62 100

64 31.3 22.6 42.0



Abundance Ion 62.00 (61.70 to 62.70): VV014589.D (-66) (-)

Ion 64.00 (63.70 to 64.70): VV014589.D (-66) (-)



#6

Bromomethane

Concen: 4.873 ug/L

RT: 1.54 min Scan# 139

Delta R.T. 0.00 min

Lab File: VV014587.D

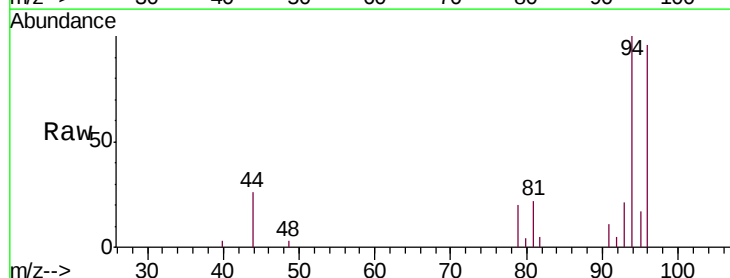
Acq: 17 Feb 2020 11:13

Tgt Ion: 94 Resp: 4249

Ion Ratio Lower Upper

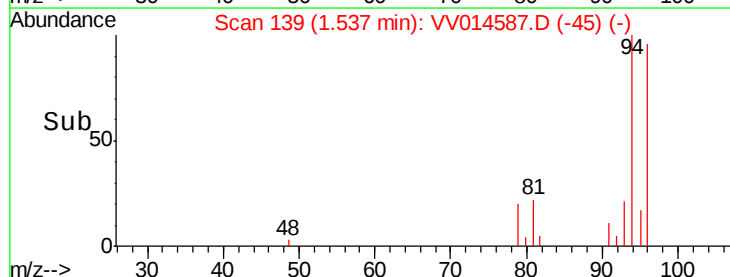
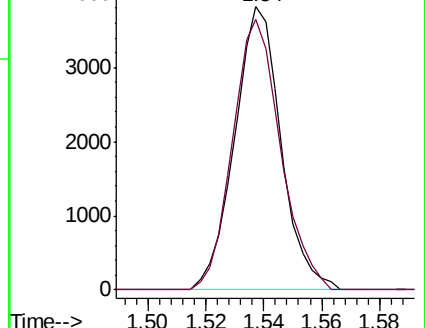
94 100

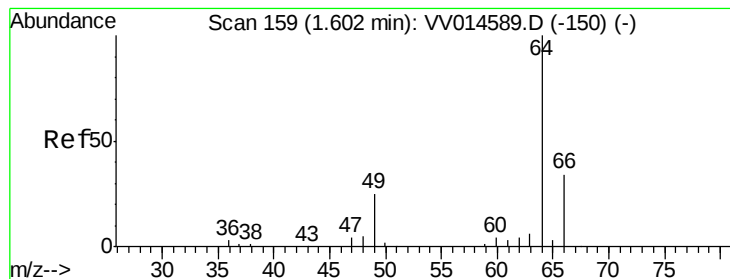
96 95.6 67.4 125.2



Abundance Ion 94.00 (93.70 to 94.70): VV014589.D (-130) (-)

Ion 96.00 (95.70 to 96.70): VV014589.D (-130) (-)





#8

Chloroethane

Concen: 4.306 ug/L

RT: 1.60 min Scan# 159

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

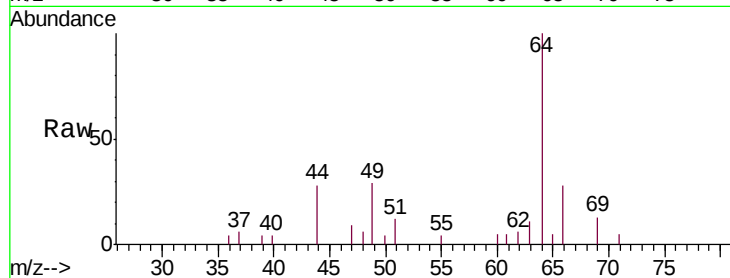
VSTD005202

Tgt Ion: 64 Resp: 3955

Ion Ratio Lower Upper

64 100

66 27.6 23.6 43.8



Abundance Ion 64.00 (63.70 to 64.70): VV014589.D (-150) (-)

Ion 66.00 (65.70 to 66.70): VV014589.D (-150) (-)

1.60

3000

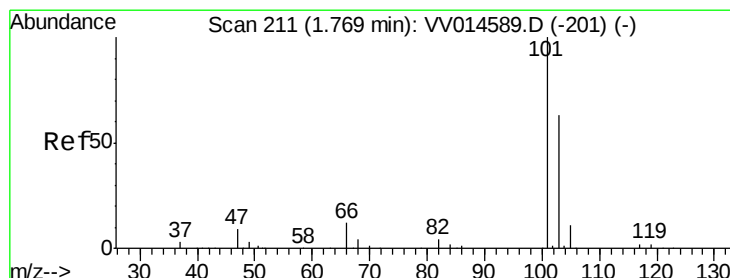
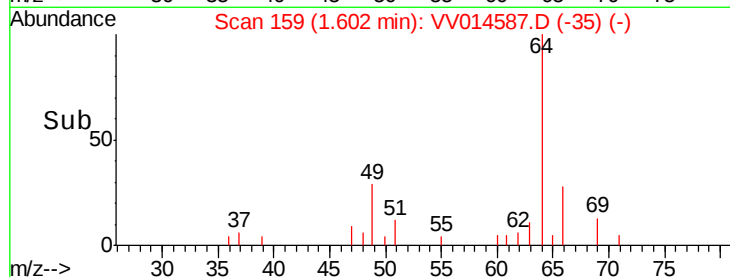
2000

1000

0

1.56 1.58 1.60 1.62 1.64

Time-->



#9

Trichlorofluoromethane

Concen: 5.277 ug/L

RT: 1.77 min Scan# 212

Delta R.T. 0.00 min

Lab File: VV014587.D

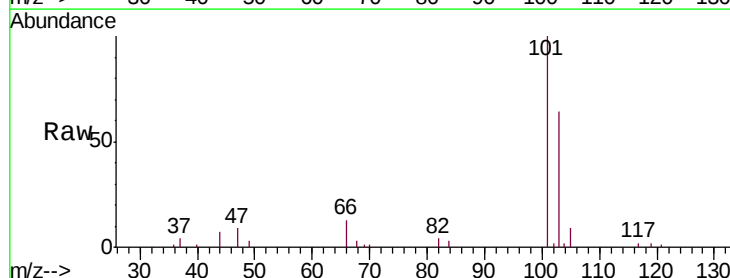
Acq: 17 Feb 2020 11:13

Tgt Ion: 101 Resp: 13804

Ion Ratio Lower Upper

101 100

103 65.5 51.4 77.0



Abundance Ion 101.00 (100.70 to 101.70): VV014589.D (-201) (-)

Ion 103.00 (102.70 to 103.70): VV014589.D (-201) (-)

1.77

12000

10000

8000

6000

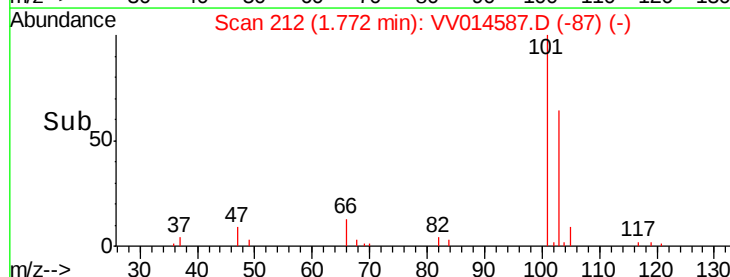
4000

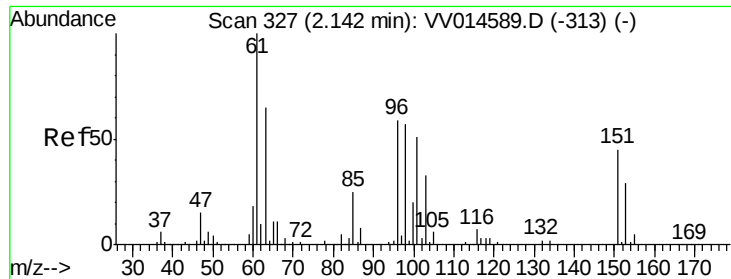
2000

0

1.75 1.80

Time-->





#10

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

Concen: 4.744 ug/L

RT: 2.14 min Scan# 327

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

VSTD005202

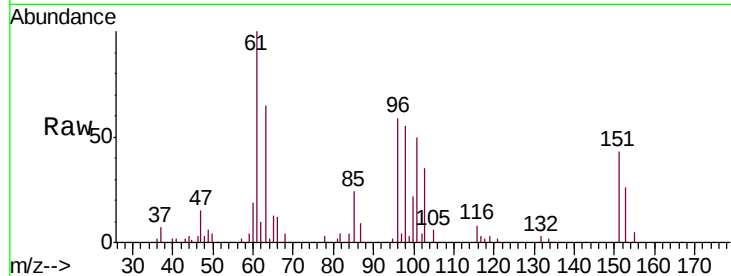
Tgt Ion: 101 Resp: 5811

Ion Ratio Lower Upper

101 100

85 48.3 37.9 56.9

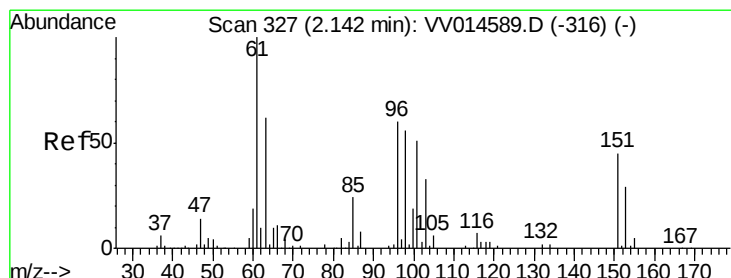
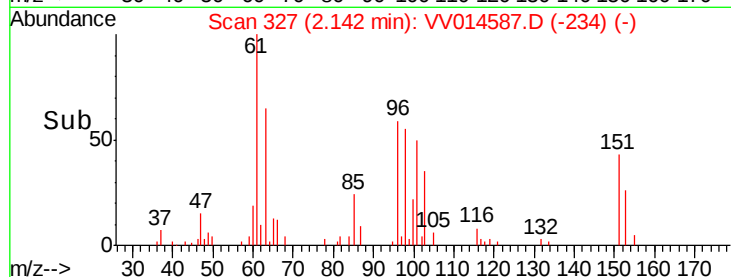
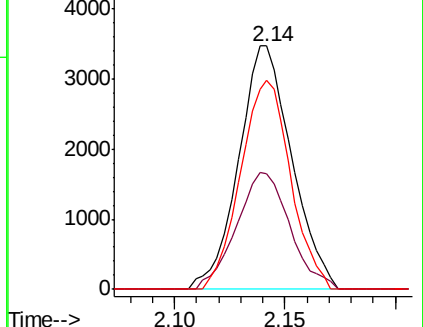
151 80.7 67.7 101.5



Abundance Ion 101.00 (100.70 to 101.70): VV014587.D (-234) (-)

Ion 85.00 (84.70 to 85.70): VV014587.D (-234) (-)

Ion 151.00 (150.70 to 151.70): VV014587.D (-234) (-)



#12

1,1-Dichloroethene

Concen: 4.837 ug/L

RT: 2.14 min Scan# 327

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

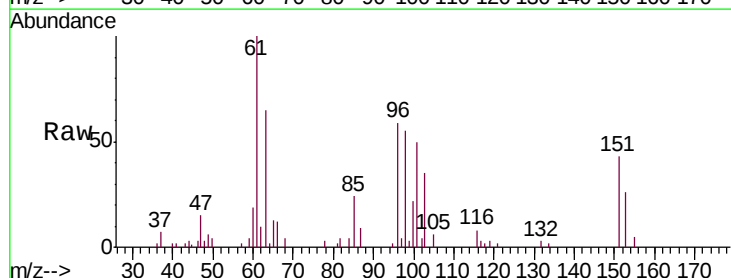
Tgt Ion: 96 Resp: 5665

Ion Ratio Lower Upper

96 100

61 170.6 118.3 219.7

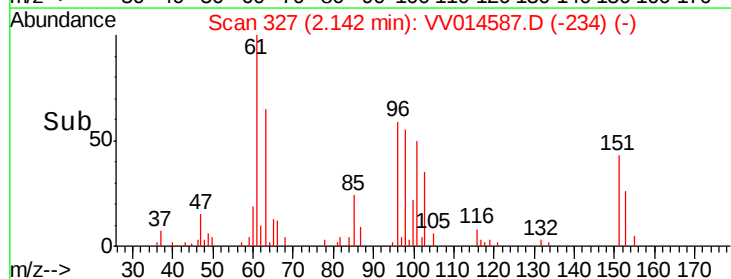
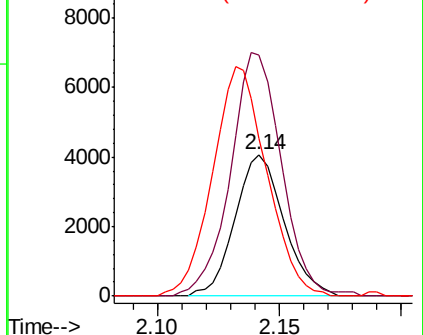
63 111.7 77.5 143.9

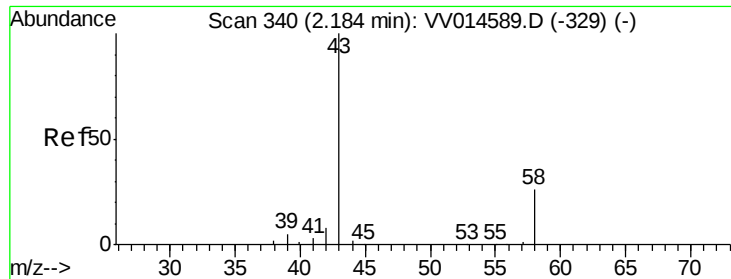


Abundance Ion 96.00 (95.70 to 96.70): VV014587.D (-234) (-)

Ion 61.00 (60.70 to 61.70): VV014587.D (-234) (-)

Ion 63.00 (62.70 to 63.70): VV014587.D (-234) (-)





#13

Acetone

Concen: 9.008 ug/L

RT: 2.19 min Scan# 341

Delta R.T. 0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

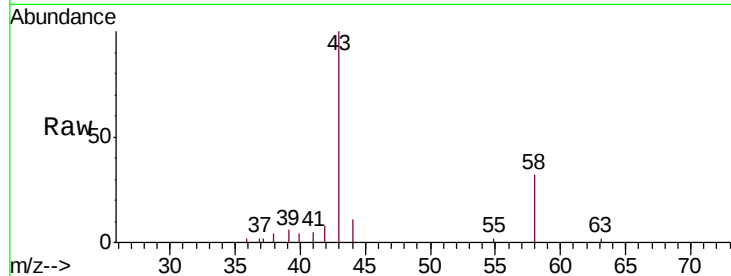
VSTD005202

Tgt Ion: 43 Resp: 9672

Ion Ratio Lower Upper

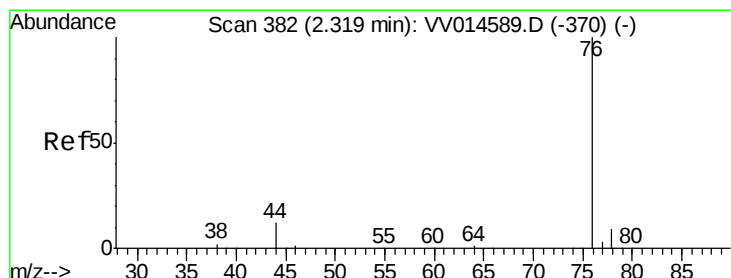
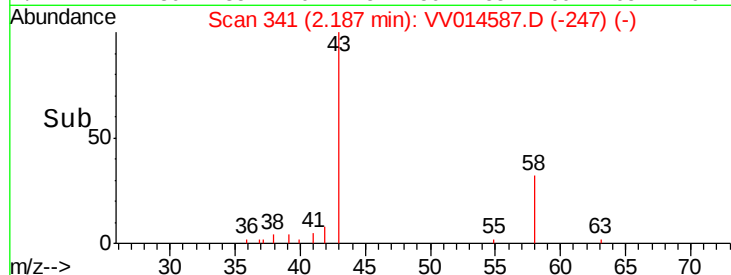
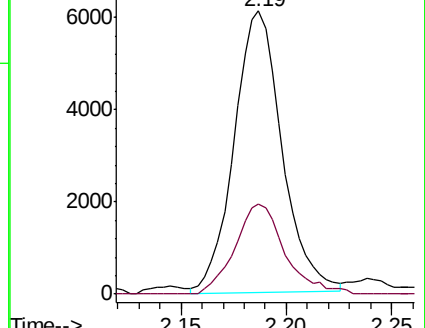
43 100

58 32.8 0.0 55.8



Abundance Ion 43.00 (42.70 to 43.70): VV014589.D (-329) (-)

Ion 58.00 (57.70 to 58.70): VV014589.D (-329) (-)



#14

Carbon disulfide

Concen: 4.505 ug/L

RT: 2.32 min Scan# 382

Delta R.T. -0.00 min

Lab File: VV014587.D

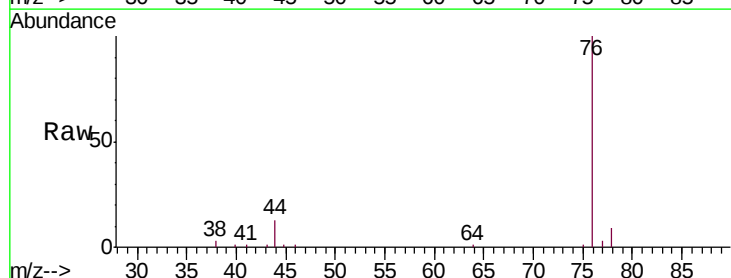
Acq: 17 Feb 2020 11:13

Tgt Ion: 76 Resp: 25342

Ion Ratio Lower Upper

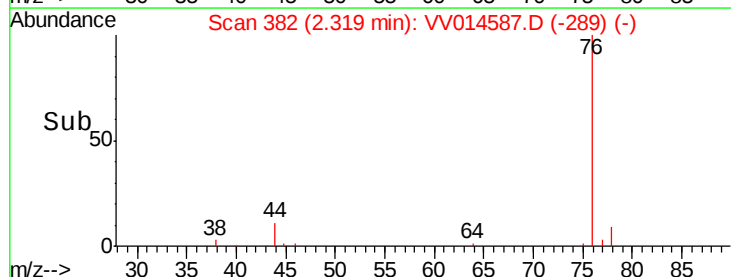
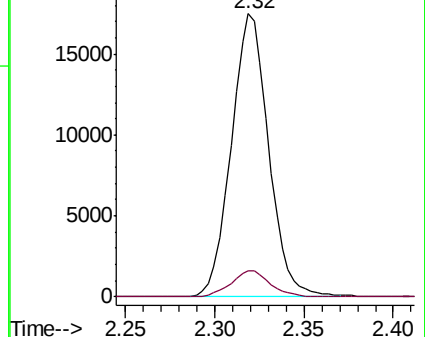
76 100

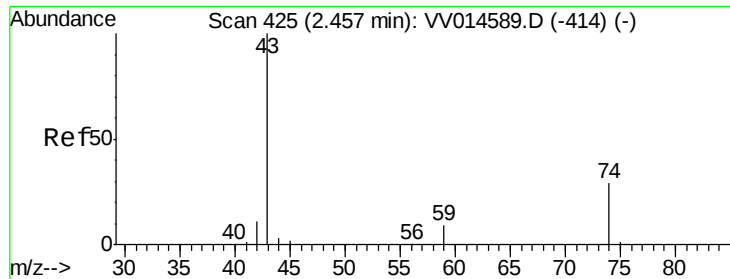
78 9.1 7.5 11.3



Abundance Ion 76.00 (75.70 to 76.70): VV014589.D (-370) (-)

Ion 78.00 (77.70 to 78.70): VV014589.D (-370) (-)





#15

Methyl Acetate

Concen: 4.251 ug/L

RT: 2.46 min Scan# 426

Delta R.T. 0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

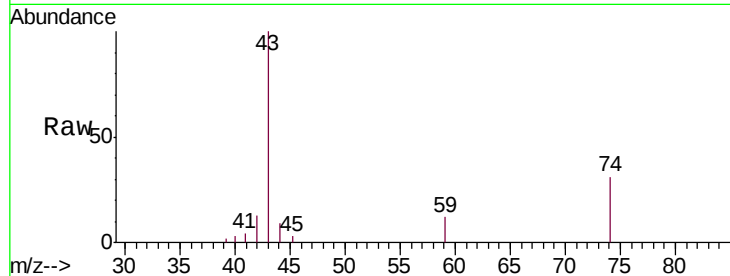
VSTD005202

Tgt Ion: 43 Resp: 8610

Ion Ratio Lower Upper

43 100

74 26.5 22.9 34.3



Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 74.00 (73.70 to 74.70): VV0

2.46

4000

3000

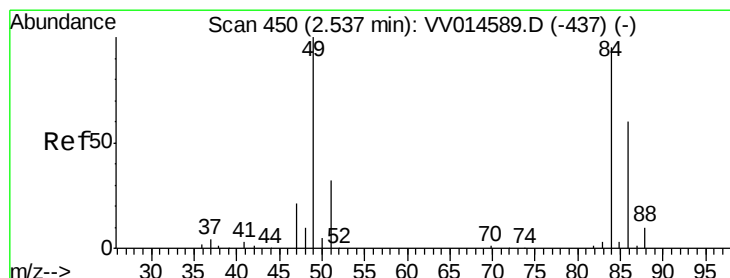
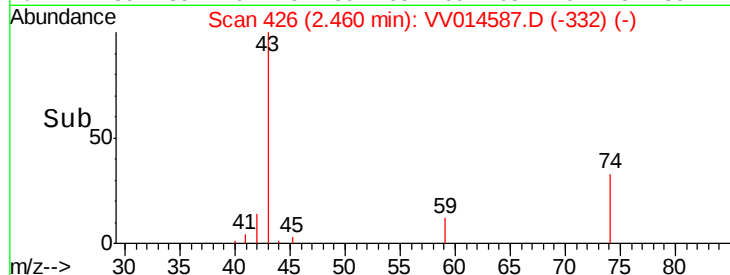
2000

1000

0

Time-->

2.40 2.45 2.50 2.55



#16

Methylene chloride

Concen: 5.104 ug/L

RT: 2.54 min Scan# 450

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

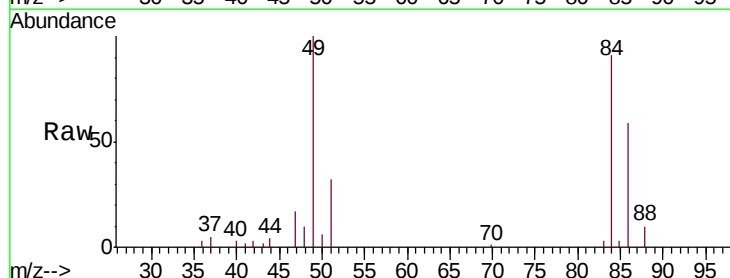
Tgt Ion: 84 Resp: 11523

Ion Ratio Lower Upper

84 100

86 65.3 44.0 81.8

49 110.0 74.0 137.4



Abundance Ion 84.00 (83.70 to 84.70): VV0

Ion 86.00 (85.70 to 86.70): VV0

Ion 49.00 (48.70 to 49.70): VV0

10000

8000

6000

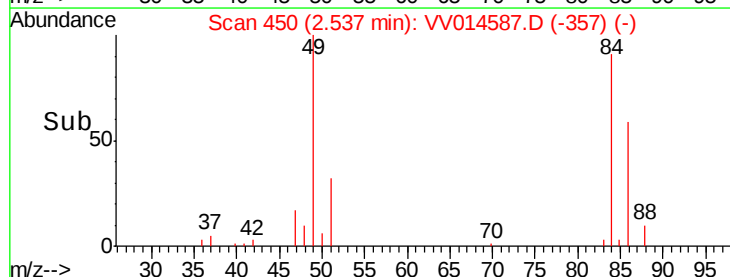
4000

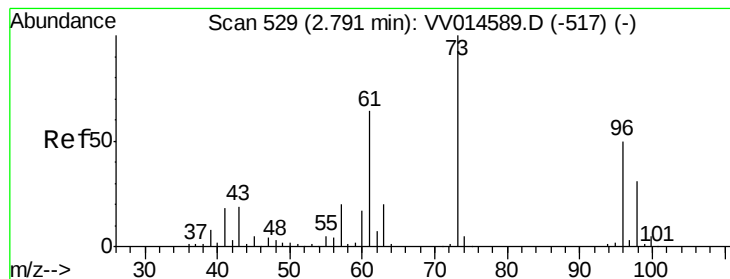
2000

0

Time-->

2.50 2.55 2.60





#17

trans-1,2-Dichloroethene

Concen: 4.705 ug/L

RT: 2.79 min Scan# 530

Delta R.T. 0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampled :

VSTD005202

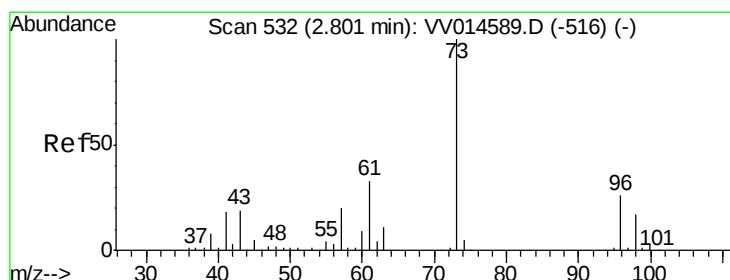
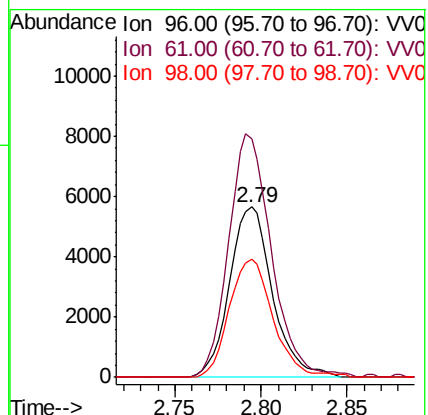
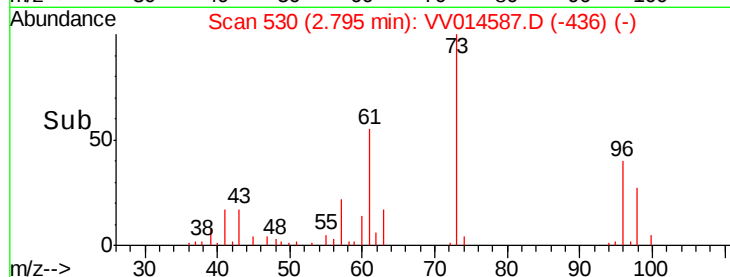
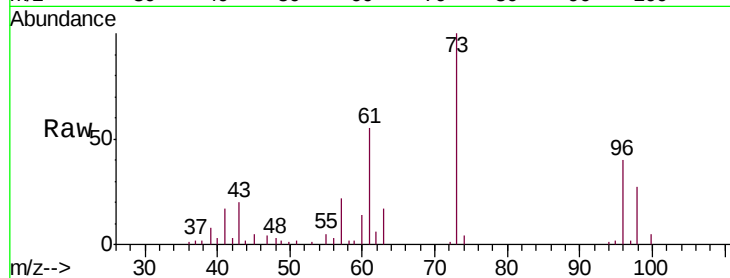
Tgt Ion: 96 Resp: 9825

Ion Ratio Lower Upper

96 100

61 139.9 90.6 168.3

98 69.4 44.2 82.2



#18

Methyl tert-butyl Ether

Concen: 4.871 ug/L

RT: 2.80 min Scan# 532

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

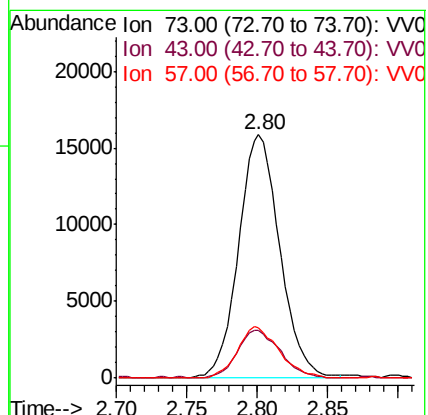
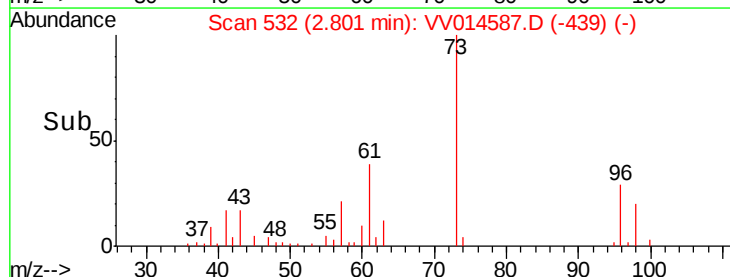
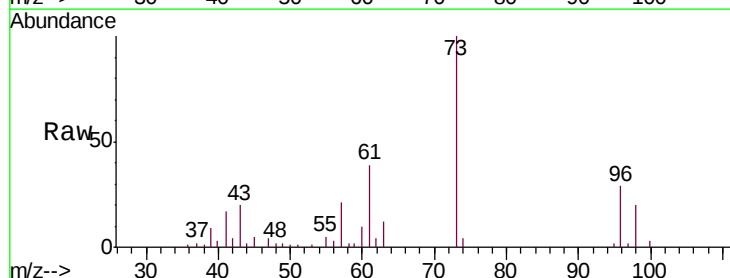
Tgt Ion: 73 Resp: 32457

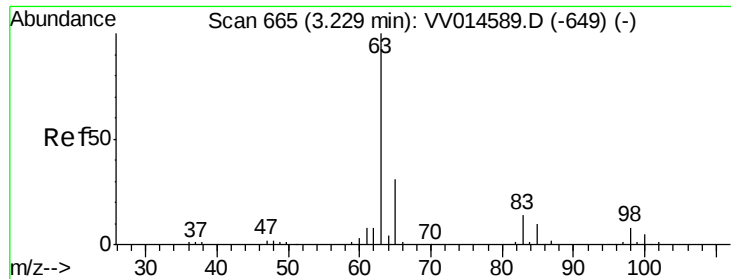
Ion Ratio Lower Upper

73 100

43 20.6 14.7 22.1

57 21.3 16.2 24.4

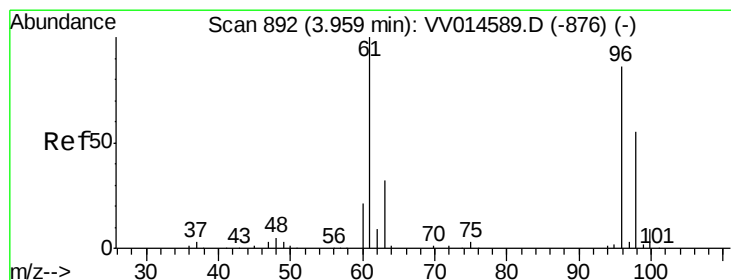
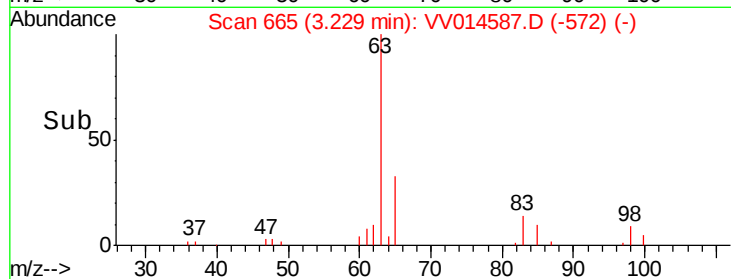
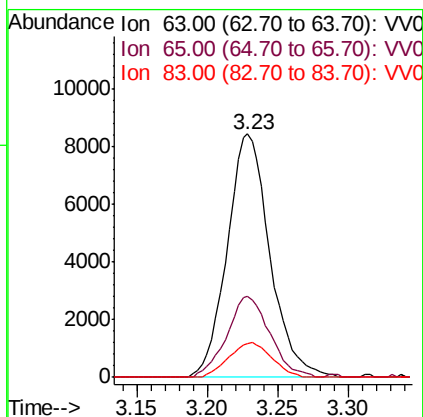
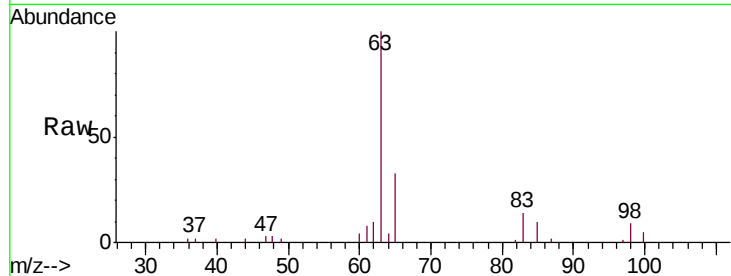




#19  
 1,1-Dichloroethane  
 Concen: 4.763 ug/L  
 RT: 3.23 min Scan# 665  
 Delta R.T. -0.00 min  
 Lab File: VV014587.D  
 Acq: 17 Feb 2020 11:13

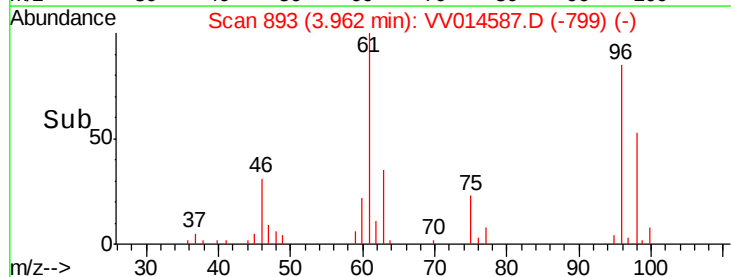
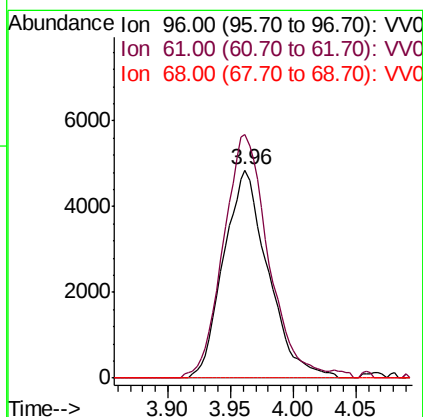
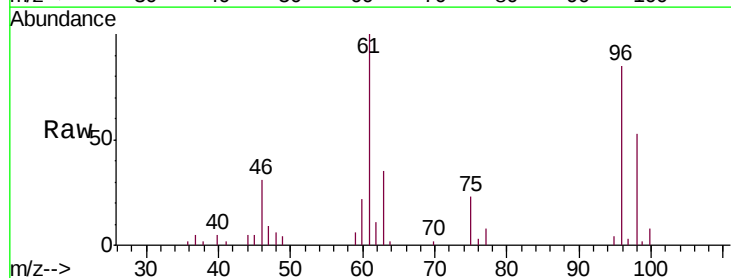
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 VSTD005202

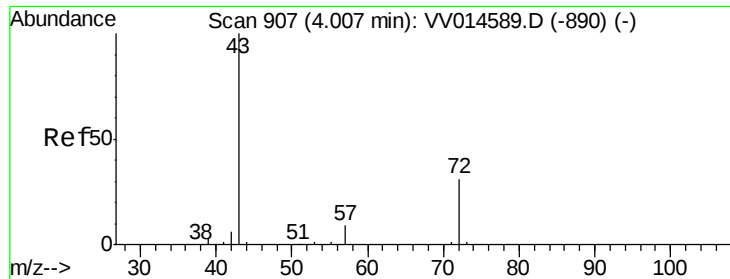
Tgt Ion: 63 Resp: 17784  
 Ion Ratio Lower Upper  
 63 100  
 65 33.2 21.8 40.4  
 83 14.1 9.9 18.3



#20  
 cis-1,2-Dichloroethene  
 Concen: 5.065 ug/L  
 RT: 3.96 min Scan# 893  
 Delta R.T. 0.00 min  
 Lab File: VV014587.D  
 Acq: 17 Feb 2020 11:13

Tgt Ion: 96 Resp: 11947  
 Ion Ratio Lower Upper  
 96 100  
 61 117.1 81.4 151.2  
 68 0.0 0.0 0.0





#22

2-Butanone

Concen: 6.760 ug/L

RT: 4.02 min Scan# 910

Delta R.T. 0.01 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

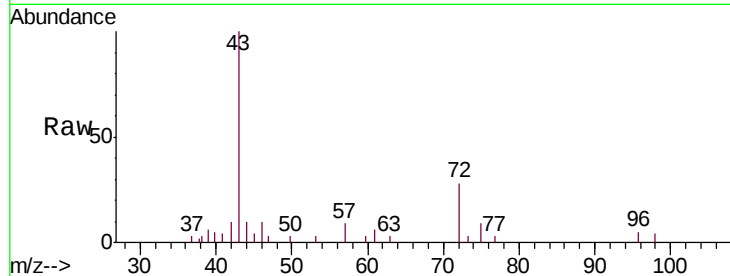
VSTD005202

Tgt Ion: 43 Resp: 10634

Ion Ratio Lower Upper

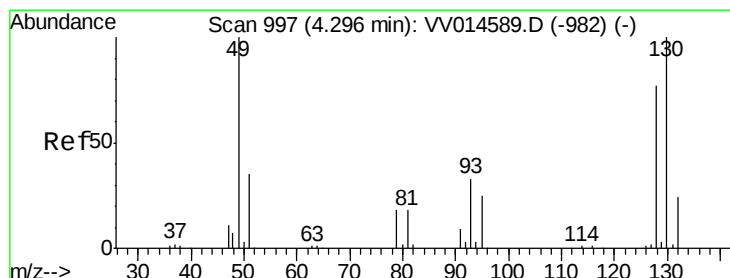
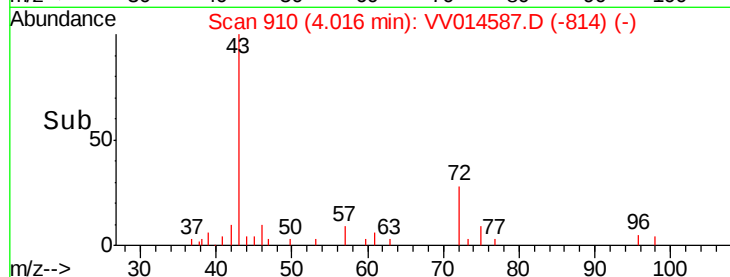
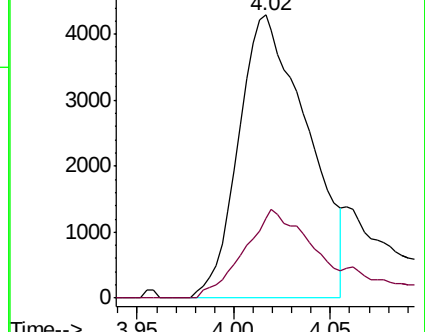
43 100

72 30.6 15.1 45.3



Abundance Ion 43.00 (42.70 to 43.70): VV014589.D (-890) (-)

Ion 72.00 (71.70 to 72.70): VV014589.D (-890) (-)



#23

Bromochloromethane

Concen: 5.096 ug/L

RT: 4.30 min Scan# 997

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Tgt Ion: 128 Resp: 5751

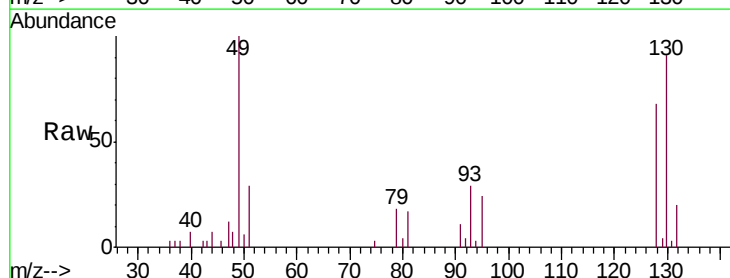
Ion Ratio Lower Upper

128 100

49 146.5 91.7 170.3

130 137.6 91.4 169.8

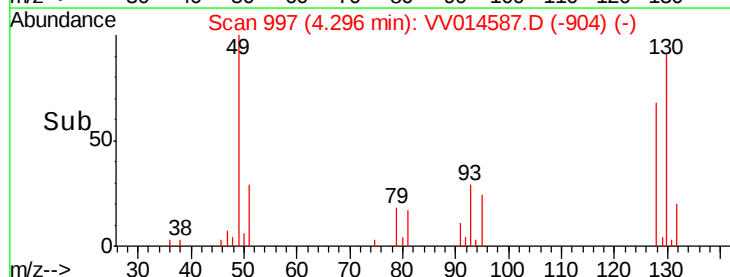
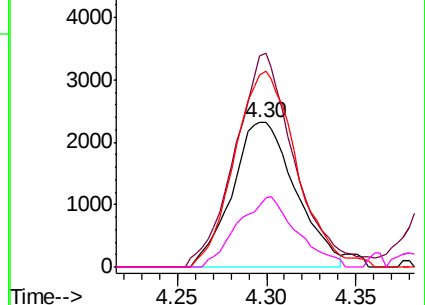
51 42.8 36.2 54.2

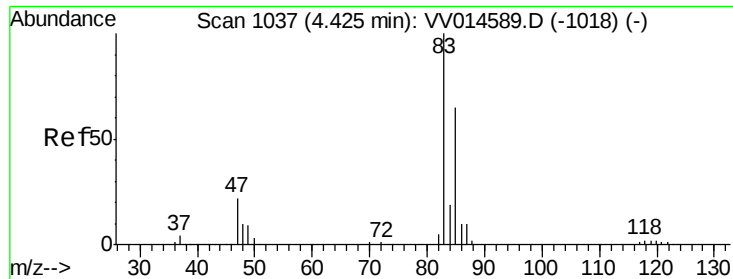


Abundance Ion 128.00 (127.70 to 128.70): VV014589.D (-982) (-)

Ion 49.00 (48.70 to 49.70): VV014589.D (-982) (-)

Ion 130.00 (129.70 to 130.70): VV014589.D (-982) (-)

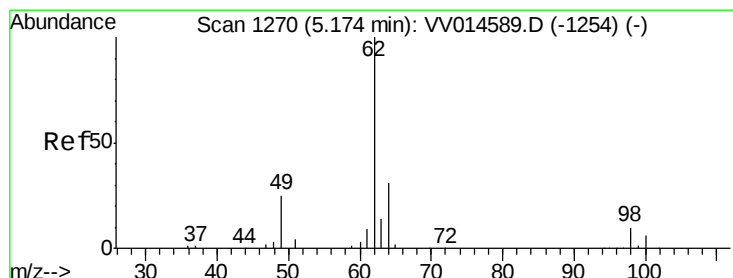
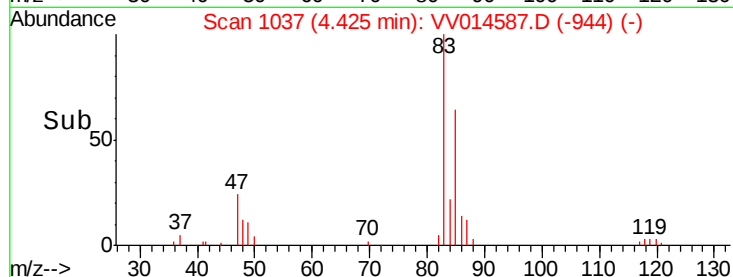
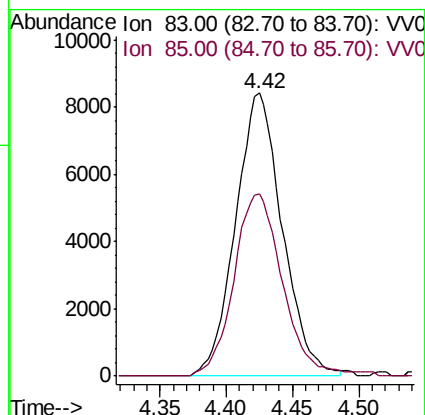
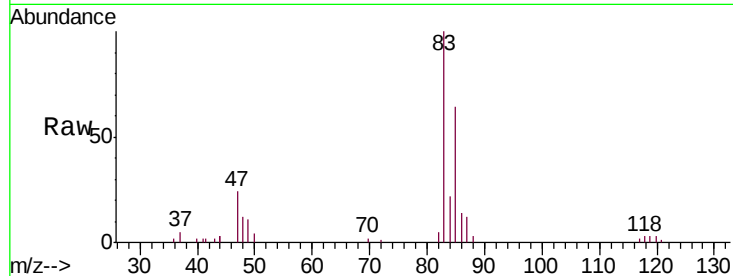




#25  
Chloroform  
Concen: 5.347 ug/L  
RT: 4.42 min Scan# 1037  
Delta R.T. -0.00 min  
Lab File: VV014587.D  
Acq: 17 Feb 2020 11:13

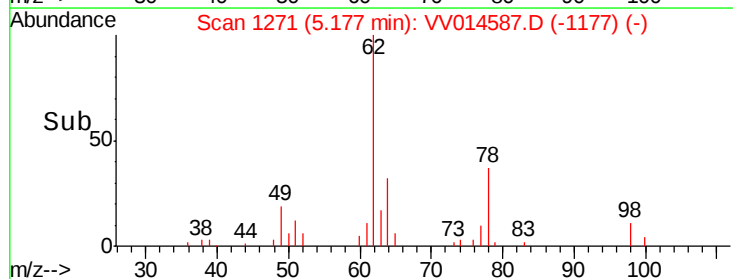
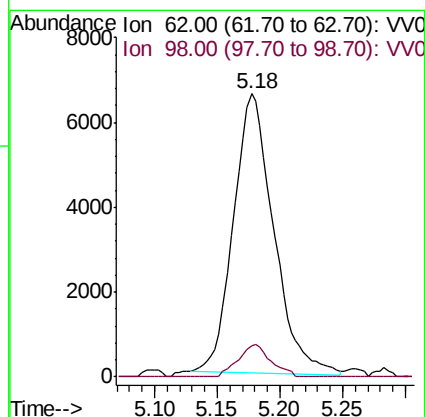
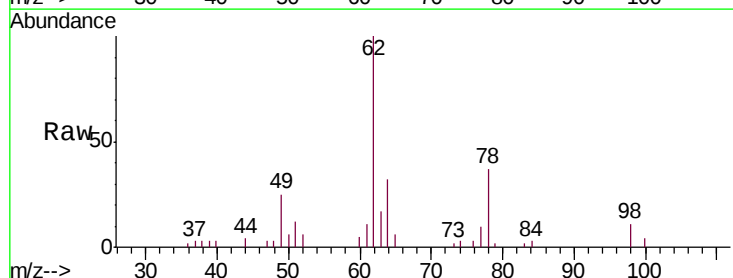
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005202

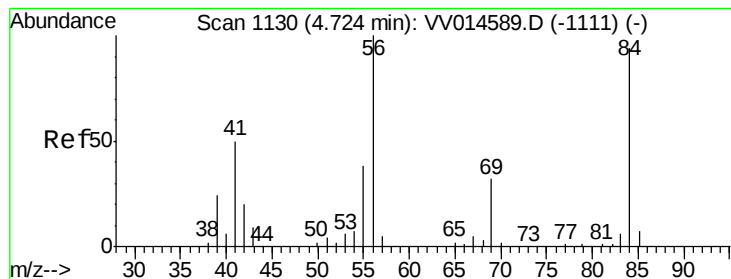
Tgt Ion: 83 Resp: 20621  
Ion Ratio Lower Upper  
83 100  
85 64.4 45.4 84.4



#27  
1,2-Dichloroethane  
Concen: 5.124 ug/L  
RT: 5.18 min Scan# 1271  
Delta R.T. 0.00 min  
Lab File: VV014587.D  
Acq: 17 Feb 2020 11:13

Tgt Ion: 62 Resp: 14707  
Ion Ratio Lower Upper  
62 100  
98 11.1 8.1 12.1





#29

Cyclohexane

Concen: 4.425 ug/L

RT: 4.72 min Scan# 1129

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

VSTD005202

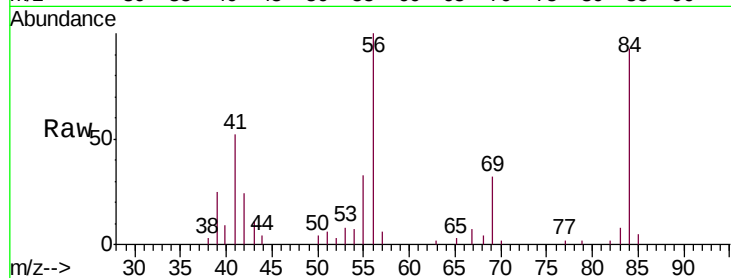
Tgt Ion: 56 Resp: 15568

Ion Ratio Lower Upper

56 100

69 32.2 26.6 39.8

84 90.0 76.6 114.8

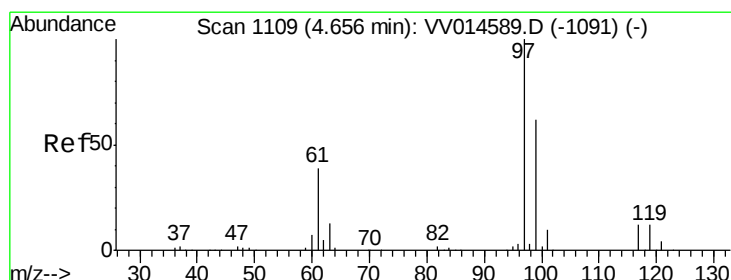
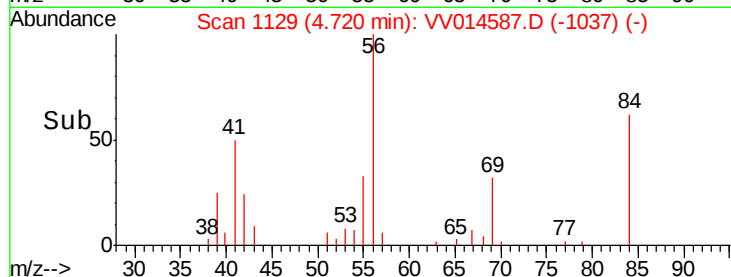
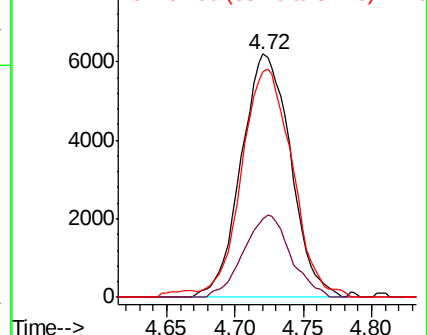


Abundance

Ion 56.00 (55.70 to 56.70): VV0

Ion 69.00 (68.70 to 69.70): VV0

Ion 84.00 (83.70 to 84.70): VV0



#30

1,1,1-Trichloroethane

Concen: 5.258 ug/L

RT: 4.65 min Scan# 1108

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

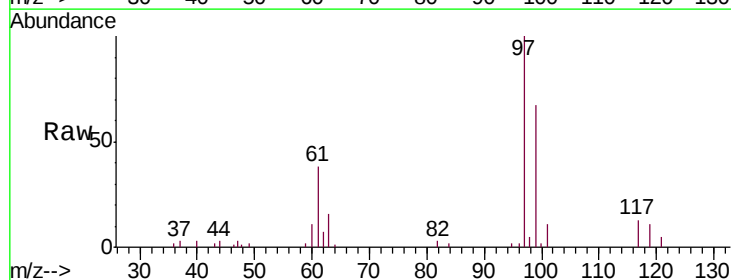
Tgt Ion: 97 Resp: 17899

Ion Ratio Lower Upper

97 100

99 65.6 50.6 76.0

61 39.8 31.6 47.4

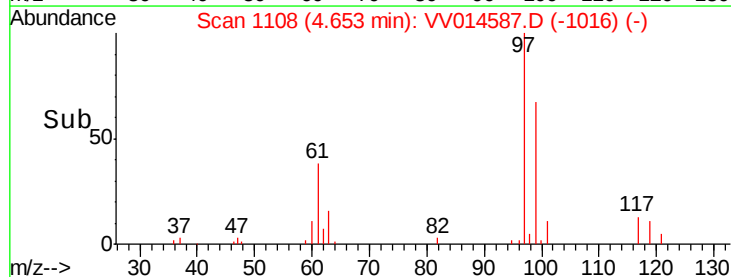
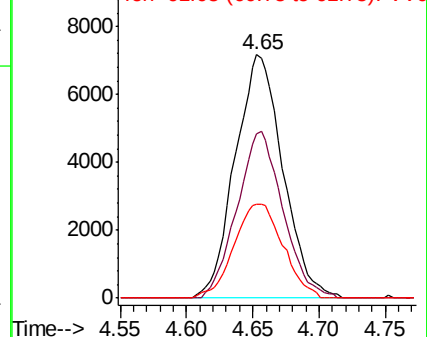


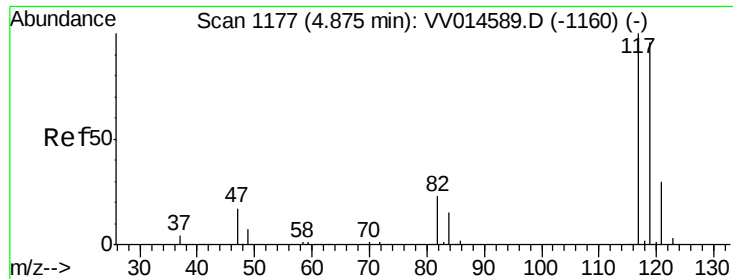
Abundance

Ion 97.00 (96.70 to 97.70): VV0

Ion 99.00 (98.70 to 99.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

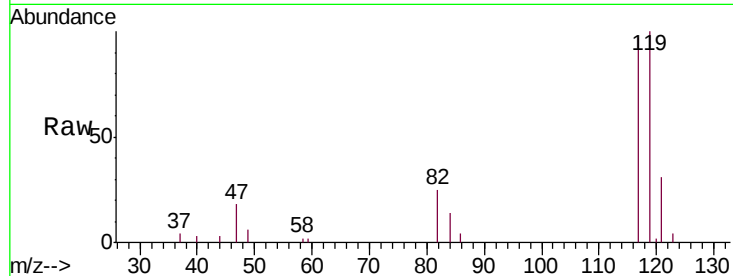




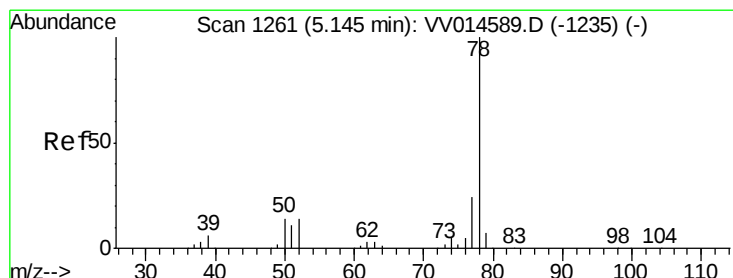
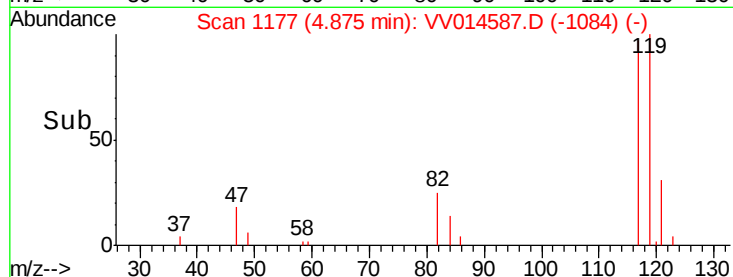
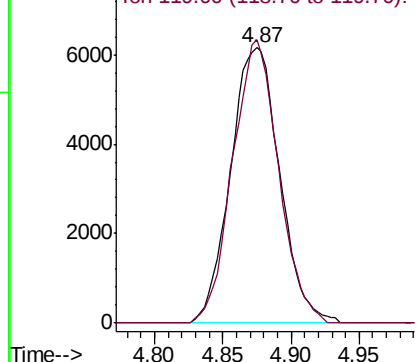
#31  
Carbon tetrachloride  
Concen: 5.109 ug/L  
RT: 4.87 min Scan# 1177  
Delta R.T. -0.00 min  
Lab File: VV014587.D  
Acq: 17 Feb 2020 11:13

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005202

Tgt Ion:117 Resp: 15422  
Ion Ratio Lower Upper  
117 100  
119 95.8 76.2 114.4

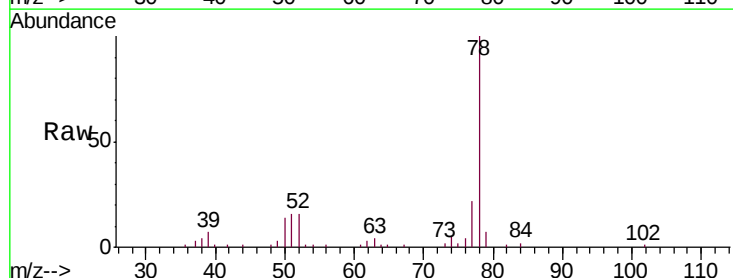


Abundance Ion 117.00 (116.70 to 117.70): V  
Ion 119.00 (118.70 to 119.70): V

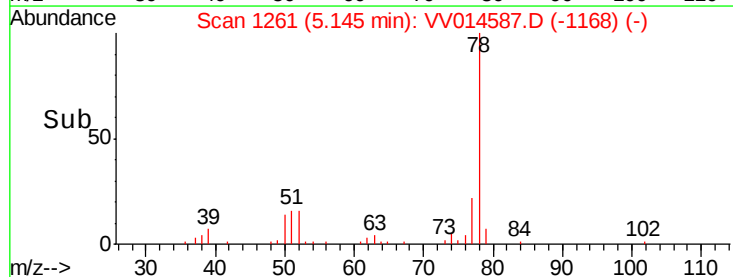
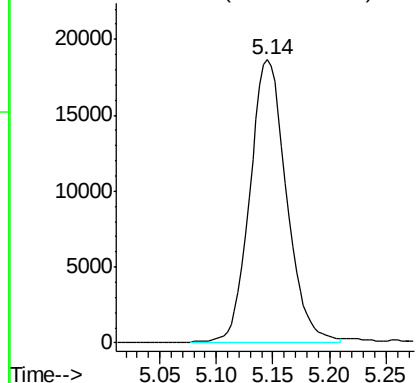


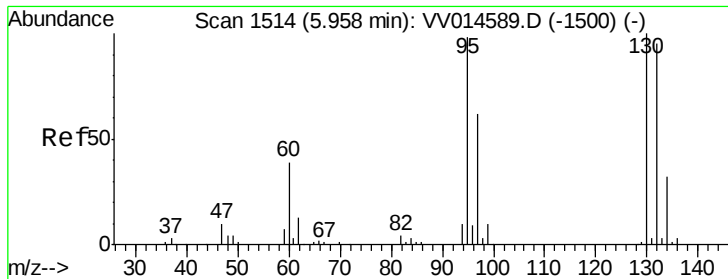
#33  
Benzene  
Concen: 4.918 ug/L  
RT: 5.14 min Scan# 1261  
Delta R.T. -0.00 min  
Lab File: VV014587.D  
Acq: 17 Feb 2020 11:13

Tgt Ion: 78 Resp: 42241



Abundance Ion 78.00 (77.70 to 78.70): VV0





#34

Trichloroethene

Concen: 5.116 ug/L

RT: 5.96 min Scan# 1514

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

VSTD005202

Tgt Ion: 95 Resp: 11737

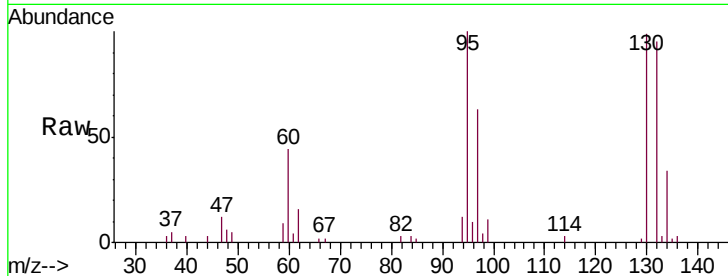
Ion Ratio Lower Upper

95 100

97 63.2 44.4 82.4

132 95.4 67.8 125.8

130 99.3 71.4 132.6



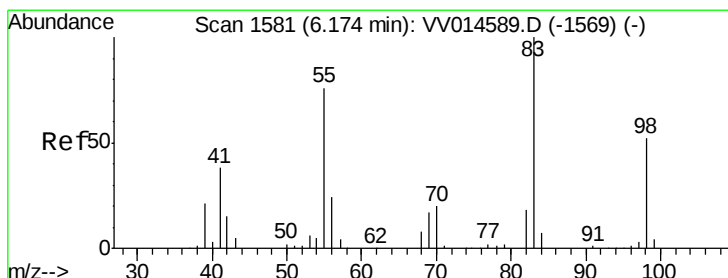
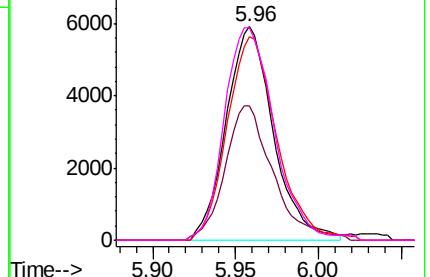
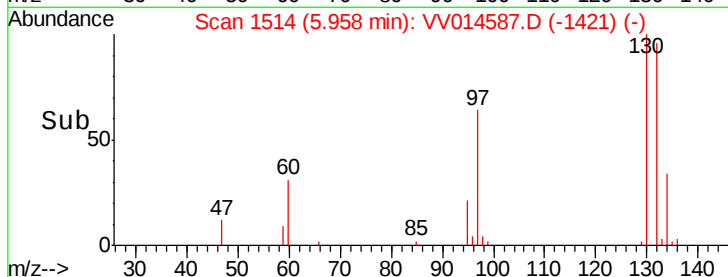
Abundance Ion 95.00 (94.70 to 95.70): VV0

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

Time-->



#35

Methylcyclohexane

Concen: 4.797 ug/L

RT: 6.17 min Scan# 1581

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

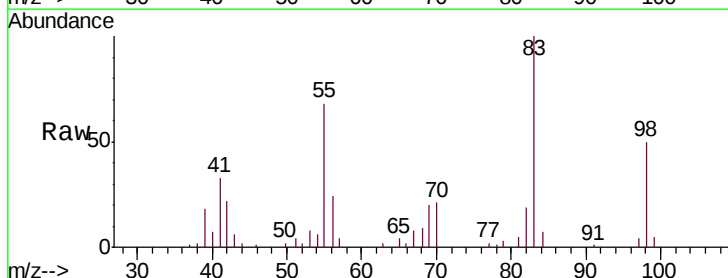
Tgt Ion: 83 Resp: 17803

Ion Ratio Lower Upper

83 100

55 70.9 57.4 86.2

98 49.9 40.4 60.6

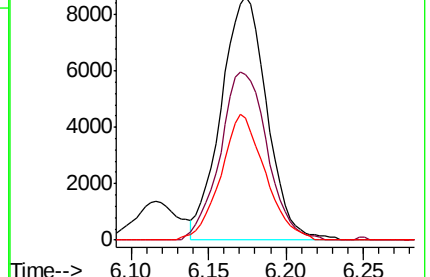
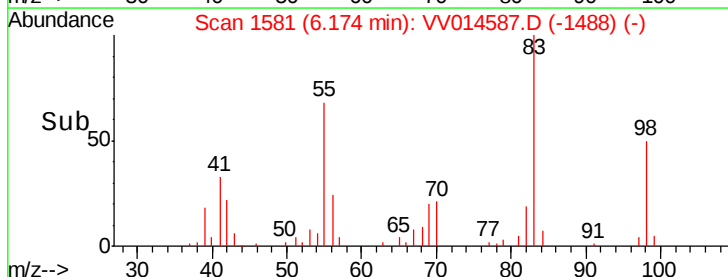


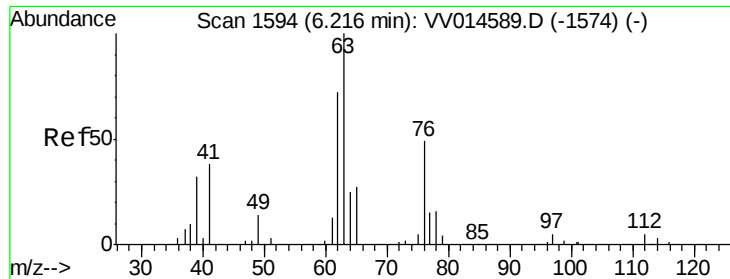
Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 55.00 (54.70 to 55.70): VV0

Ion 98.00 (97.70 to 98.70): VV0

Time-->

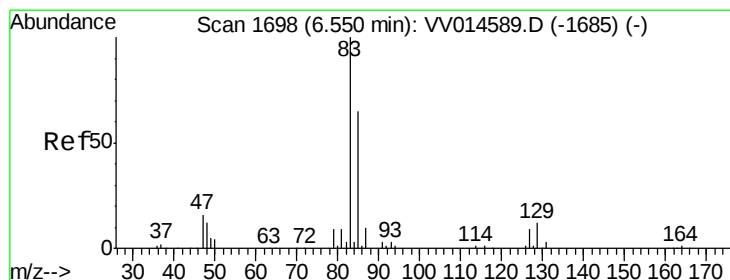
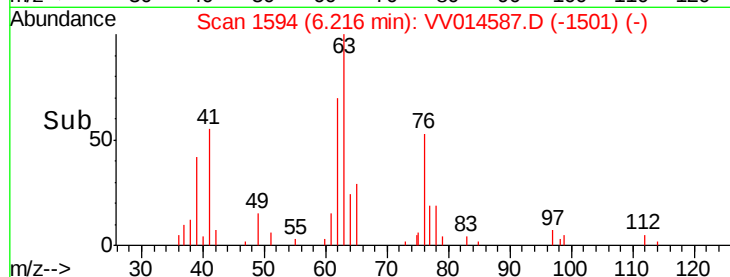
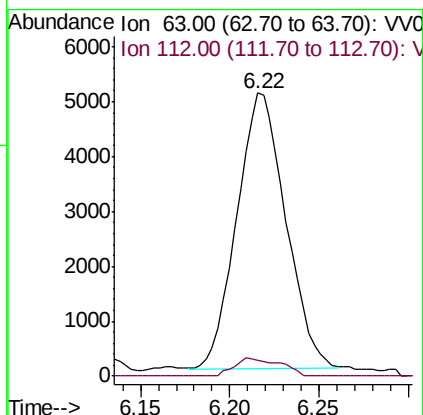
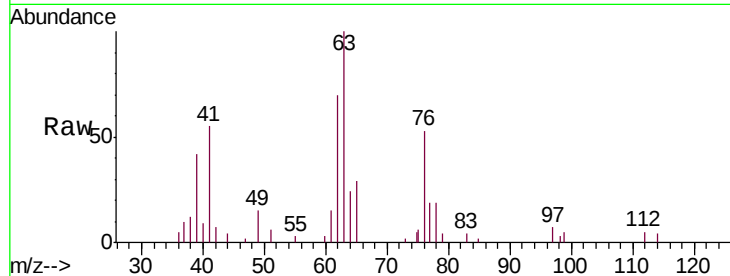




#37  
 1,2-Dichloropropane  
 Concen: 4.411 ug/L  
 RT: 6.22 min Scan# 1594  
 Delta R.T. -0.00 min  
 Lab File: VV014587.D  
 Acq: 17 Feb 2020 11:13

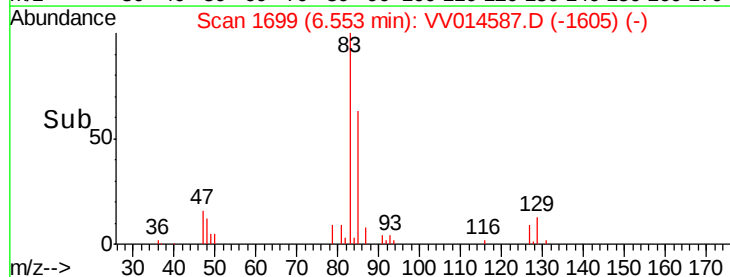
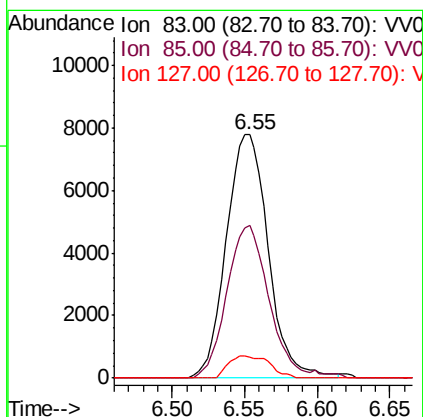
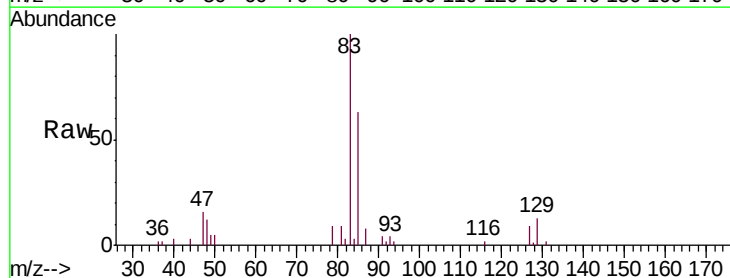
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD005202

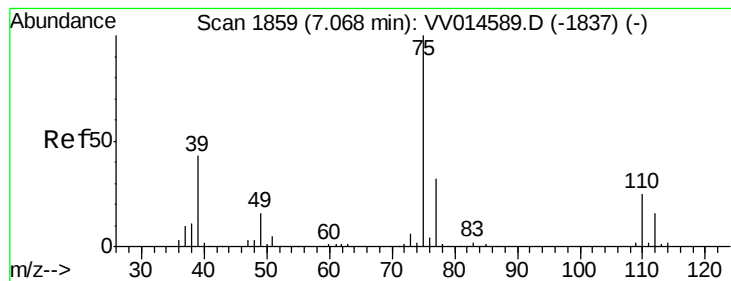
Tgt Ion: 63 Resp: 9598  
 Ion Ratio Lower Upper  
 63 100  
 112 4.7 4.2 6.2



#38  
 Bromodichloromethane  
 Concen: 5.240 ug/L  
 RT: 6.55 min Scan# 1699  
 Delta R.T. 0.00 min  
 Lab File: VV014587.D  
 Acq: 17 Feb 2020 11:13

Tgt Ion: 83 Resp: 15636  
 Ion Ratio Lower Upper  
 83 100  
 85 62.9 45.5 84.5  
 127 9.8 7.1 10.7





#39

cis-1,3-Dichloropropene

Concen: 4.329 ug/L

RT: 7.07 min Scan# 1860

Delta R.T. 0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

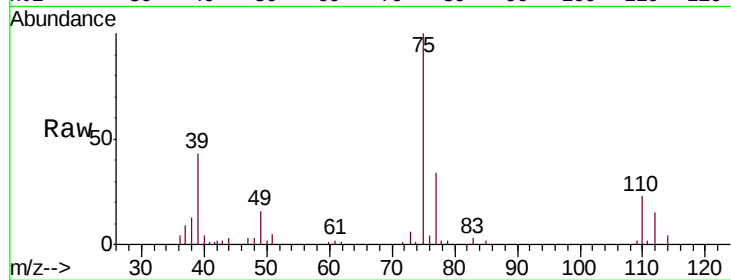
VSTD005202

Tgt Ion: 75 Resp: 15942

Ion Ratio Lower Upper

75 100

77 34.0 22.3 41.5



Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 77.00 (76.70 to 77.70): VV0

7.07

10000

8000

6000

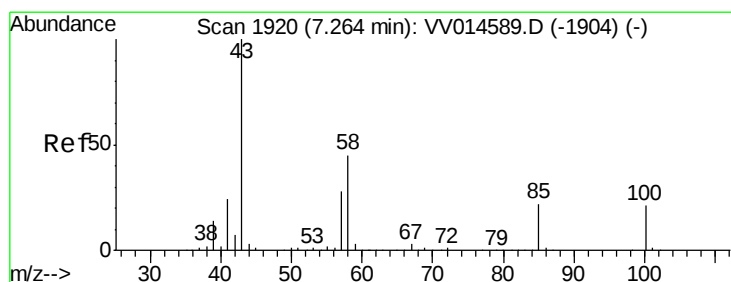
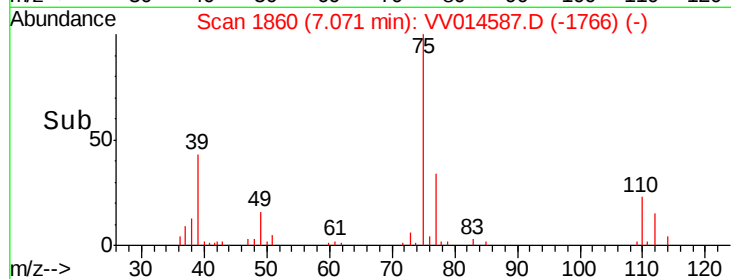
4000

2000

0

Time-->

7.00 7.05 7.10 7.15



#40

4-Methyl-2-pentanone

Concen: 8.405 ug/L

RT: 7.27 min Scan# 1922

Delta R.T. 0.01 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

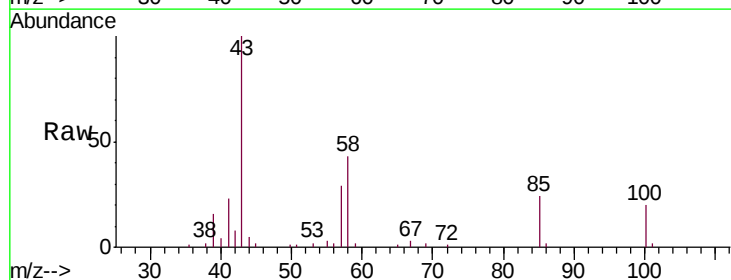
Tgt Ion: 43 Resp: 23433

Ion Ratio Lower Upper

43 100

58 43.8 35.6 53.4

100 19.9 16.0 24.0



Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 58.00 (57.70 to 58.70): VV0

Ion 100.00 (99.70 to 100.70): VV0

15000

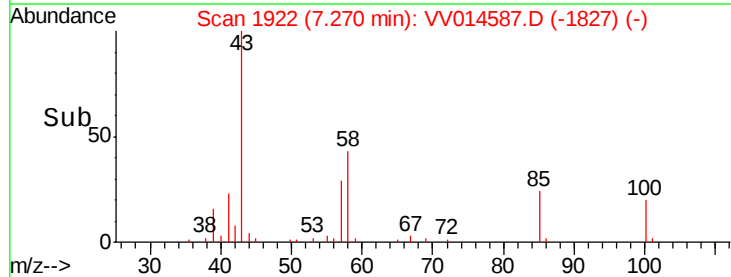
10000

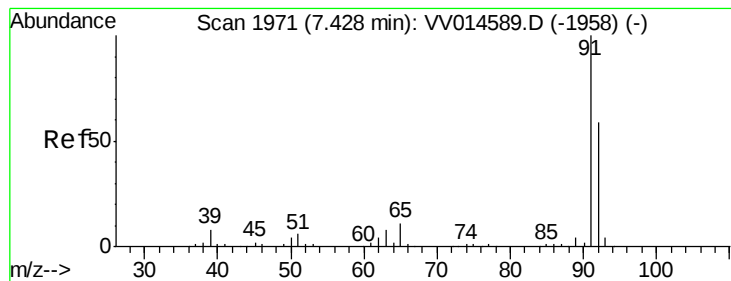
5000

0

Time-->

7.20 7.25 7.30 7.35





#42

Toluene

Concen: 4.945 ug/L

RT: 7.43 min Scan# 1971

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

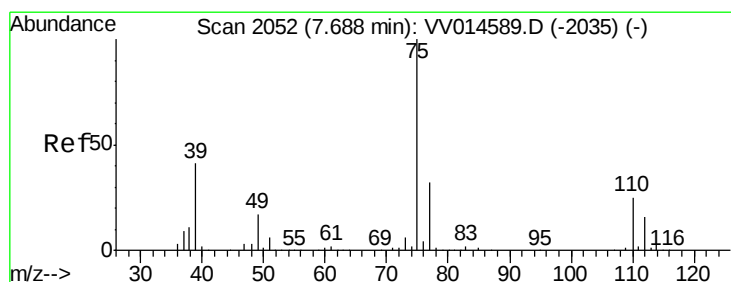
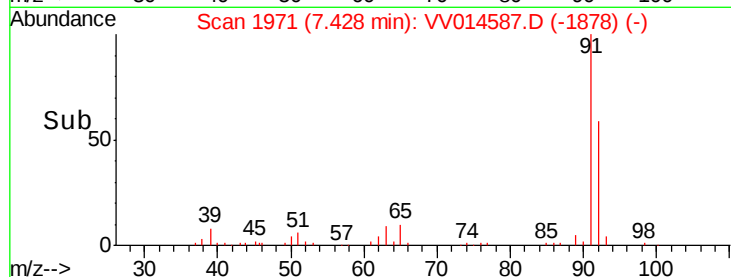
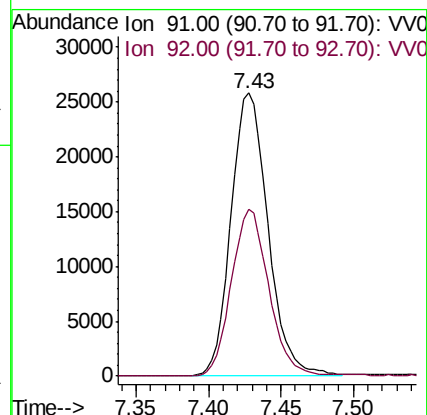
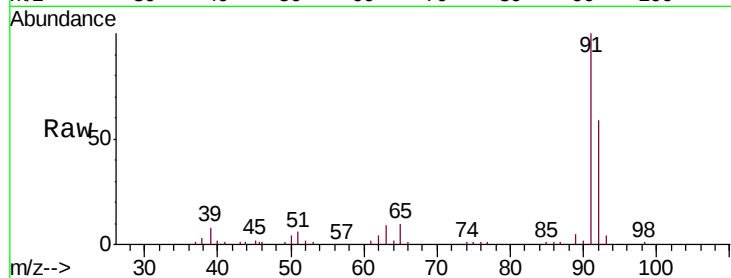
VSTD005202

Tgt Ion: 91 Resp: 45877

Ion Ratio Lower Upper

91 100

92 59.2 41.2 76.6



#44

trans-1,3-Dichloropropene

Concen: 4.777 ug/L

RT: 7.69 min Scan# 2053

Delta R.T. 0.00 min

Lab File: VV014587.D

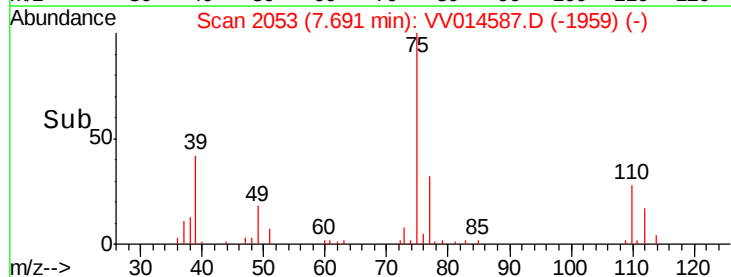
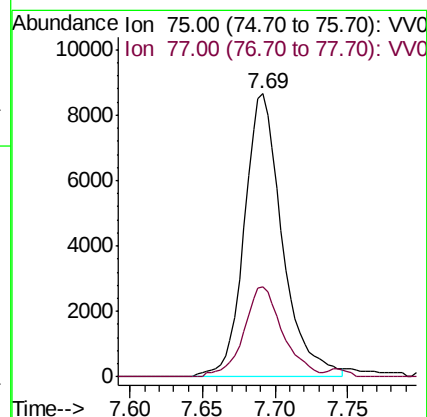
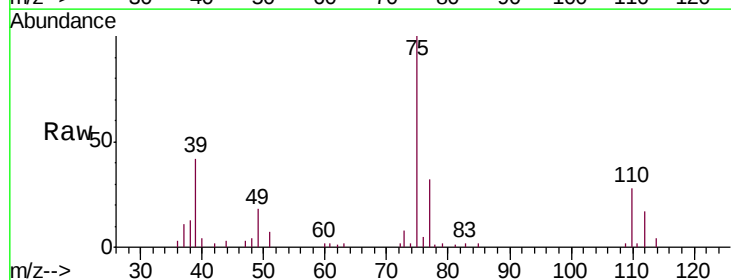
Acq: 17 Feb 2020 11:13

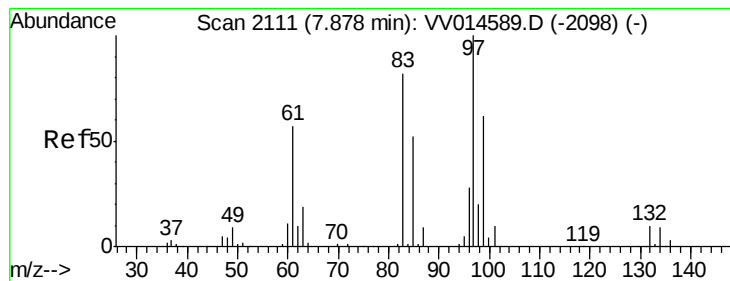
Tgt Ion: 75 Resp: 15779

Ion Ratio Lower Upper

75 100

77 32.0 22.7 42.1





#45

1,1,2-Trichloroethane

Concen: 5.005 ug/L

RT: 7.88 min Scan# 2111

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

VSTD005202

Tgt Ion: 97 Resp: 10658

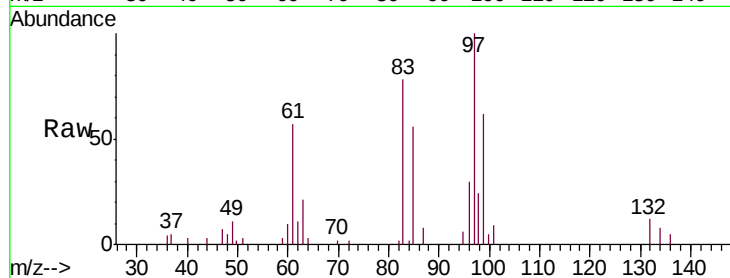
Ion Ratio Lower Upper

97 100

99 62.2 43.4 80.6

83 78.1 57.6 107.0

85 56.1 36.1 67.1



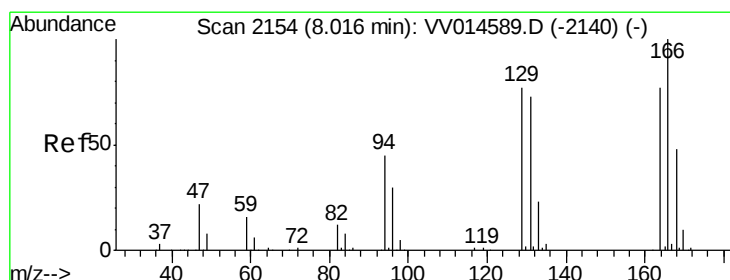
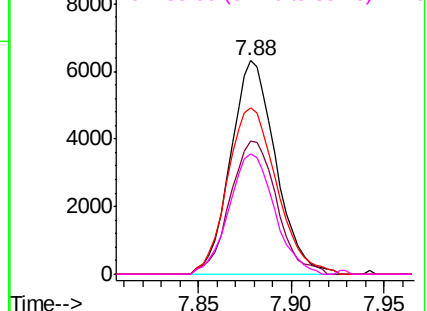
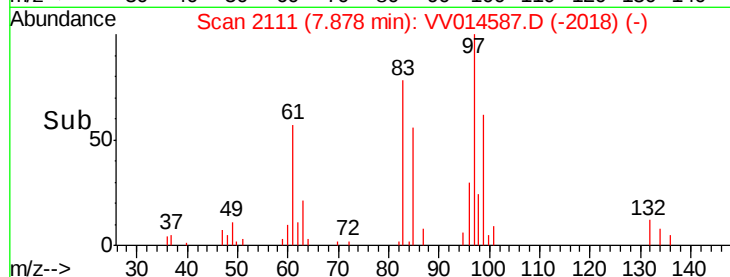
Abundance

Ion 97.00 (96.70 to 97.70): VV014589.D (-2098) (-)

Ion 99.00 (98.70 to 99.70): VV014589.D (-2098) (-)

Ion 83.00 (82.70 to 83.70): VV014589.D (-2098) (-)

Ion 85.00 (84.70 to 85.70): VV014589.D (-2098) (-)



#46

Tetrachloroethene

Concen: 5.336 ug/L

RT: 8.01 min Scan# 2153

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Tgt Ion: 164 Resp: 9352

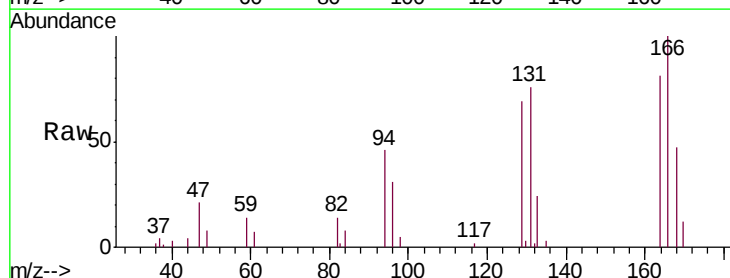
Ion Ratio Lower Upper

164 100

129 85.5 69.8 129.6

131 94.3 66.2 123.0

166 123.8 90.9 168.9



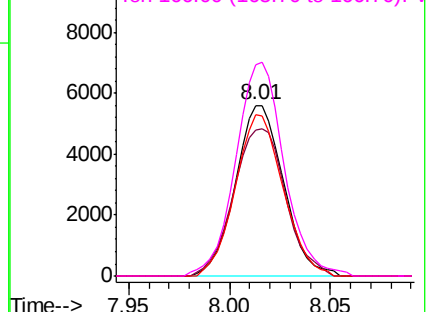
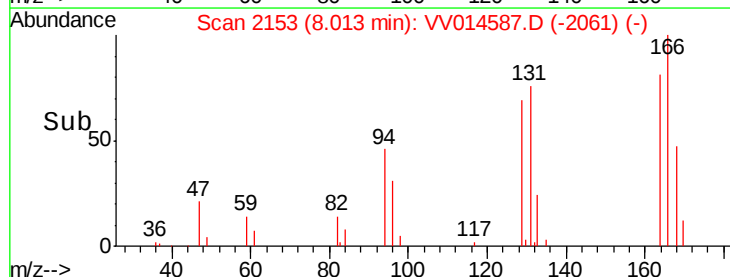
Abundance

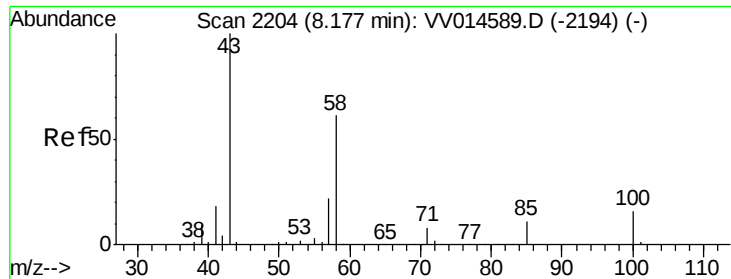
Ion 164.00 (163.70 to 164.70): VV014589.D (-2140) (-)

Ion 129.00 (128.70 to 129.70): VV014589.D (-2140) (-)

Ion 131.00 (130.70 to 131.70): VV014589.D (-2140) (-)

Ion 166.00 (165.70 to 166.70): VV014589.D (-2140) (-)

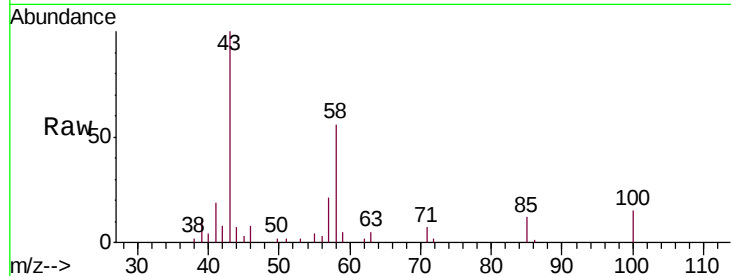




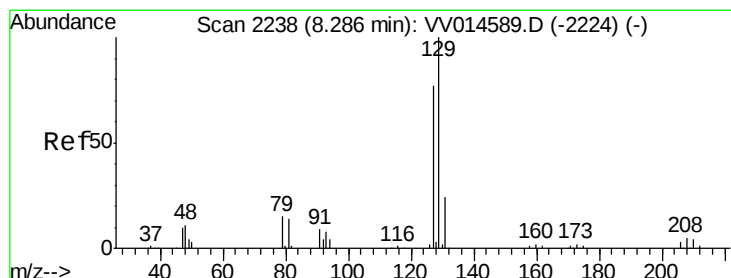
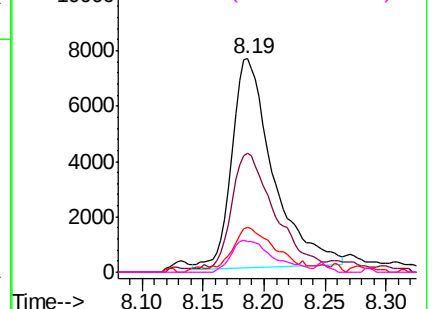
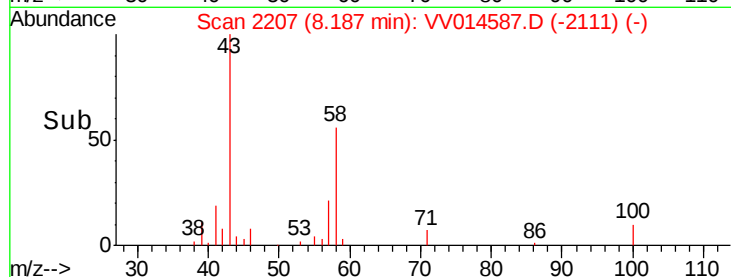
#48  
2-Hexanone  
Concen: 8.367 ug/L  
RT: 8.19 min Scan# 2207  
Delta R.T. 0.01 min  
Lab File: VV014587.D  
Acq: 17 Feb 2020 11:13

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005202

Tgt Ion: 43 Resp: 17861  
Ion Ratio Lower Upper  
43 100  
58 56.2 49.8 74.6  
57 18.9 17.0 25.6  
100 15.8 13.4 20.2

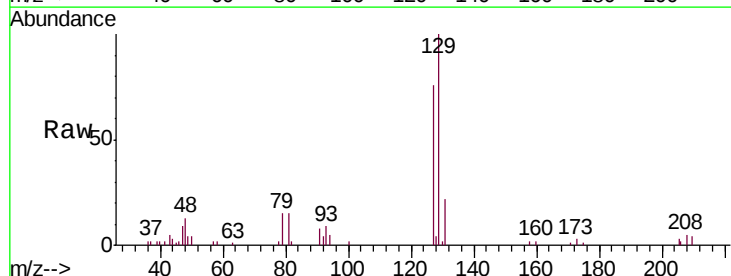


Abundance Ion 43.00 (42.70 to 43.70): VV014587.D (-2111) (-)  
Ion 58.00 (57.70 to 58.70): VV014587.D (-2111) (-)  
Ion 57.00 (56.70 to 57.70): VV014587.D (-2111) (-)  
Ion 100.00 (99.70 to 100.70): VV014587.D (-2111) (-)

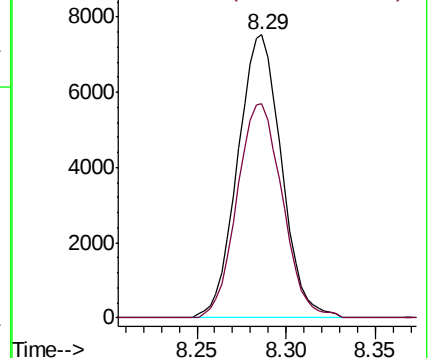
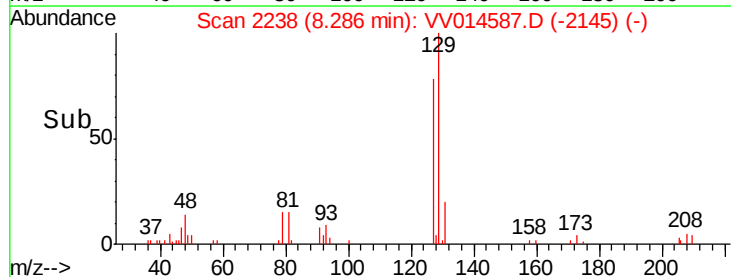


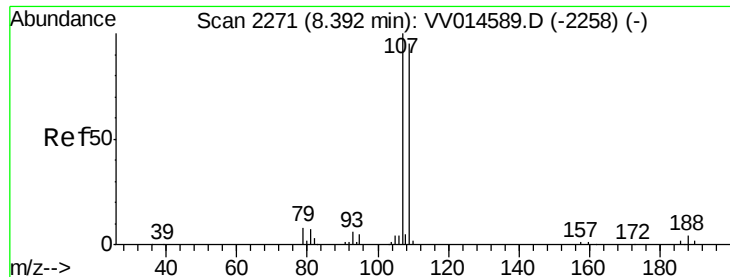
#49  
Dibromochloromethane  
Concen: 5.294 ug/L  
RT: 8.29 min Scan# 2238  
Delta R.T. -0.00 min  
Lab File: VV014587.D  
Acq: 17 Feb 2020 11:13

Tgt Ion: 129 Resp: 12889  
Ion Ratio Lower Upper  
129 100  
127 75.6 53.8 100.0



Abundance Ion 129.00 (128.70 to 129.70): VV014587.D (-2145) (-)  
Ion 127.00 (126.70 to 127.70): VV014587.D (-2145) (-)

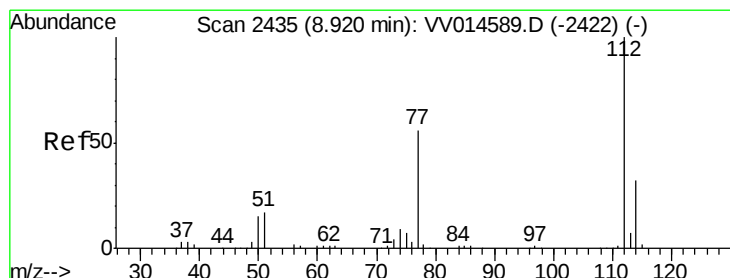
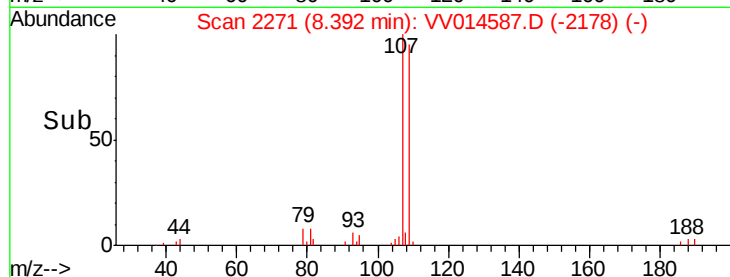
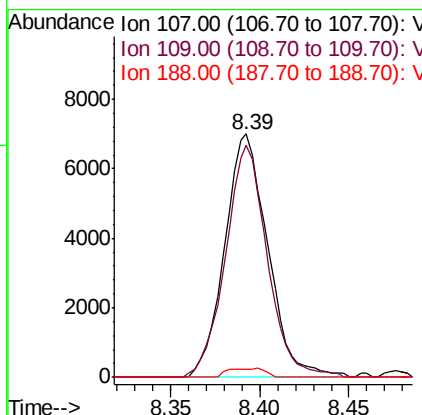
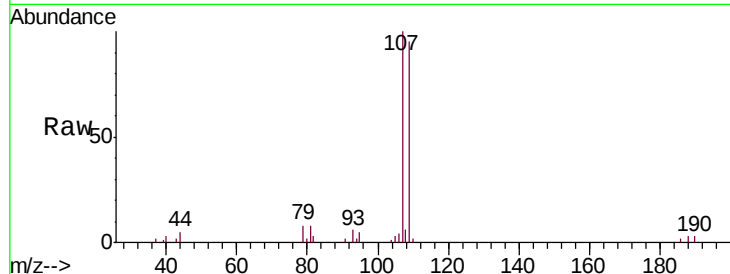




#50  
1,2-Dibromoethane  
Concen: 5.106 ug/L  
RT: 8.39 min Scan# 2271  
Delta R.T. -0.00 min  
Lab File: VV014587.D  
Acq: 17 Feb 2020 11:13

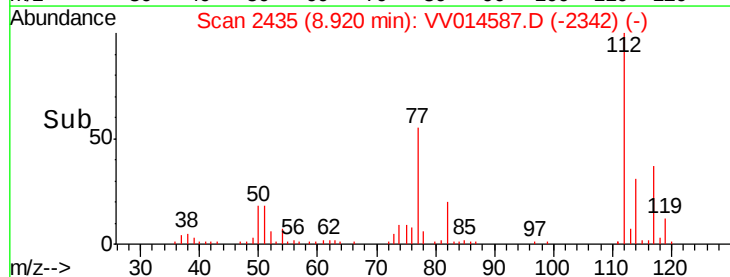
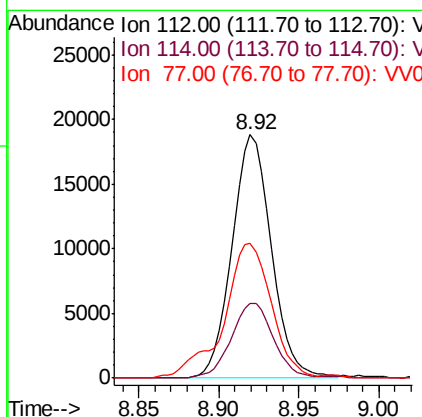
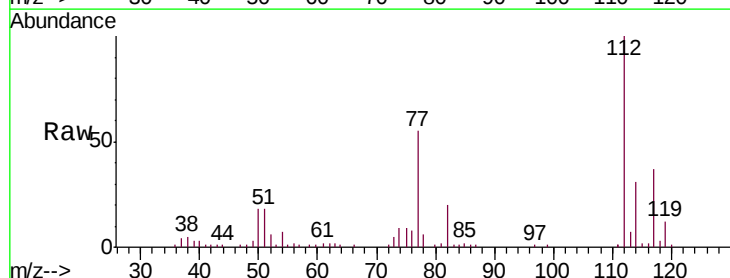
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005202

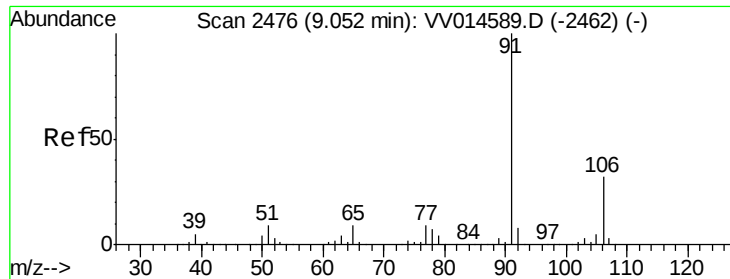
Tgt Ion:107 Resp: 11759  
Ion Ratio Lower Upper  
107 100  
109 95.4 66.5 123.5  
188 3.1 3.3 4.9#



#51  
Chlorobenzene  
Concen: 5.182 ug/L  
RT: 8.92 min Scan# 2435  
Delta R.T. -0.00 min  
Lab File: VV014587.D  
Acq: 17 Feb 2020 11:13

Tgt Ion:112 Resp: 31572  
Ion Ratio Lower Upper  
112 100  
114 30.6 22.4 41.6  
77 55.3 45.5 68.3





#52

Ethylbenzene

Concen: 5.050 ug/L

RT: 9.05 min Scan# 2476

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

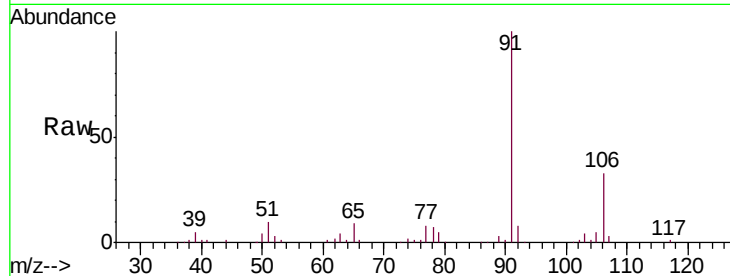
VSTD005202

Tgt Ion: 91 Resp: 52628

Ion Ratio Lower Upper

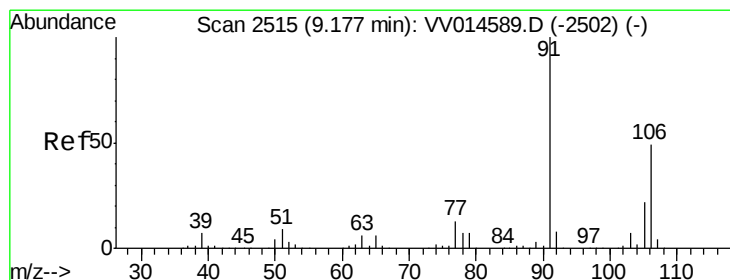
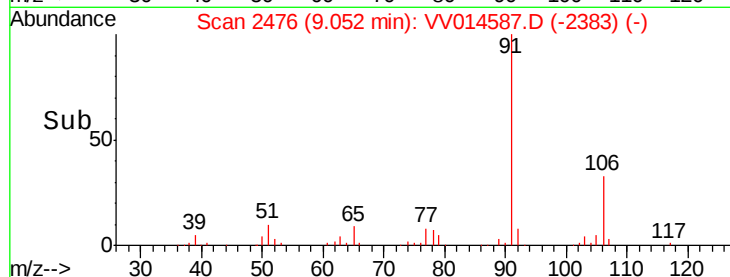
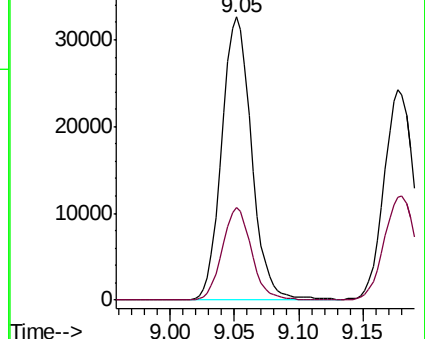
91 100

106 32.7 22.0 41.0



Abundance Ion 91.00 (90.70 to 91.70): VV014587.D (-2462) (-)

Ion 106.00 (105.70 to 106.70): VV014587.D (-2462) (-)



#53

m,p-Xylene

Concen: 5.125 ug/L

RT: 9.18 min Scan# 2516

Delta R.T. 0.00 min

Lab File: VV014587.D

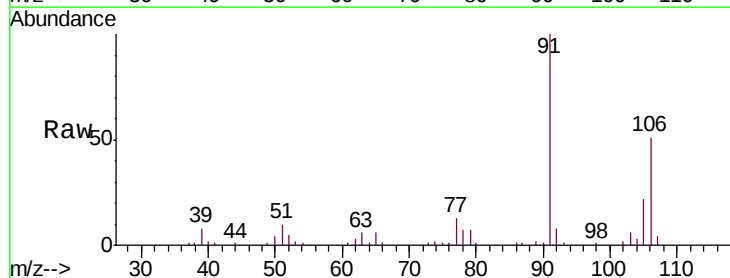
Acq: 17 Feb 2020 11:13

Tgt Ion: 106 Resp: 20596

Ion Ratio Lower Upper

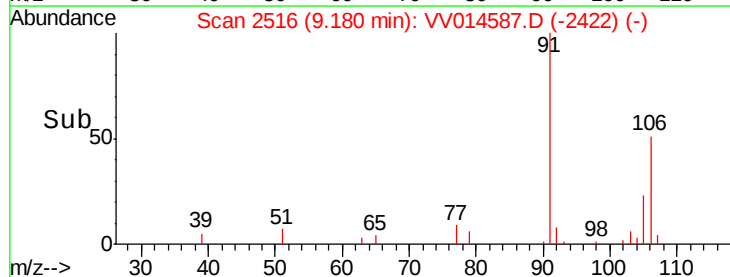
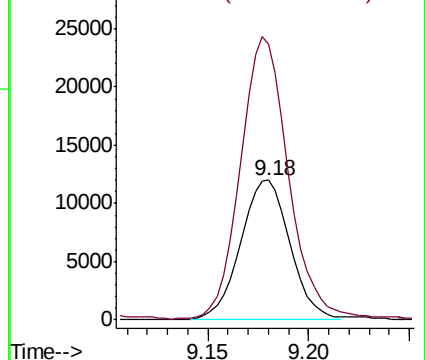
106 100

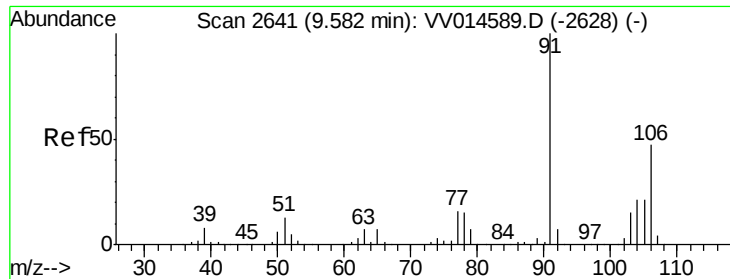
91 197.4 141.7 263.3



Abundance Ion 106.00 (105.70 to 106.70): VV014587.D (-2502) (-)

Ion 91.00 (90.70 to 91.70): VV014587.D (-2502) (-)

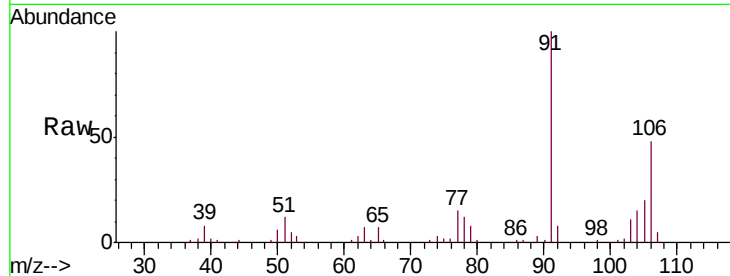




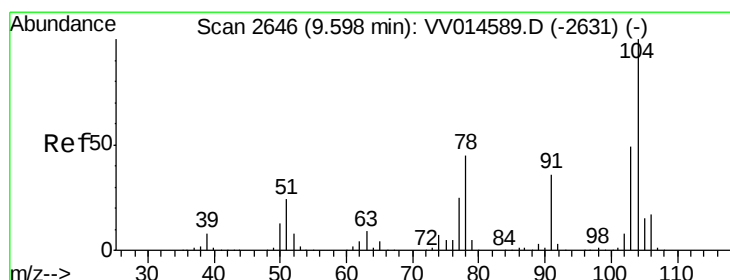
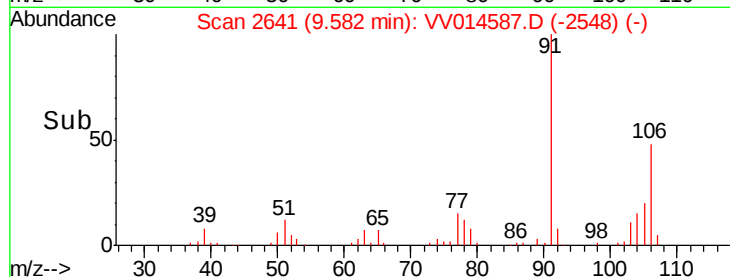
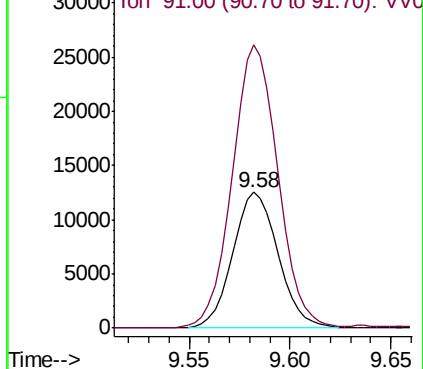
#54  
o-Xylene  
Concen: 5.148 ug/L  
RT: 9.58 min Scan# 2641  
Delta R.T. -0.00 min  
Lab File: VV014587.D  
Acq: 17 Feb 2020 11:13

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005202

Tgt Ion:106 Resp: 19827  
Ion Ratio Lower Upper  
106 100  
91 208.5 150.5 279.5

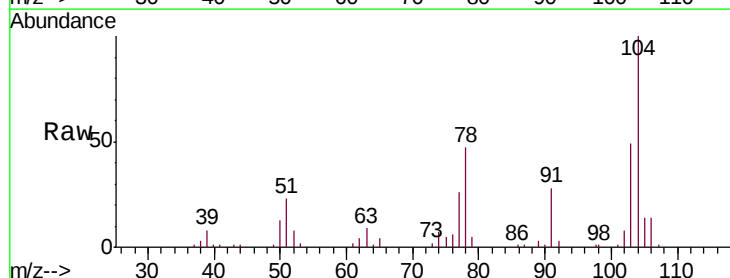


Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): VV0

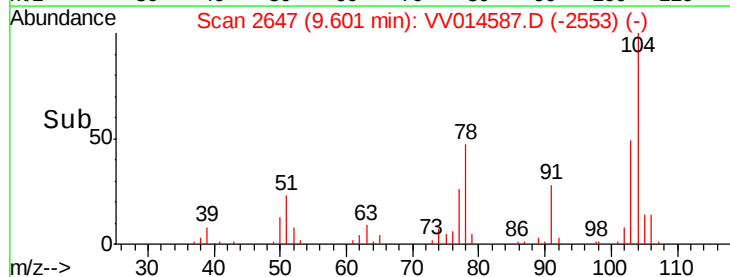
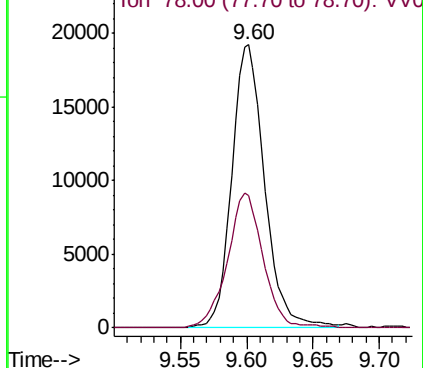


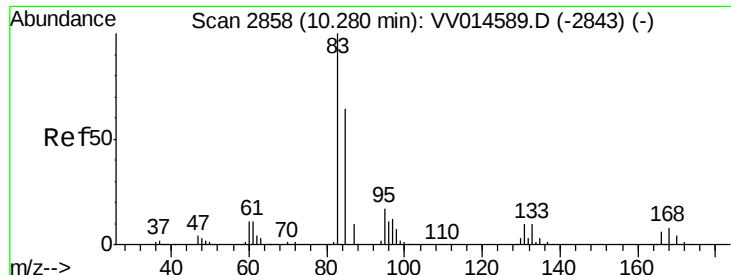
#55  
Styrene  
Concen: 5.043 ug/L  
RT: 9.60 min Scan# 2647  
Delta R.T. 0.00 min  
Lab File: VV014587.D  
Acq: 17 Feb 2020 11:13

Tgt Ion:104 Resp: 33139  
Ion Ratio Lower Upper  
104 100  
78 46.6 31.9 59.2



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





#57

1,1,2,2-Tetrachloroethane

Concen: 5.101 ug/L

RT: 10.28 min Scan# 2858

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

VSTD005202

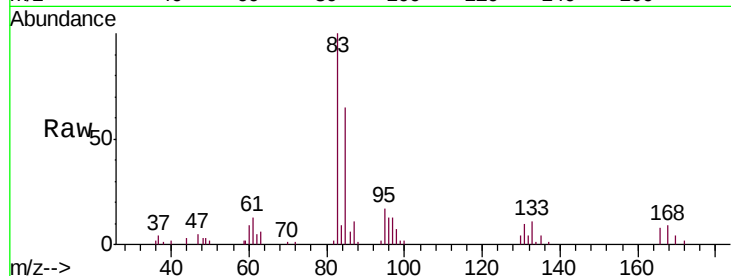
Tgt Ion: 83 Resp: 16987

Ion Ratio Lower Upper

83 100

85 64.5 44.9 83.3

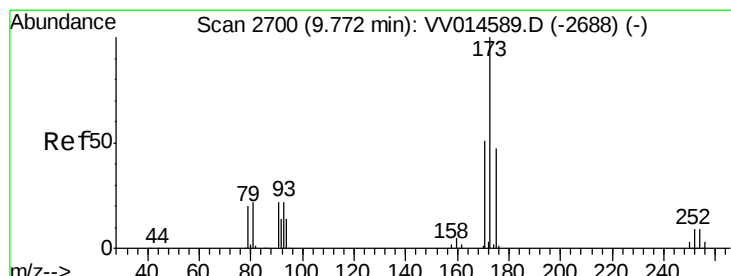
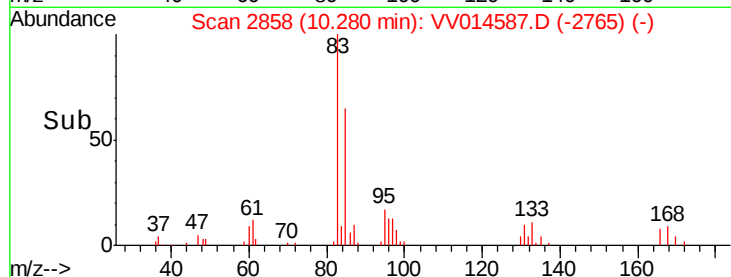
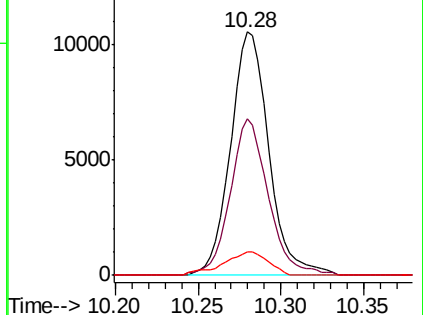
131 9.9 8.4 12.6



Abundance Ion 83.00 (82.70 to 83.70): VV014589.D (-2843) (-)

Ion 85.00 (84.70 to 85.70): VV014589.D (-2843) (-)

Ion 131.00 (130.70 to 131.70): VV014589.D (-2843) (-)



#59

Bromoform

Concen: 5.184 ug/L

RT: 9.77 min Scan# 2700

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

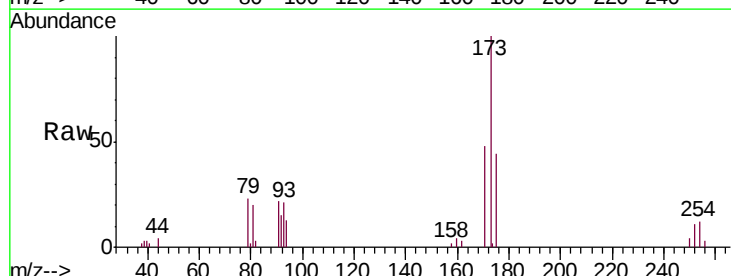
Tgt Ion: 173 Resp: 8852

Ion Ratio Lower Upper

173 100

175 46.1 38.5 57.7

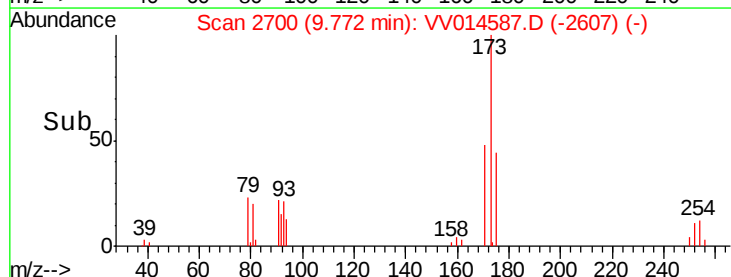
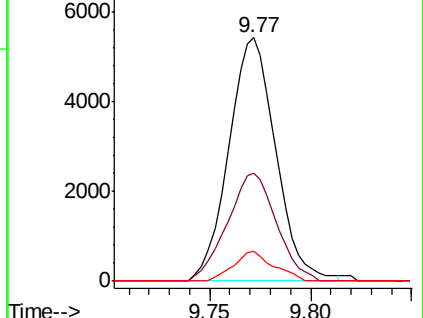
254 10.4 7.4 11.0

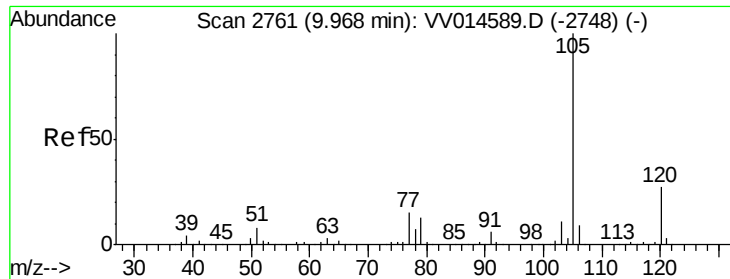


Abundance Ion 173.00 (172.70 to 173.70): VV014589.D (-2688) (-)

Ion 175.00 (174.70 to 175.70): VV014589.D (-2688) (-)

Ion 254.00 (253.70 to 254.70): VV014589.D (-2688) (-)





#60

Isopropylbenzene

Concen: 5.041 ug/L

RT: 9.97 min Scan# 2762

Delta R.T. 0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampleId :

VSTD005202

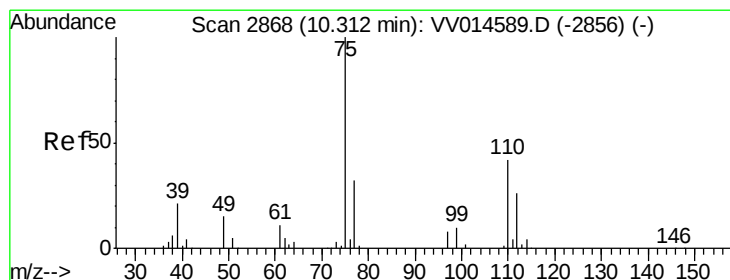
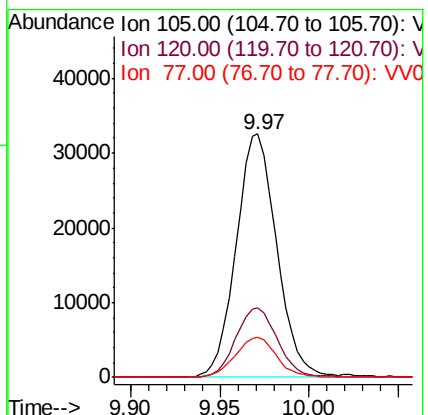
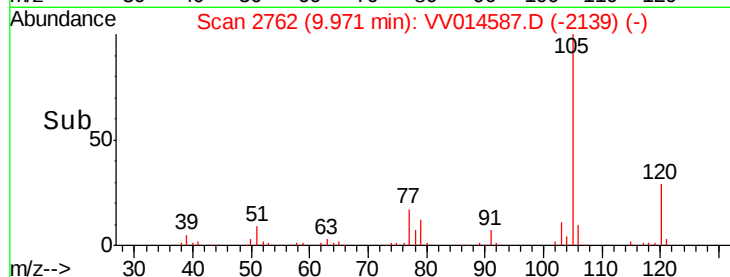
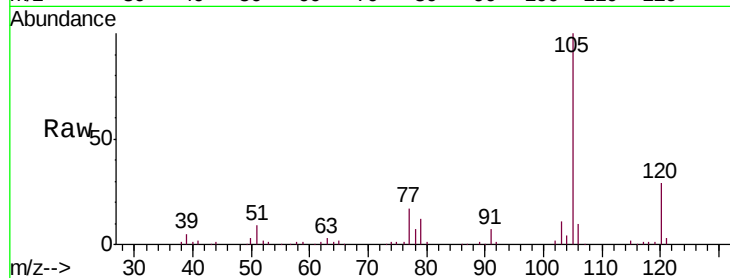
Tgt Ion:105 Resp: 51611

Ion Ratio Lower Upper

105 100

120 29.1 21.4 32.0

77 16.7 12.2 18.2



#61

1,2,3-Trichloropropane

Concen: 5.040 ug/L

RT: 10.31 min Scan# 2868

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

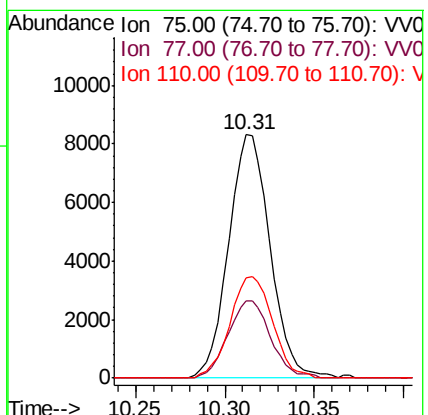
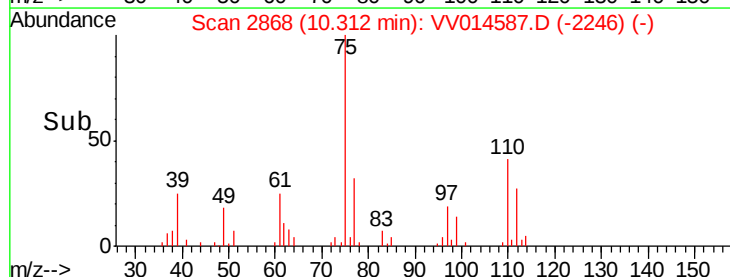
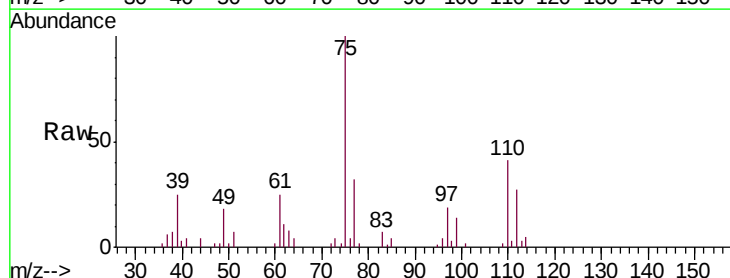
Tgt Ion: 75 Resp: 13508

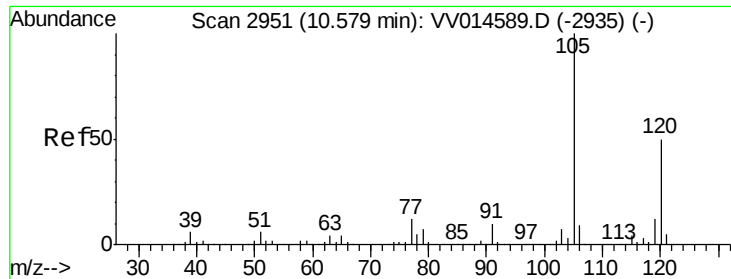
Ion Ratio Lower Upper

75 100

77 32.3 25.6 38.4

110 42.7 33.4 50.0

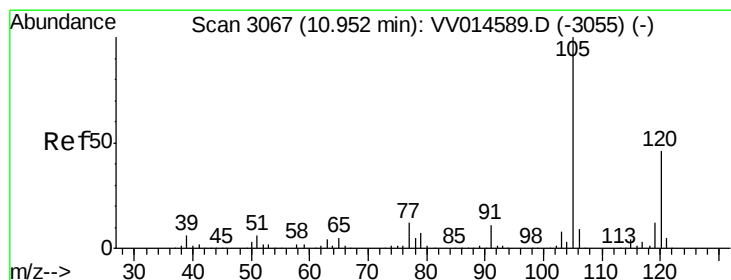
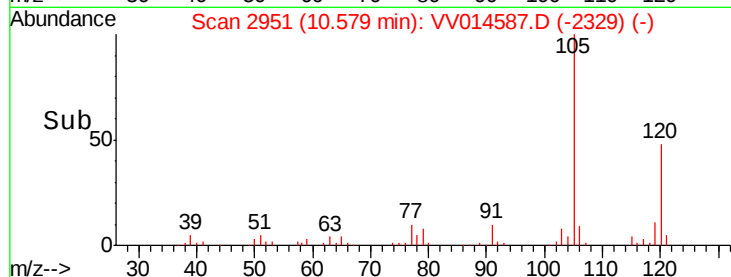
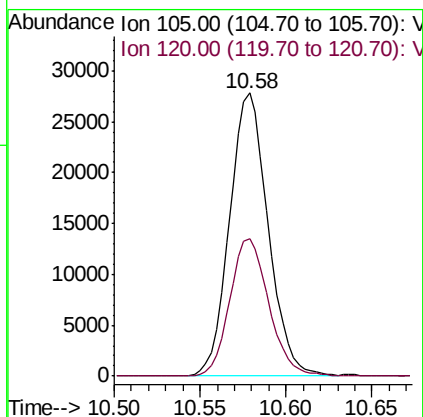
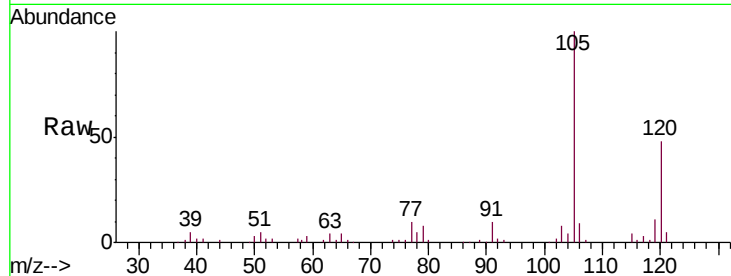




#62  
 1,3,5-Trimethylbenzene  
 Concen: 4.952 ug/L  
 RT: 10.58 min Scan# 2951  
 Delta R.T. -0.00 min  
 Lab File: VV014587.D  
 Acq: 17 Feb 2020 11:13

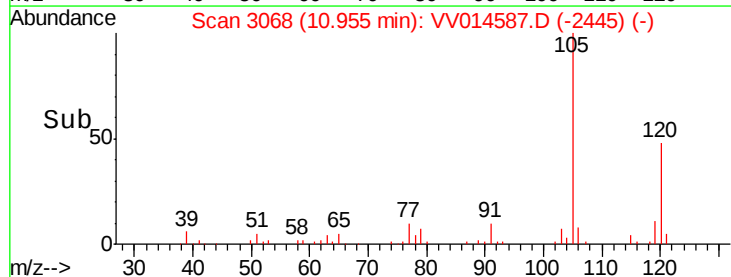
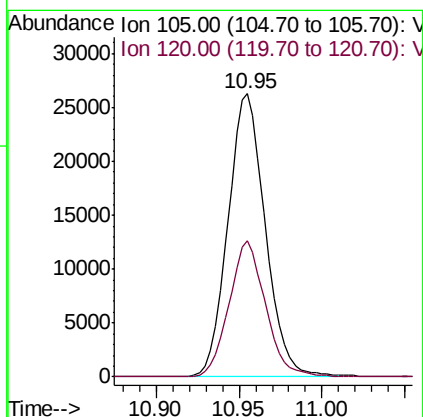
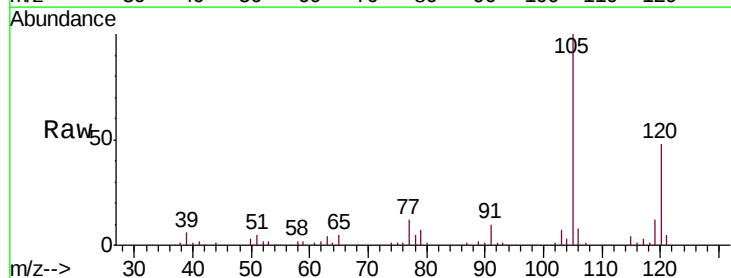
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD005202

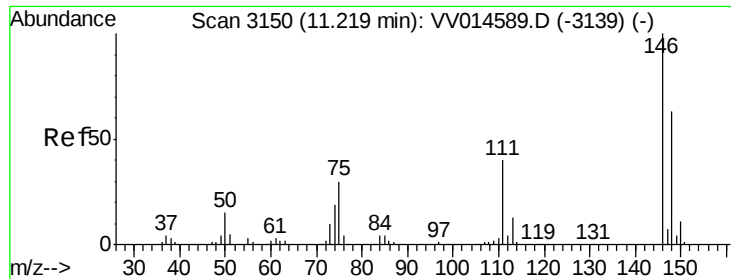
Tgt Ion:105 Resp: 43322  
 Ion Ratio Lower Upper  
 105 100  
 120 49.1 39.8 59.6



#63  
 1,2,4-Trimethylbenzene  
 Concen: 4.769 ug/L  
 RT: 10.95 min Scan# 3068  
 Delta R.T. 0.00 min  
 Lab File: VV014587.D  
 Acq: 17 Feb 2020 11:13

Tgt Ion:105 Resp: 41076  
 Ion Ratio Lower Upper  
 105 100  
 120 47.1 36.6 55.0

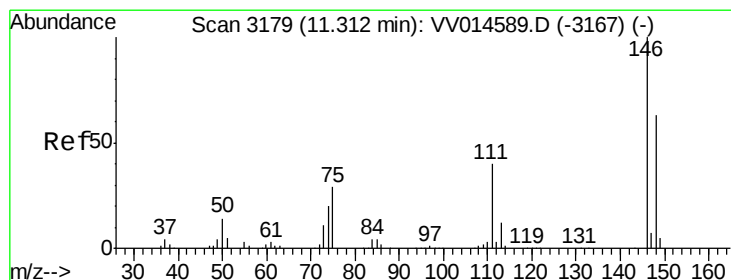
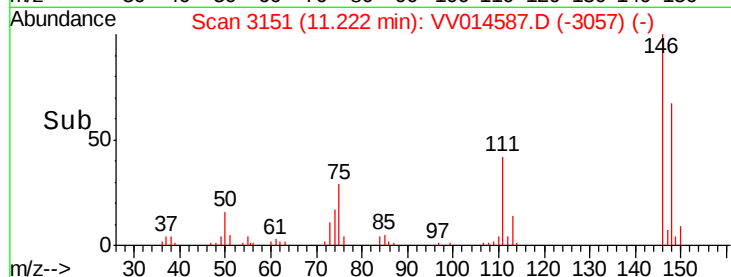
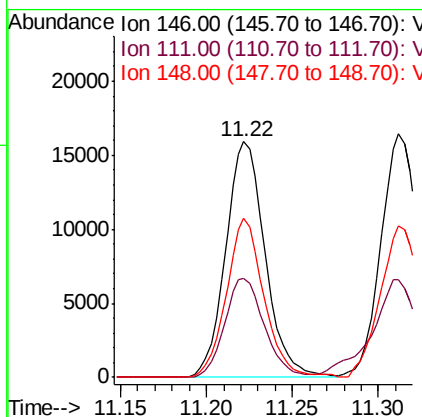
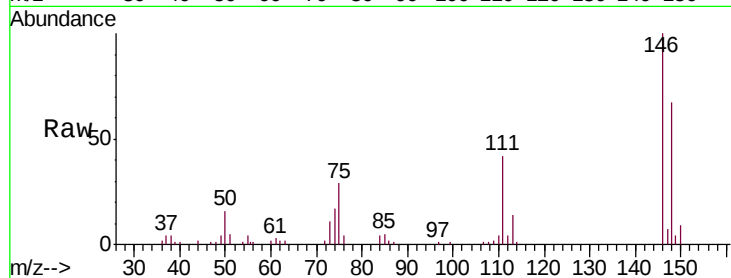




#64  
 1,3-Dichlorobenzene  
 Concen: 5.268 ug/L  
 RT: 11.22 min Scan# 3151  
 Delta R.T. 0.00 min  
 Lab File: VV014587.D  
 Acq: 17 Feb 2020 11:13

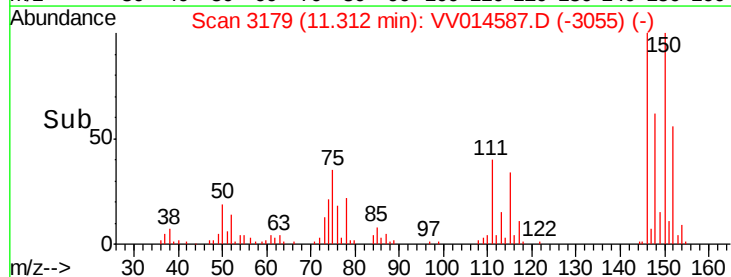
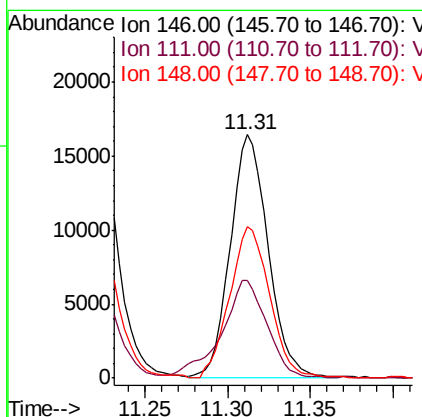
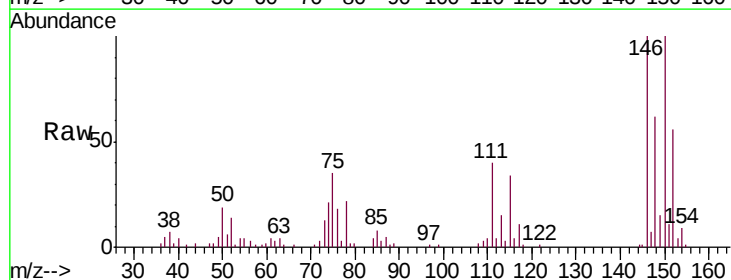
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD005202

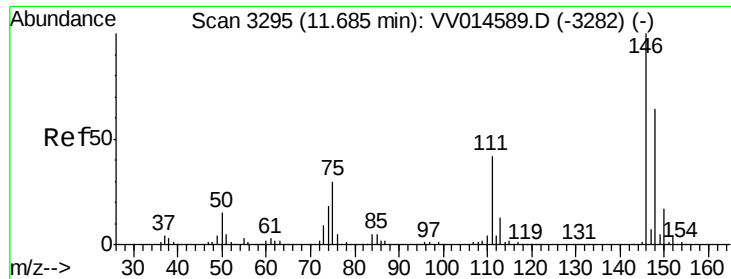
Tgt Ion:146 Resp: 25473  
 Ion Ratio Lower Upper  
 146 100  
 111 41.9 28.3 52.5  
 148 67.2 44.0 81.8



#65  
 1,4-Dichlorobenzene  
 Concen: 5.278 ug/L  
 RT: 11.31 min Scan# 3179  
 Delta R.T. -0.00 min  
 Lab File: VV014587.D  
 Acq: 17 Feb 2020 11:13

Tgt Ion:146 Resp: 26226  
 Ion Ratio Lower Upper  
 146 100  
 111 40.2 27.9 51.9  
 148 62.0 44.2 82.2





#67

1,2-Dichlorobenzene

Concen: 5.304 ug/L

RT: 11.68 min Scan# 3295

Delta R.T. -0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

Instrument :

MSVOA\_V

ClientSampled :

VSTD005202

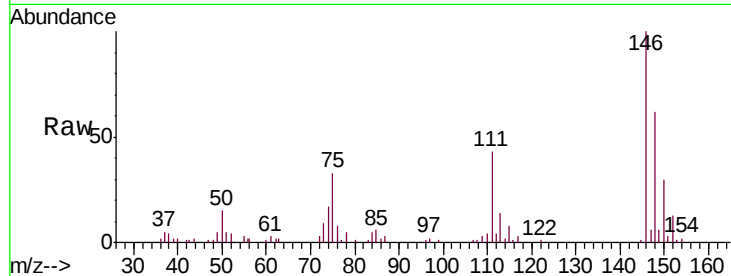
Tgt Ion:146 Resp: 24975

Ion Ratio Lower Upper

146 100

111 42.6 34.1 51.1

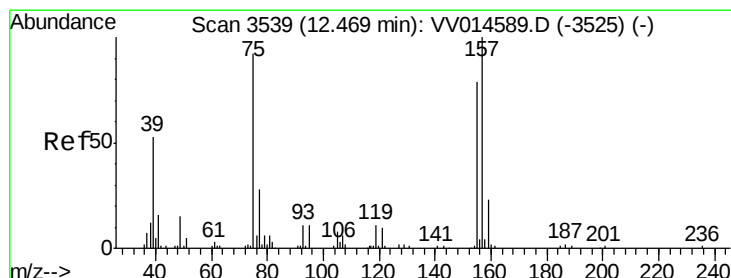
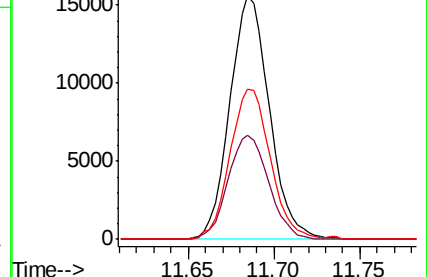
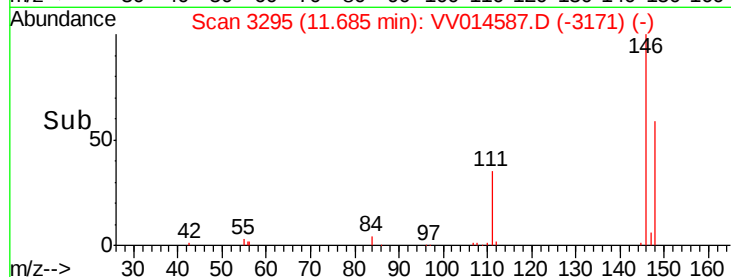
148 61.6 51.1 76.7



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#68

1,2-Dibromo-3-chloropropane

Concen: 5.331 ug/L

RT: 12.47 min Scan# 3540

Delta R.T. 0.00 min

Lab File: VV014587.D

Acq: 17 Feb 2020 11:13

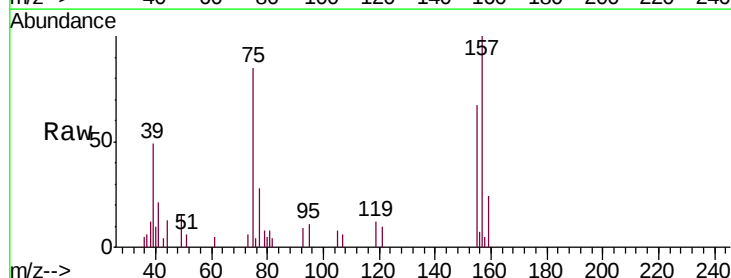
Tgt Ion: 75 Resp: 4033

Ion Ratio Lower Upper

75 100

155 78.9 69.4 104.0

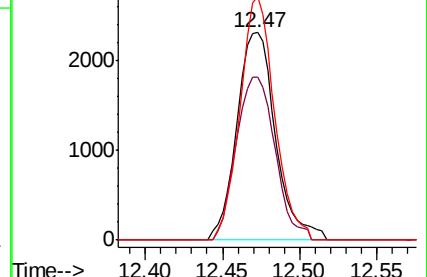
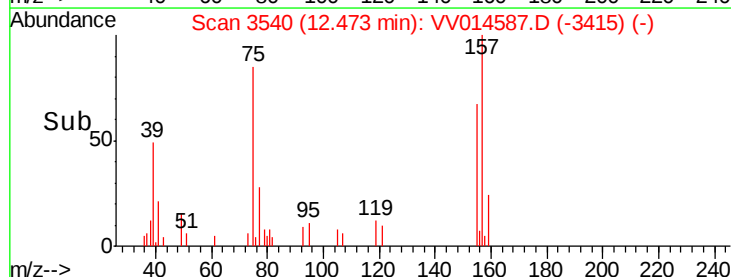
157 117.5 87.4 131.0

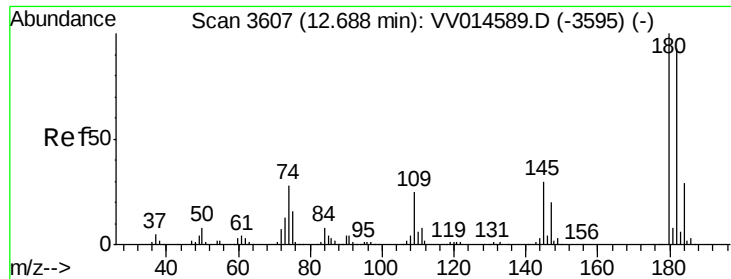


Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 155.00 (154.70 to 155.70): V

Ion 157.00 (156.70 to 157.70): V

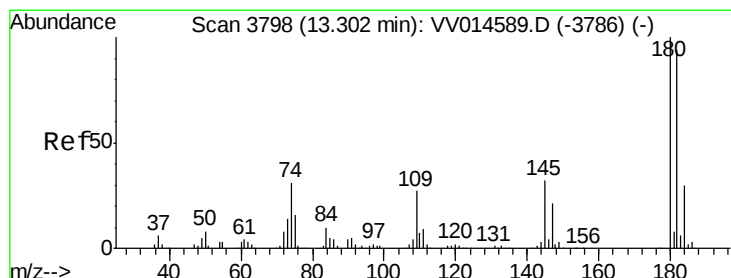
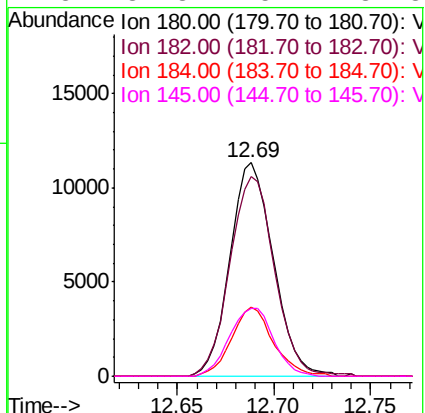
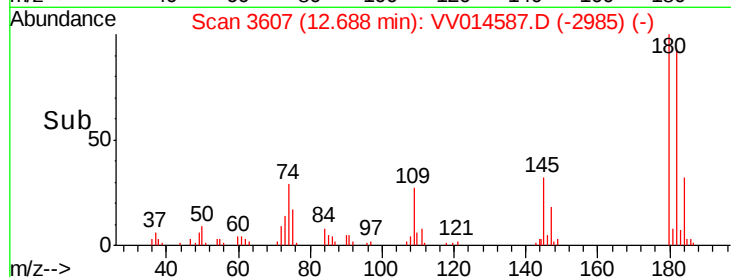
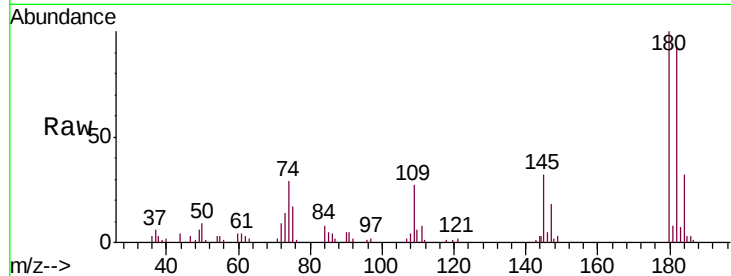




#69  
 1,3,5-Trichlorobenzene  
 Concen: 5.179 ug/L  
 RT: 12.69 min Scan# 3607  
 Delta R.T. -0.00 min  
 Lab File: VV014587.D  
 Acq: 17 Feb 2020 11:13

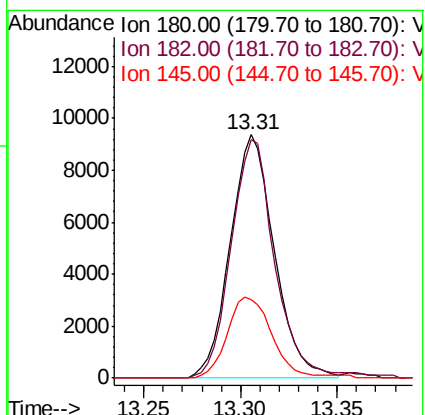
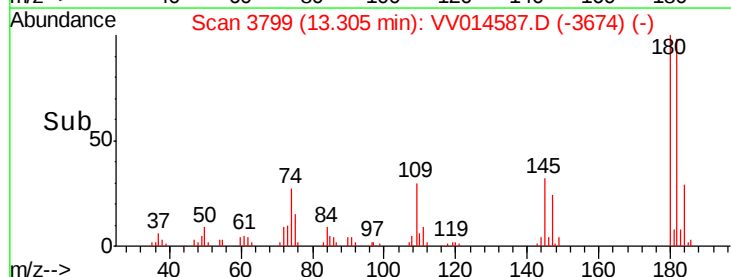
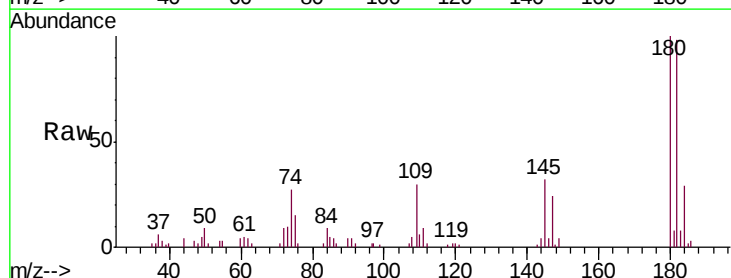
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD005202

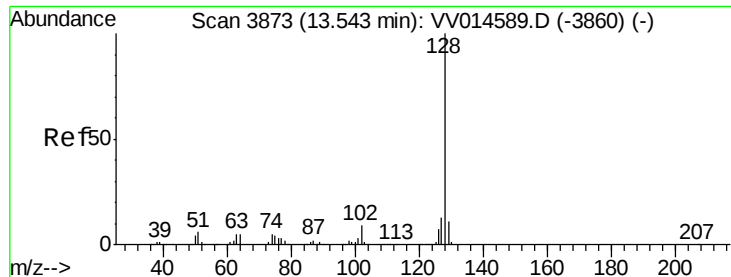
Tgt Ion:180 Resp: 17708  
 Ion Ratio Lower Upper  
 180 100  
 182 96.3 75.6 113.4  
 184 30.7 23.4 35.2  
 145 32.3 25.2 37.8



#70  
 1,2,4-trichlorobenzene  
 Concen: 4.746 ug/L  
 RT: 13.31 min Scan# 3799  
 Delta R.T. 0.00 min  
 Lab File: VV014587.D  
 Acq: 17 Feb 2020 11:13

Tgt Ion:180 Resp: 14853  
 Ion Ratio Lower Upper  
 180 100  
 182 96.2 75.8 113.6  
 145 33.4 25.5 38.3

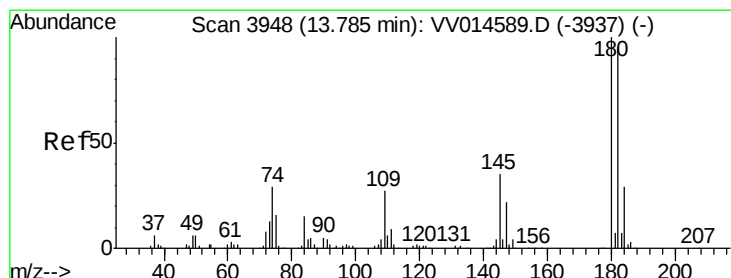
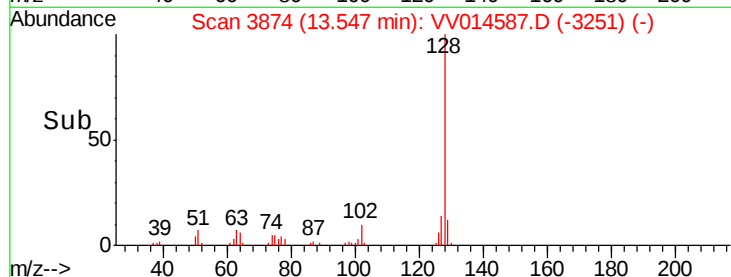
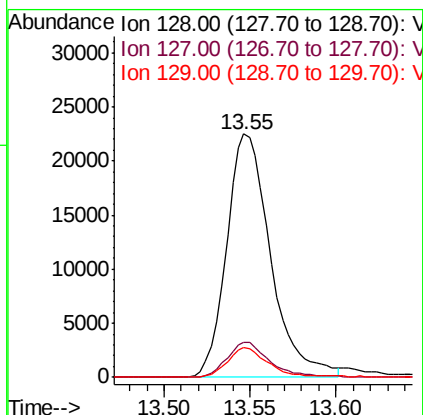
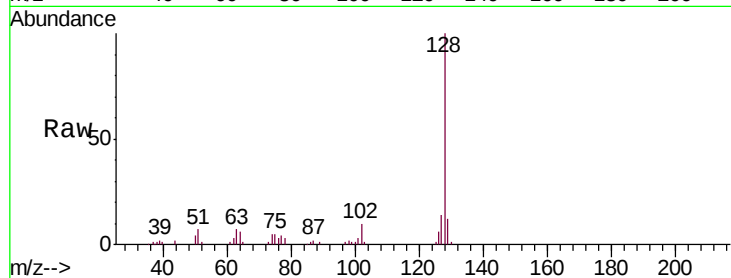




#71  
Naphthalene  
Concen: 3.925 ug/L  
RT: 13.55 min Scan# 3874  
Delta R.T. 0.00 min  
Lab File: VV014587.D  
Acq: 17 Feb 2020 11:13

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005202

Tgt Ion:128 Resp: 40230  
Ion Ratio Lower Upper  
128 100  
127 13.9 10.3 15.5  
129 11.1 8.6 13.0



#72  
1,2,3-Trichlorobenzene  
Concen: 4.795 ug/L  
RT: 13.79 min Scan# 3949  
Delta R.T. 0.00 min  
Lab File: VV014587.D  
Acq: 17 Feb 2020 11:13

Tgt Ion:180 Resp: 14624  
Ion Ratio Lower Upper  
180 100  
182 94.7 76.0 114.0  
145 35.7 27.7 41.5

