

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU052920\  
 Data File : VU038367.D  
 Acq On : 29 May 2020 08:47  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: May 29 16:34:31 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM052820WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri May 29 04:31:03 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.28  | 114  | 639429   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.44  | 117  | 629280   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.83 | 152  | 315551   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.61    | 65    | 162092   | 40.38    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 80.76% |
| 7) Chloroethane-d5             | 1.93    | 69    | 131192   | 42.30    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 84.60% |
| 11) 1,1-Dichloroethene-d2      | 2.59    | 63    | 356498   | 43.45    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 86.90% |
| 21) 2-Butanone-d5              | 4.66    | 46    | 349731   | 91.70    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 91.70% |
| 24) Chloroform-d               | 5.10    | 84    | 358555   | 45.49    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 90.98% |
| 26) 1,2-Dichloroethane-d4      | 5.74    | 65    | 229465   | 42.48    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 84.96% |
| 32) Benzene-d6                 | 5.76    | 84    | 701594   | 42.91    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 85.82% |
| 36) 1,2-Dichloropropane-d6     | 6.72    | 67    | 218774   | 43.16    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 86.32% |
| 41) Toluene-d8                 | 7.93    | 98    | 634121   | 43.87    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 87.74% |
| 43) trans-1,3-Dichloropropene- | 8.20    | 79    | 112014   | 44.39    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 88.78% |
| 47) 2-Hexanone-d5              | 8.66    | 63    | 243210   | 91.14    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 91.14% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.77   | 84    | 325118   | 43.34    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 86.68% |
| 64) 1,2-Dichlorobenzene-d4     | 12.21   | 152   | 253187   | 43.29    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 86.58% |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc    | Units | Ovalue |
|--------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.39 | 85   | 234213   | 48.662  | ug/L  | 99     |
| 3) Chloromethane               | 1.53 | 50   | 213236   | 48.070  | ug/L  | 98     |
| 5) Vinyl chloride              | 1.62 | 62   | 235251   | 48.006  | ug/L  | 99     |
| 6) Bromomethane                | 1.87 | 94   | 110793   | 55.263  | ug/L  | 97     |
| 8) Chloroethane                | 1.95 | 64   | 141155   | 47.140  | ug/L  | 98     |
| 9) Trichlorofluoromethane      | 2.16 | 101  | 327449   | 49.858  | ug/L  | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.61 | 101  | 196409   | 50.017  | ug/L  | 99     |
| 12) 1,1-Dichloroethene         | 2.60 | 96   | 189319   | 48.833  | ug/L  | 95     |
| 13) Acetone                    | 2.66 | 43   | 368814   | 116.385 | ug/L  | 98     |
| 14) Carbon disulfide           | 2.82 | 76   | 604356   | 47.799  | ug/L  | 99     |
| 15) Methyl Acetate             | 2.98 | 43   | 272338   | 47.943  | ug/L  | 100    |
| 16) Methylene chloride         | 3.08 | 84   | 213190   | 47.857  | ug/L  | 97     |
| 17) trans-1,2-Dichloroethene   | 3.39 | 96   | 201596   | 48.411  | ug/L  | 98     |
| 18) Methyl tert-butyl Ether    | 3.40 | 73   | 650865   | 48.741  | ug/L  | 100    |
| 19) 1,1-Dichloroethane         | 3.91 | 63   | 380103   | 48.199  | ug/L  | 99     |
| 20) cis-1,2-Dichloroethene     | 4.71 | 96   | 221261   | 48.503  | ug/L  | 99     |
| 22) 2-Butanone                 | 4.75 | 43   | 462663   | 104.135 | ug/L  | 100    |

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 ClientSampleId :

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 Quant Title : VOC Analysis  
 QLast Update : Fri May 29 04:31:03 2020  
 Response via : Initial Calibration

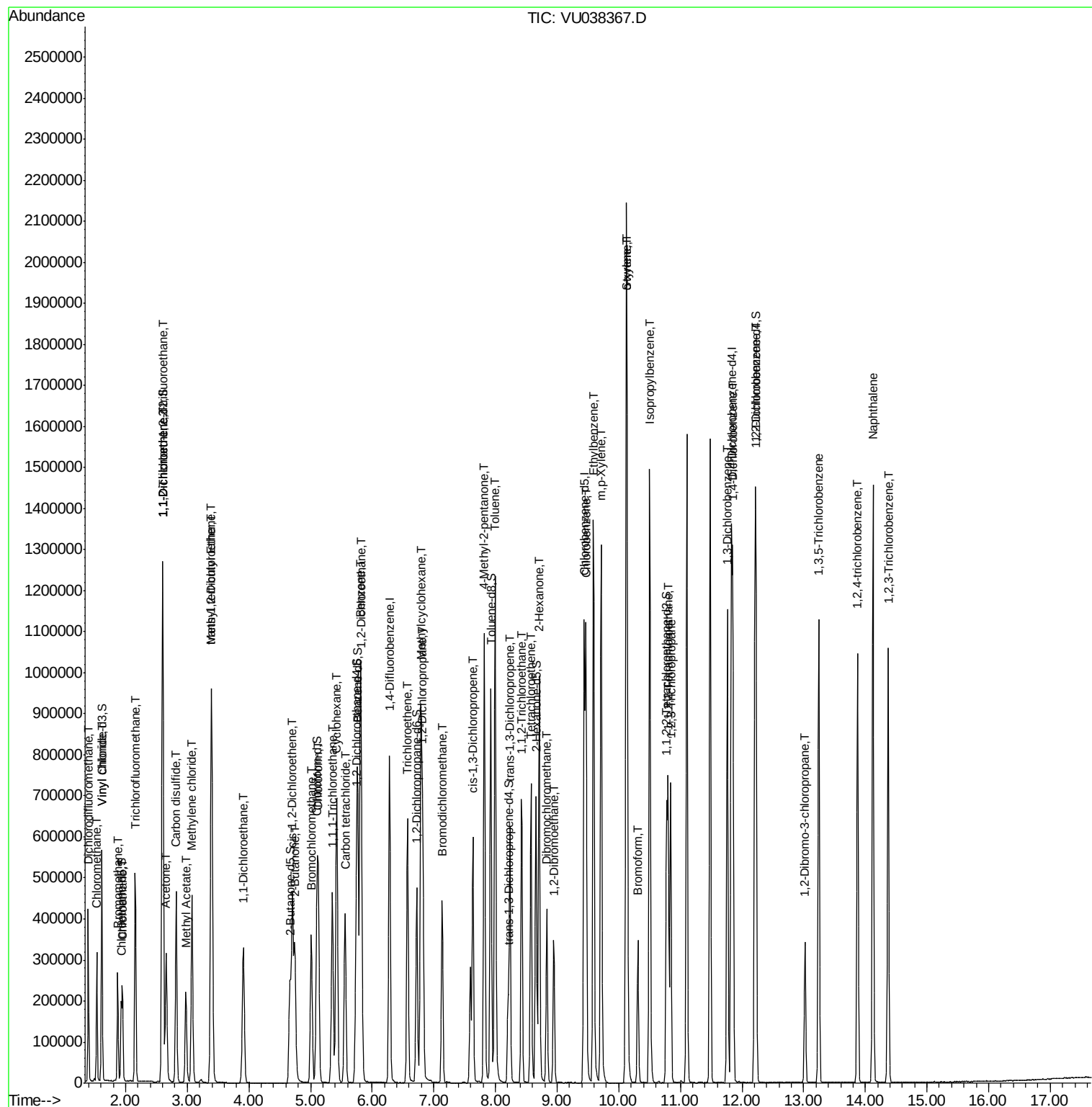
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane         | 5.01  | 128  | 108004   | 47.823 | ug/L  | 93       |
| 25) Chloroform                 | 5.12  | 83   | 381050   | 46.986 | ug/L  | 100      |
| 27) 1,2-Dichloroethane         | 5.83  | 62   | 311814   | 47.485 | ug/L  | 100      |
| 29) Cyclohexane                | 5.43  | 56   | 358141   | 49.638 | ug/L  | 99       |
| 30) 1,1,1-Trichloroethane      | 5.35  | 97   | 336049   | 49.110 | ug/L  | 100      |
| 31) Carbon tetrachloride       | 5.56  | 117  | 281363   | 49.336 | ug/L  | 100      |
| 33) Benzene                    | 5.81  | 78   | 858097   | 48.552 | ug/L  | 100      |
| 34) Trichloroethene            | 6.57  | 95   | 218769   | 48.379 | ug/L  | 99       |
| 35) Methylcyclohexane          | 6.79  | 83   | 352846   | 49.699 | ug/L  | 98       |
| 37) 1,2-Dichloropropane        | 6.82  | 63   | 223144   | 48.683 | ug/L  | 100      |
| 38) Bromodichloromethane       | 7.13  | 83   | 283666   | 48.292 | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene    | 7.64  | 75   | 351969   | 48.255 | ug/L  | 98       |
| 40) 4-Methyl-2-pentanone       | 7.82  | 43   | 707933   | 97.115 | ug/L  | 100      |
| 42) Toluene                    | 8.00  | 91   | 920871   | 49.629 | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene  | 8.23  | 75   | 336841   | 49.336 | ug/L  | 99       |
| 45) 1,1,2-Trichloroethane      | 8.42  | 97   | 210805   | 48.464 | ug/L  | 99       |
| 46) Tetrachloroethene          | 8.58  | 164  | 163954   | 49.595 | ug/L  | 98       |
| 48) 2-Hexanone                 | 8.71  | 43   | 612864   | 99.575 | ug/L  | 100      |
| 49) Dibromochloromethane       | 8.84  | 129  | 217139   | 49.303 | ug/L  | 96       |
| 50) 1,2-Dibromoethane          | 8.95  | 107  | 224099   | 47.932 | ug/L  | 96       |
| 51) Chlorobenzene              | 9.47  | 112  | 578745   | 48.532 | ug/L  | 99       |
| 52) Ethylbenzene               | 9.59  | 91   | 1027079  | 49.402 | ug/L  | 99       |
| 53) m,p-Xylene                 | 9.72  | 106  | 399327   | 50.226 | ug/L  | 99       |
| 54) o-xylene                   | 10.12 | 106  | 383854   | 49.658 | ug/L  | 100      |
| 55) Styrene                    | 10.13 | 104  | 663069   | 49.909 | ug/L  | 100      |
| 56) Isopropylbenzene           | 10.50 | 105  | 1014389  | 50.216 | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.80 | 83   | 355894   | 47.812 | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.84 | 75   | 307017   | 47.899 | ug/L  | 99       |
| 61) Bromoform                  | 10.31 | 173  | 152771   | 48.191 | ug/L  | 99       |
| 62) 1,3-Dichlorobenzene        | 11.76 | 146  | 453267   | 49.136 | ug/L  | 98       |
| 63) 1,4-Dichlorobenzene        | 11.85 | 146  | 459271   | 48.981 | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene        | 12.23 | 146  | 443682   | 48.501 | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan | 13.02 | 75   | 90344    | 48.241 | ug/L  | 99       |
| 67) 1,3,5-Trichlorobenzene     | 13.25 | 180  | 334552   | 50.959 | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.87 | 180  | 314353   | 49.924 | ug/L  | 98       |
| 69) Naphthalene                | 14.12 | 128  | 1130275  | 50.134 | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 14.37 | 180  | 314425   | 49.987 | ug/L  | 99       |

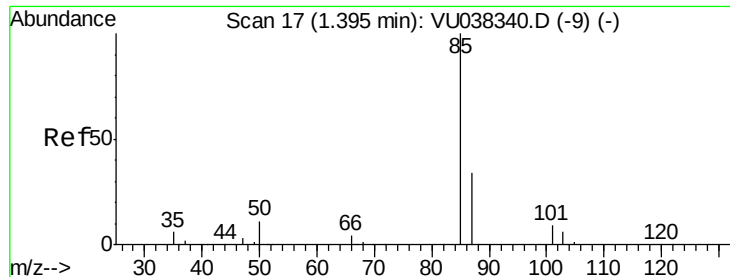
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : VOC Analysis  
QLast Update : Fri May 29 04:31:03 2020  
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 48.662 ug/L

RT: 1.39 min Scan# 17

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

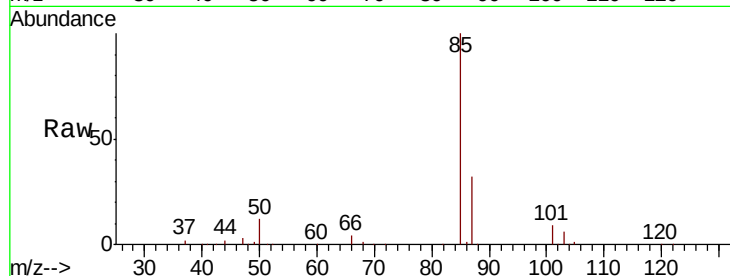
Instrument :  
MSVOA\_U  
ClientSampled :

Tot Ion: 85 Resp: 234213

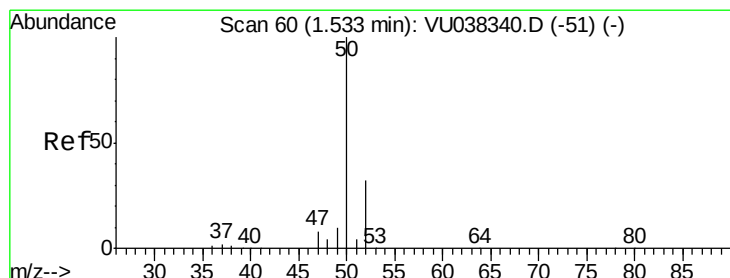
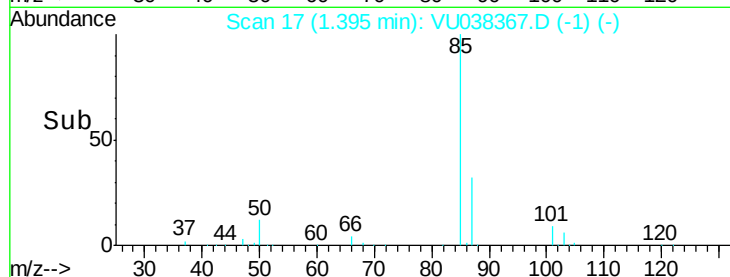
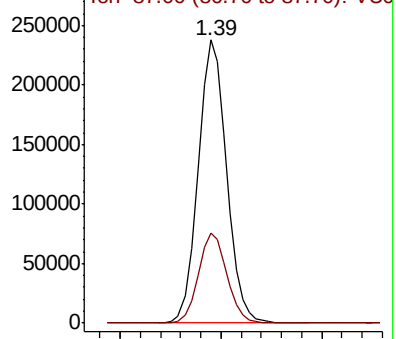
Ion Ratio Lower Upper

85 100

87 32.0 25.2 37.8



Abundance Ion 85.00 (84.70 to 85.70): VU038367.D (-1) (-)



#3

Chloromethane

Concen: 48.070 ug/L

RT: 1.53 min Scan# 60

Delta R.T. -0.00 min

Lab File: VU038367.D

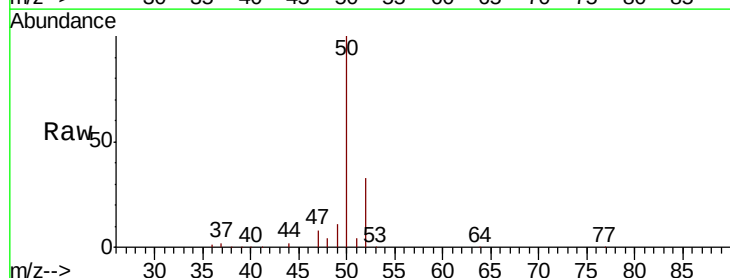
Acq: 29 May 2020 08:47

Tgt Ion: 50 Resp: 213236

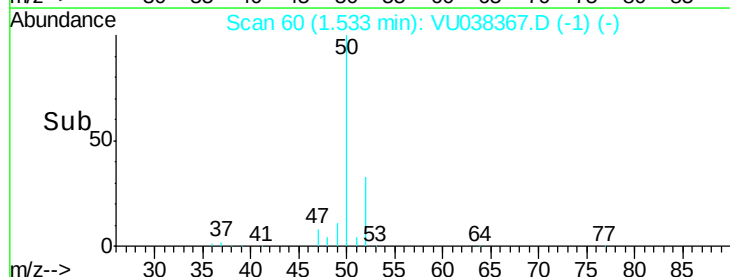
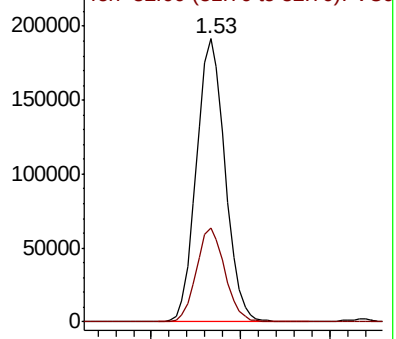
Ion Ratio Lower Upper

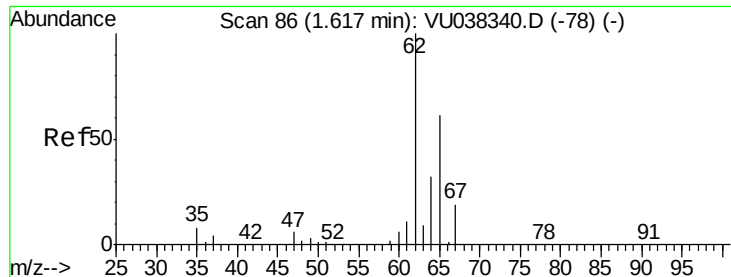
50 100

52 33.2 22.5 41.7



Abundance Ion 50.00 (49.70 to 50.70): VU038367.D (-1) (-)





#5

Vinyl chloride

Concen: 48.006 ug/L

RT: 1.62 min Scan# 86

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Instrument :

MSVOA\_U

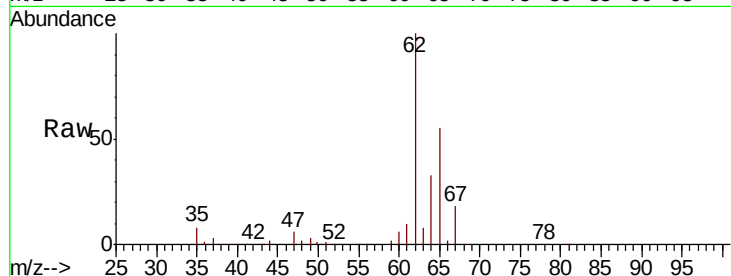
ClientSampleId :

Tot Ion: 62 Resp: 235251

Ion Ratio Lower Upper

62 100

64 33.4 23.2 43.0



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.00 (63.70 to 64.70): VU0

1.62

200000

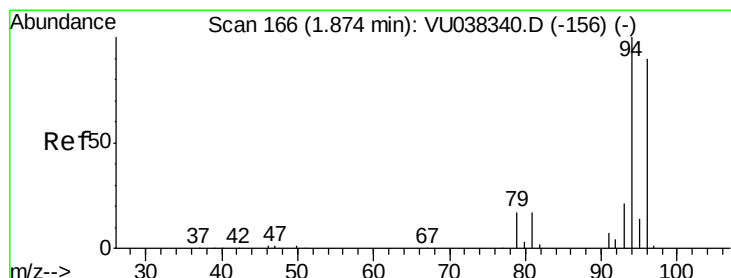
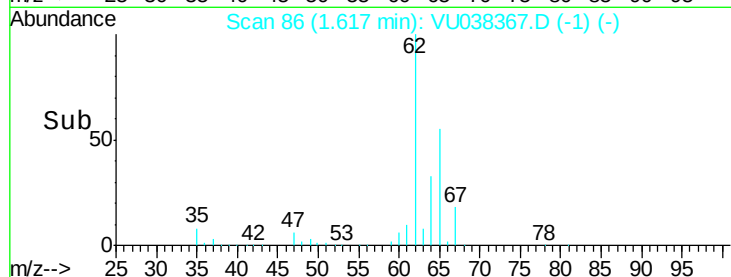
150000

100000

50000

0

Time--> 1.55 1.60 1.65 1.70



#6

Bromomethane

Concen: 55.263 ug/L

RT: 1.87 min Scan# 166

Delta R.T. -0.00 min

Lab File: VU038367.D

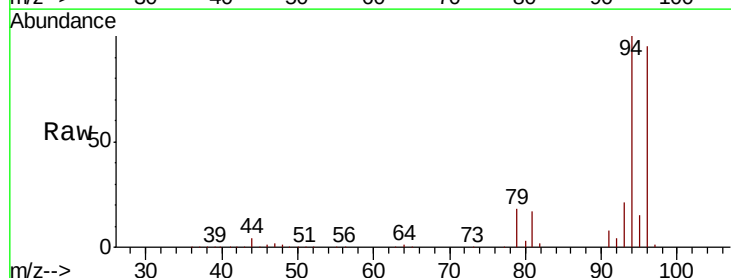
Acq: 29 May 2020 08:47

Tgt Ion: 94 Resp: 110793

Ion Ratio Lower Upper

94 100

96 94.7 64.3 119.5



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0

1.87

100000

80000

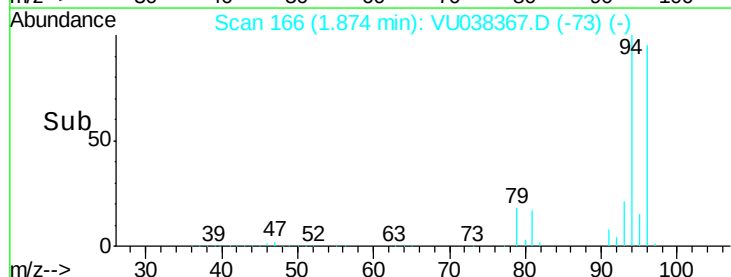
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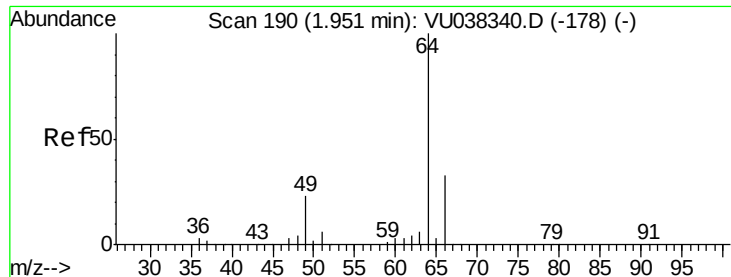
40000

20000

0

Time--> 1.85 1.90





#8

Chloroethane

Concen: 47.140 ug/L

RT: 1.95 min Scan# 190

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Instrument :

MSVOA\_U

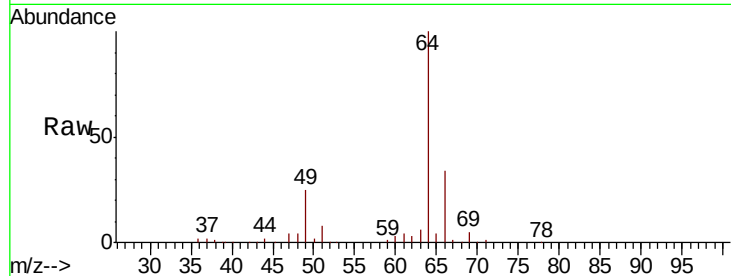
ClientSampleId :

Tot Ion: 64 Resp: 141155

Ion Ratio Lower Upper

64 100

66 33.9 23.0 42.8



Abundance Ion 64.00 (63.70 to 64.70): VU038340.D (-178) (-)

Ion 66.00 (65.70 to 66.70): VU038340.D (-178) (-)

1.95

120000

100000

80000

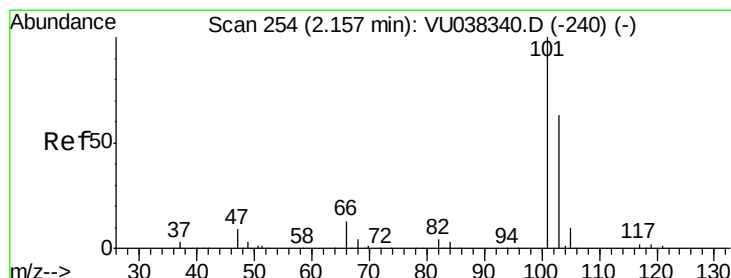
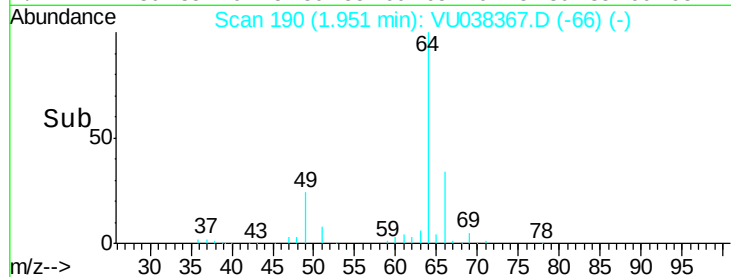
60000

40000

20000

0

Time-->



#9

Trichlorofluoromethane

Concen: 49.858 ug/L

RT: 2.16 min Scan# 254

Delta R.T. -0.00 min

Lab File: VU038367.D

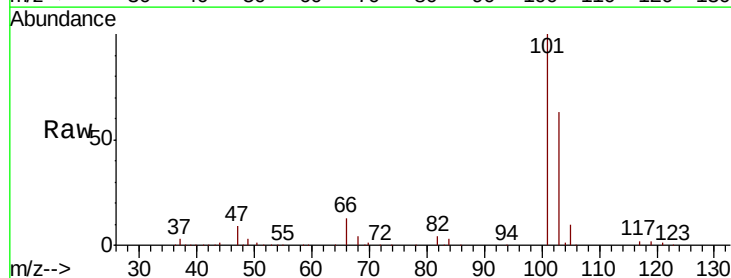
Acq: 29 May 2020 08:47

Tgt Ion:101 Resp: 327449

Ion Ratio Lower Upper

101 100

103 63.9 51.4 77.0



Abundance Ion 101.00 (100.70 to 101.70): VU038340.D (-240) (-)

Ion 103.00 (102.70 to 103.70): VU038340.D (-240) (-)

2.16

250000

200000

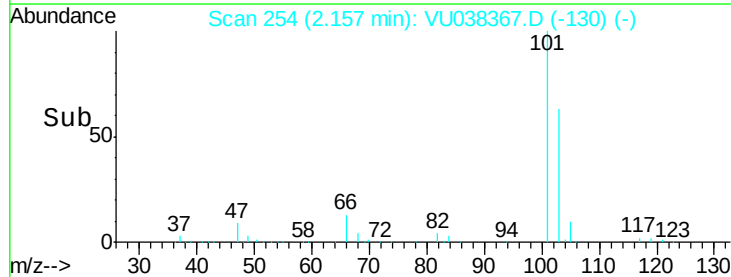
150000

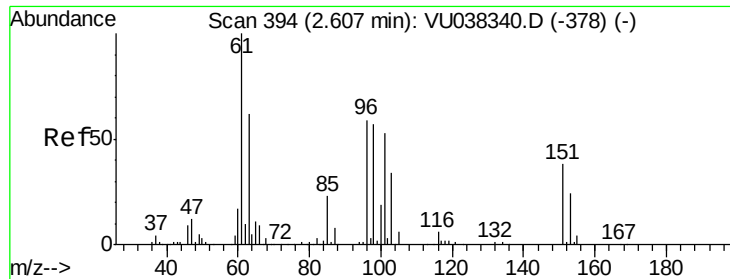
100000

50000

0

Time-->





#10

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

Concen: 50.017 ug/L

RT: 2.61 min Scan# 394

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Instrument :

MSVOA\_U

ClientSampleId :

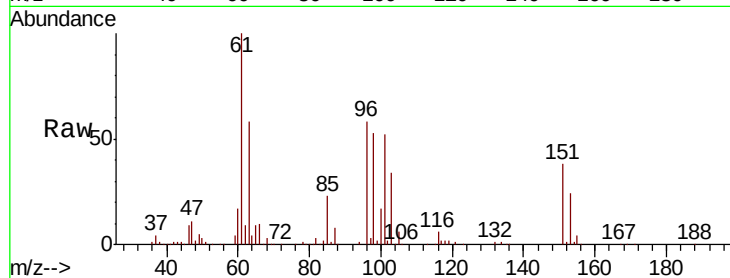
Tot Ion:101 Resp: 196409

Ion Ratio Lower Upper

101 100

85 43.5 35.5 53.3

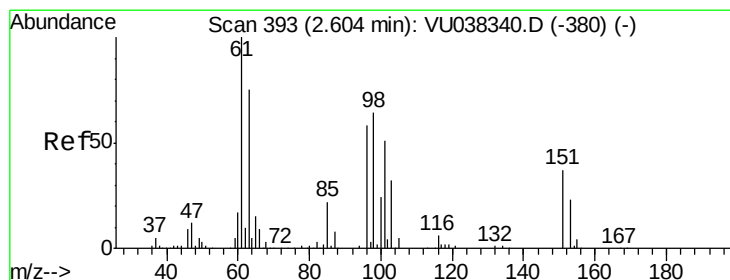
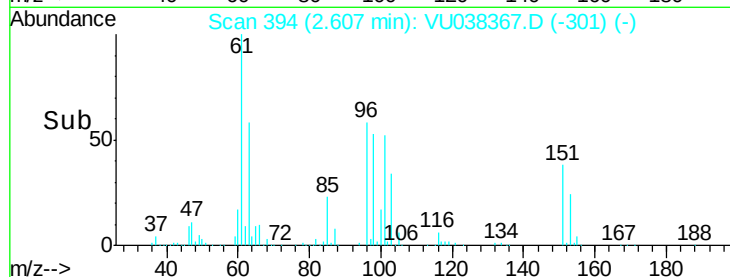
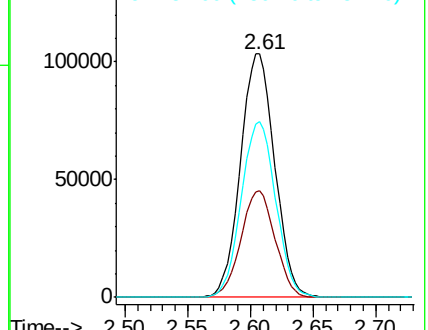
151 72.7 58.4 87.6



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VU0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 48.833 ug/L

RT: 2.60 min Scan# 393

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

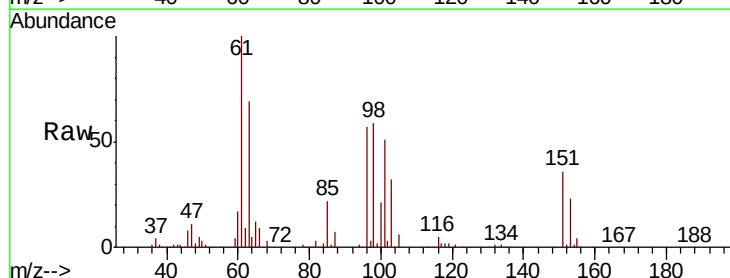
Tgt Ion: 96 Resp: 189319

Ion Ratio Lower Upper

96 100

61 175.6 123.5 229.3

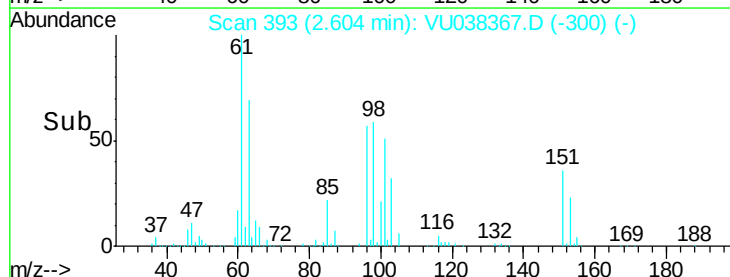
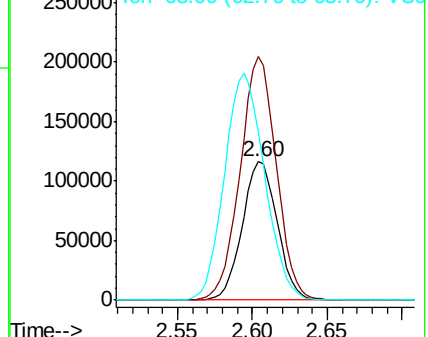
63 121.0 76.6 142.2

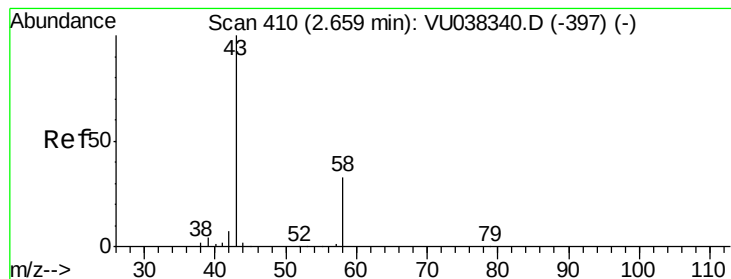


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 116.385 ug/L

RT: 2.66 min Scan# 410

Delta R.T. -0.00 min

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MSVOA\_U

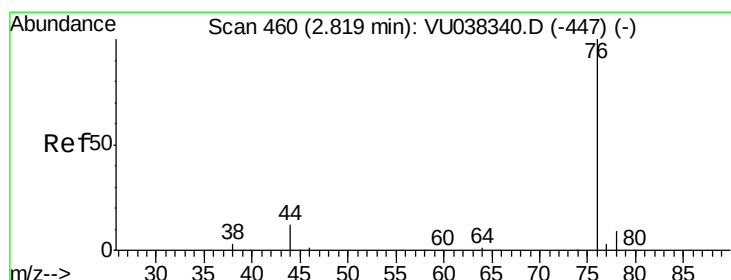
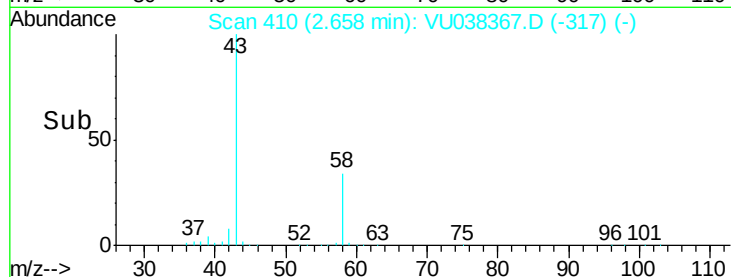
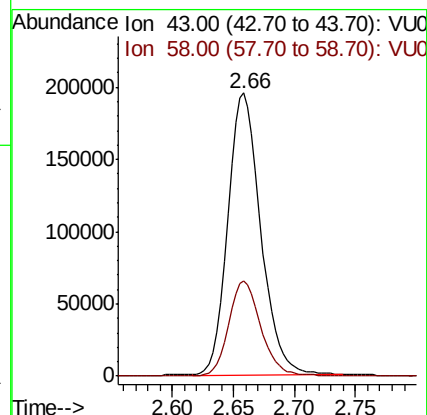
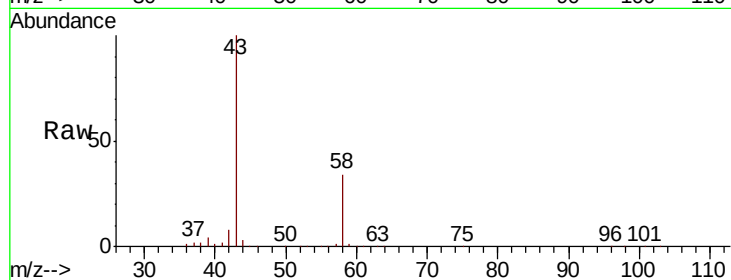
ClientSampled :

Tot Ion: 43 Resp: 368814

Ion Ratio Lower Upper

43 100

58 32.8 0.0 63.4



#14

Carbon disulfide

Concen: 47.799 ug/L

RT: 2.82 min Scan# 460

Delta R.T. -0.00 min

Lab File: VU038367.D

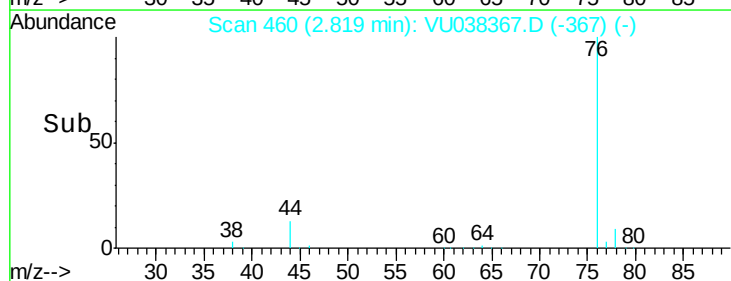
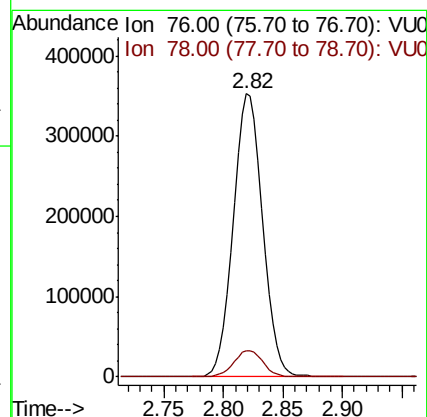
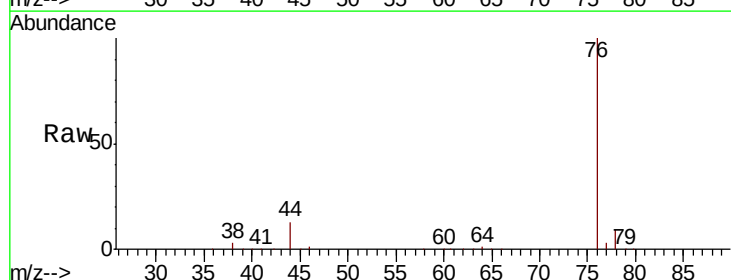
Acq: 29 May 2020 08:47

Tgt Ion: 76 Resp: 604356

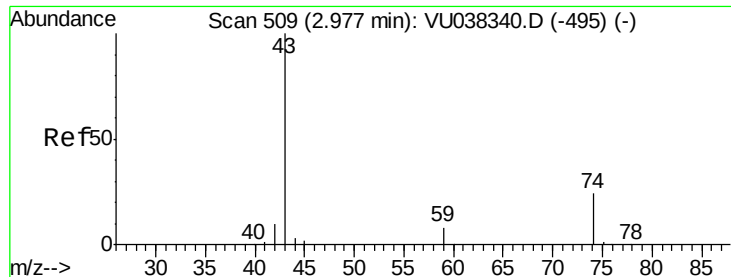
Ion Ratio Lower Upper

76 100

78 9.4 7.3 10.9



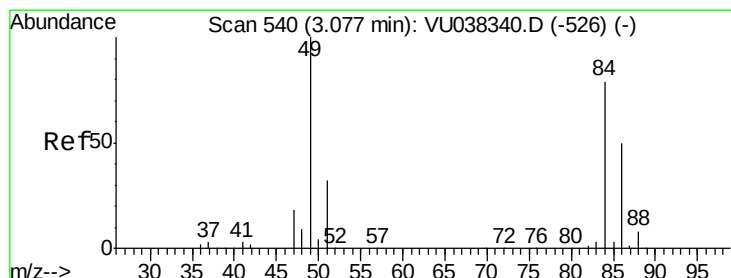
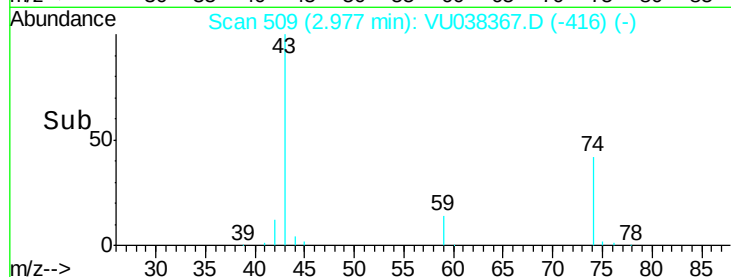
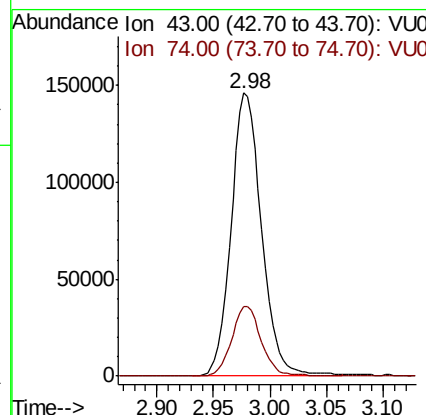
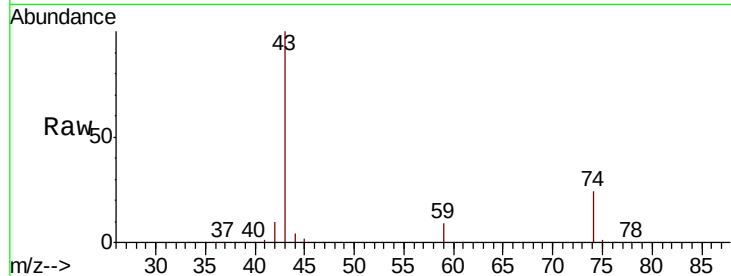




#15  
Methvl Acetate  
Concen: 47.943 ug/L  
RT: 2.98 min Scan# 509  
Delta R.T. -0.00 min  
Lab File: VU038367.D  
Acq: 29 May 2020 08:47

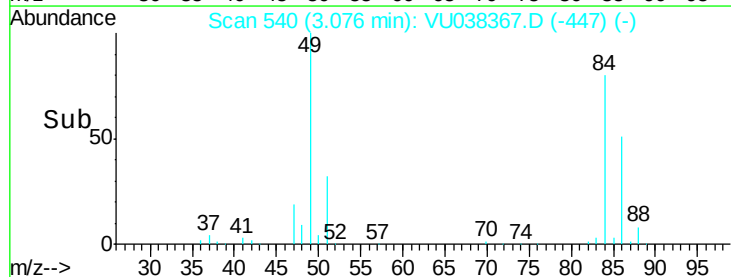
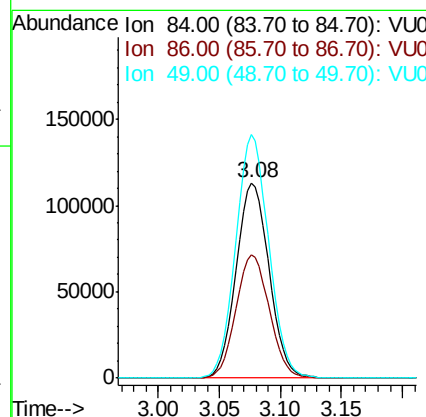
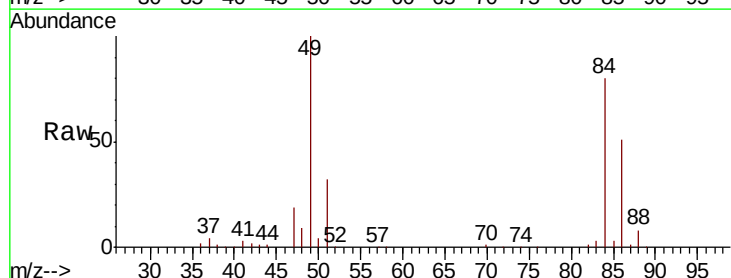
Instrument :  
MSVOA\_U  
ClientSampleId :

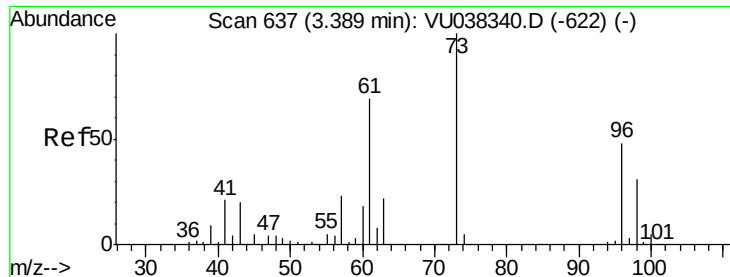
Tot Ion: 43 Resp: 272338  
Ion Ratio Lower Upper  
43 100  
74 24.0 19.1 28.7



#16  
Methylene chloride  
Concen: 47.857 ug/L  
RT: 3.08 min Scan# 540  
Delta R.T. -0.00 min  
Lab File: VU038367.D  
Acq: 29 May 2020 08:47

Tgt Ion: 84 Resp: 213190  
Ion Ratio Lower Upper  
84 100  
86 63.2 46.1 85.7  
49 124.8 90.0 167.2





#17

trans-1,2-Dichloroethene

Concen: 48.411 ug/L

RT: 3.39 min Scan# 636

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Instrument :

MSVOA\_U

ClientSampleId :

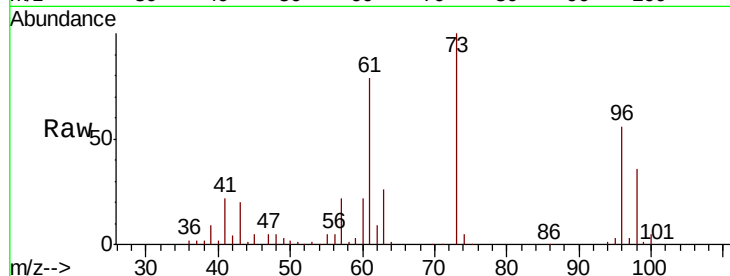
Tot Ion: 96 Resp: 201596

Ion Ratio Lower Upper

96 100

61 142.2 100.4 186.4

98 63.7 46.1 85.5

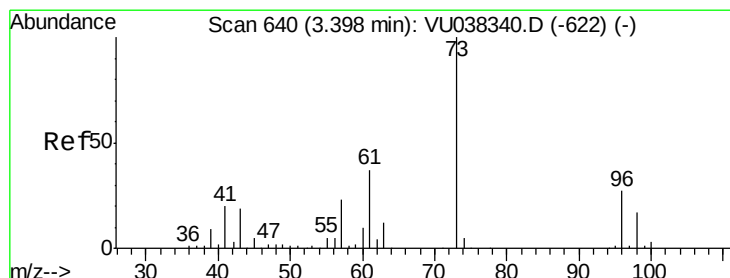
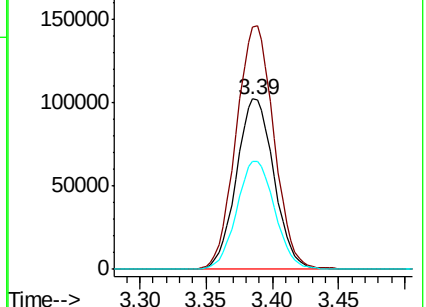
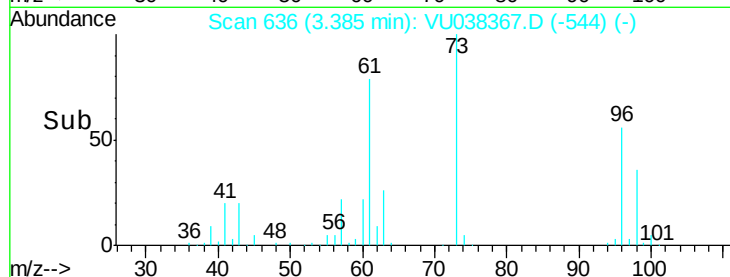


Abundance Ion 96.00 (95.70 to 96.70): VU038367.D (-544) (-)

Ion 61.00 (60.70 to 61.70): VU038367.D (-544) (-)

Ion 98.00 (97.70 to 98.70): VU038367.D (-544) (-)

Time-->



#18

Methyl tert-butyl Ether

Concen: 48.741 ug/L

RT: 3.40 min Scan# 640

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

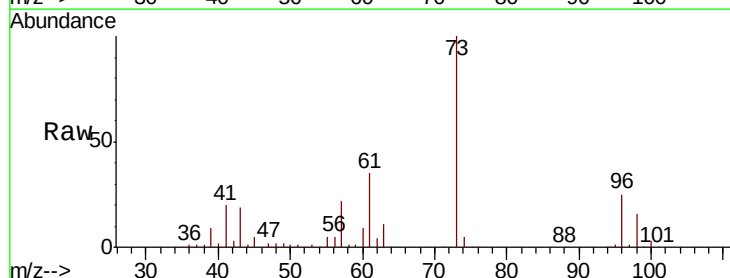
Tgt Ion: 73 Resp: 650865

Ion Ratio Lower Upper

73 100

43 19.7 15.7 23.5

57 22.0 17.7 26.5

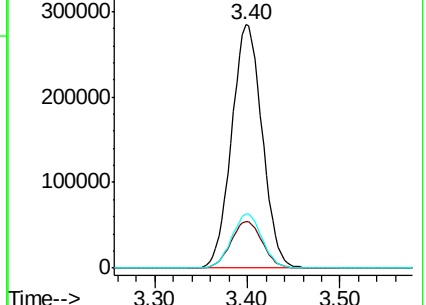
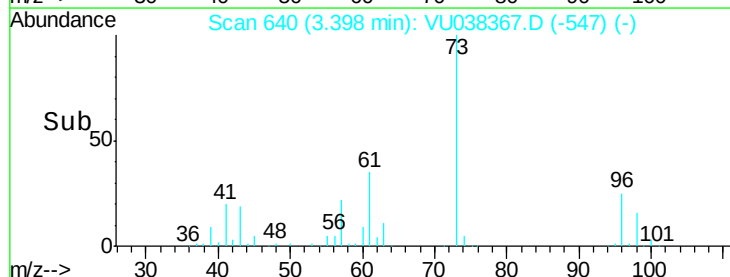


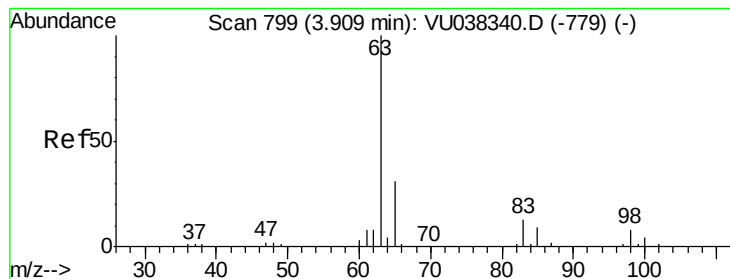
Abundance Ion 73.00 (72.70 to 73.70): VU038367.D (-547) (-)

Ion 43.00 (42.70 to 43.70): VU038367.D (-547) (-)

Ion 57.00 (56.70 to 57.70): VU038367.D (-547) (-)

Time-->





#19

1,1-Dichloroethane

Concen: 48.199 ug/L

RT: 3.91 min Scan# 799

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Instrument :

MSVOA\_U

ClientSampleId :

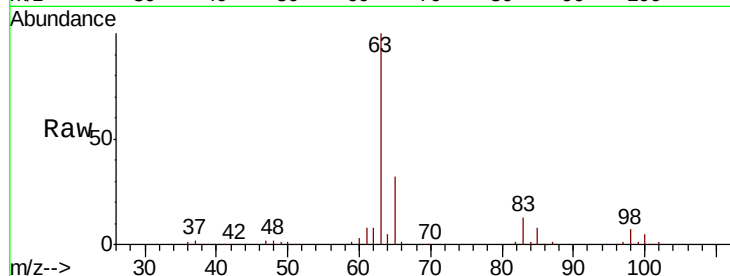
Tot Ion: 63 Resp: 380103

Ion Ratio Lower Upper

63 100

65 32.4 22.2 41.2

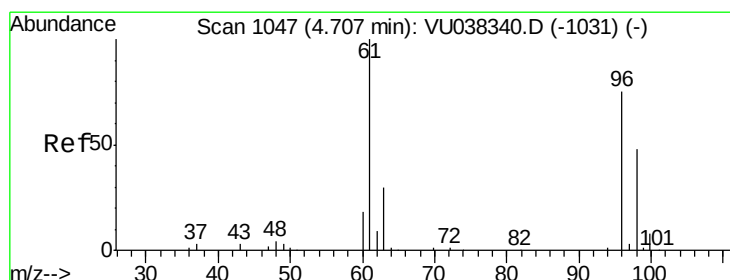
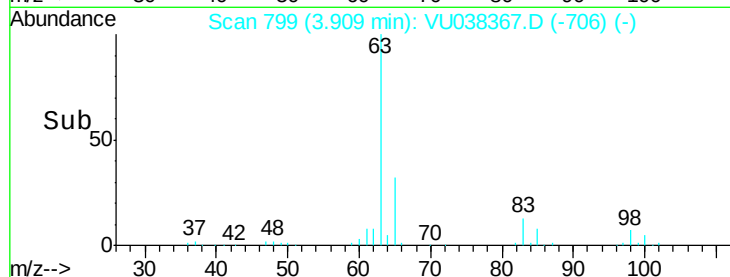
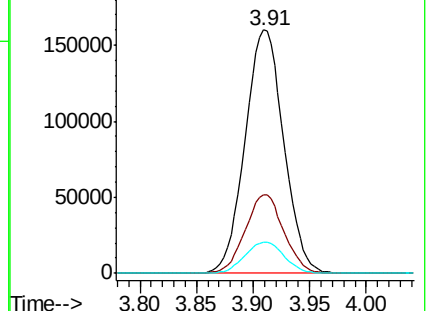
83 13.0 9.4 17.4



Abundance Ion 63.00 (62.70 to 63.70): VU038340.D (-779) (-)

Ion 65.00 (64.70 to 65.70): VU038340.D (-779) (-)

Ion 83.00 (82.70 to 83.70): VU038340.D (-779) (-)



#20

cis-1,2-Dichloroethene

Concen: 48.503 ug/L

RT: 4.71 min Scan# 1047

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

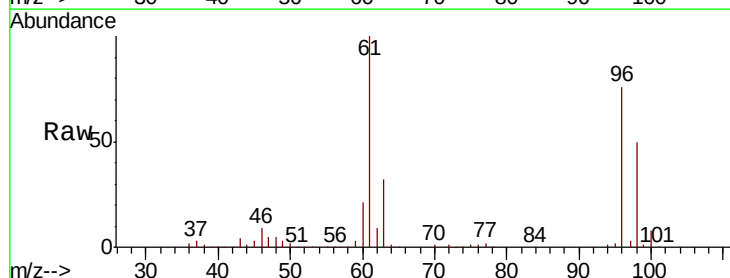
Tgt Ion: 96 Resp: 221261

Ion Ratio Lower Upper

96 100

61 132.3 93.4 173.4

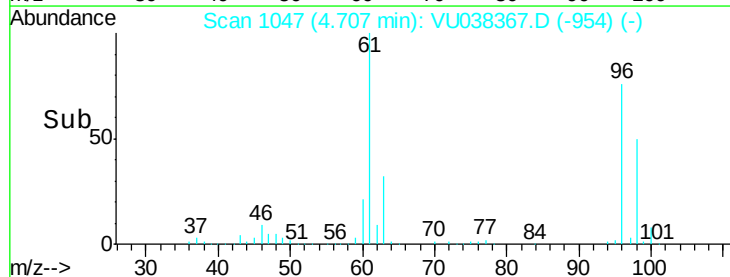
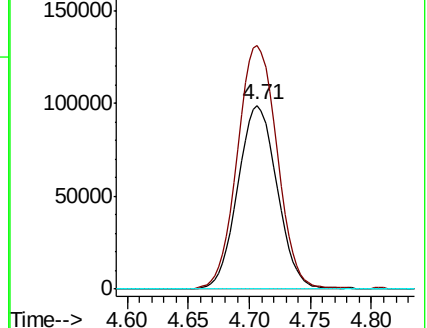
68 0.0 0.0 0.0

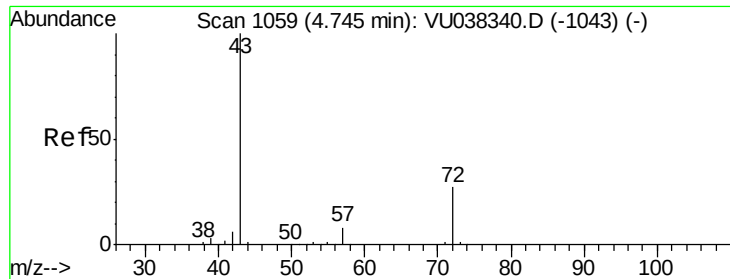


Abundance Ion 96.00 (95.70 to 96.70): VU038340.D (-1031) (-)

Ion 61.00 (60.70 to 61.70): VU038340.D (-1031) (-)

Ion 68.00 (67.70 to 68.70): VU038340.D (-1031) (-)





#22

2-Butanone

Concen: 104.135 ug/L

RT: 4.75 min Scan# 1059

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

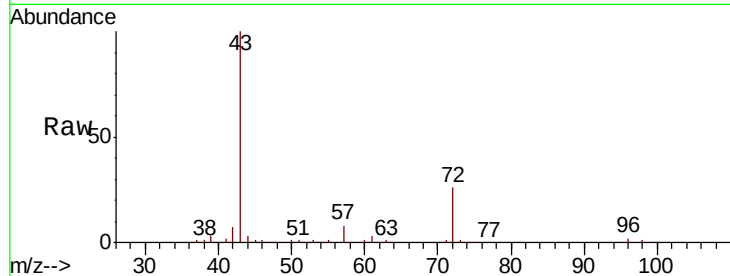
Instrument :  
MSVOA\_U  
ClientSampled :

Tot Ion: 43 Resp: 462663

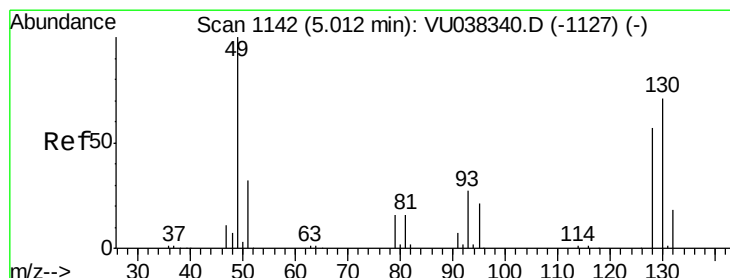
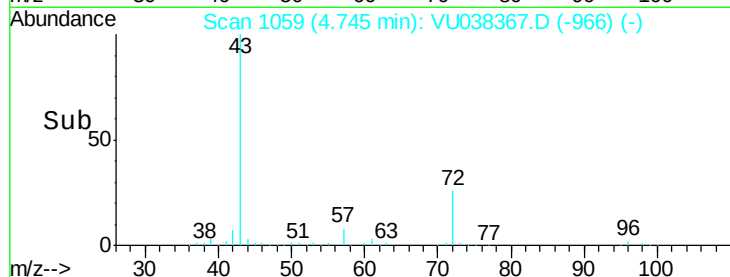
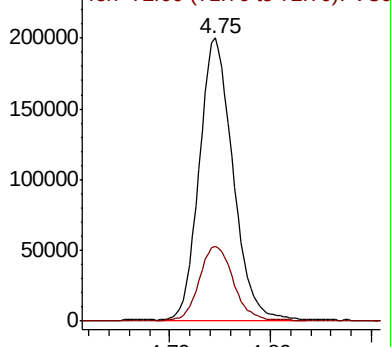
Ion Ratio Lower Upper

43 100

72 27.3 13.8 41.3



Abundance Ion 43.00 (42.70 to 43.70): VU038367.D (-966) (-)



#23

Bromochloromethane

Concen: 47.823 ug/L

RT: 5.01 min Scan# 1142

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Tgt Ion: 128 Resp: 108004

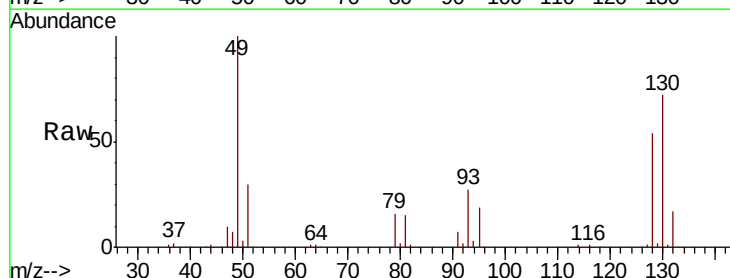
Ion Ratio Lower Upper

128 100

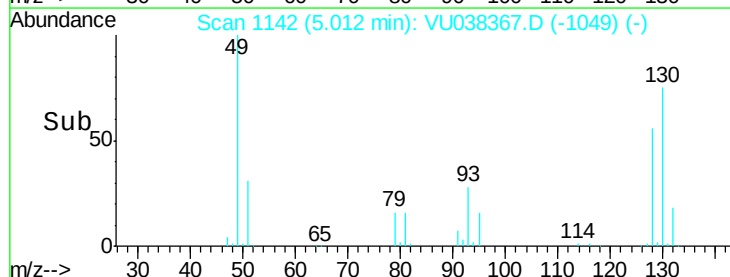
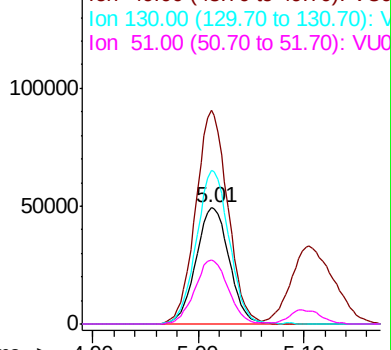
49 184.2 120.1 223.1

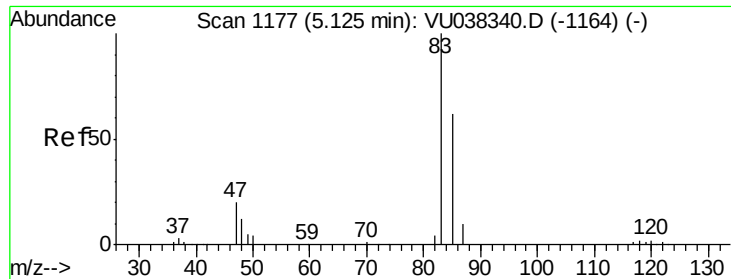
130 132.3 88.1 163.5

51 55.3 41.8 62.8



Abundance Ion 128.00 (127.70 to 128.70): VU038367.D (-1049) (-)

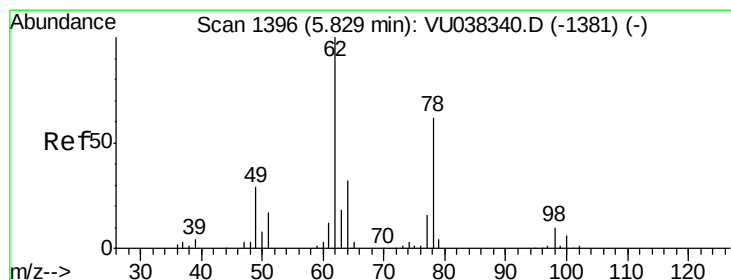
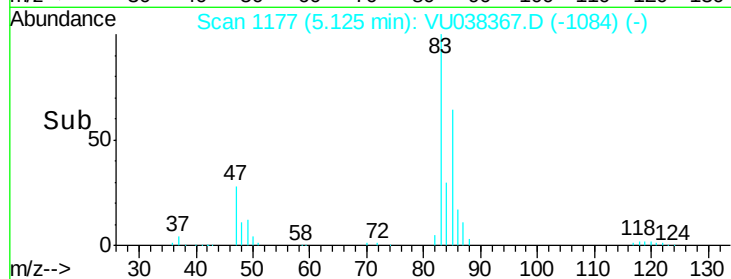
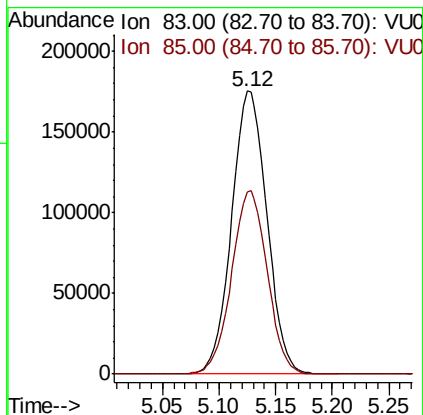
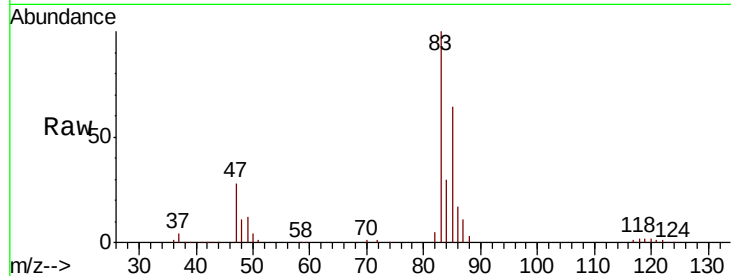




#25  
Chloroform  
Concen: 46.986 ug/L  
RT: 5.12 min Scan# 1177  
Delta R.T. -0.00 min  
Lab File: VU038367.D  
Acq: 29 May 2020 08:47

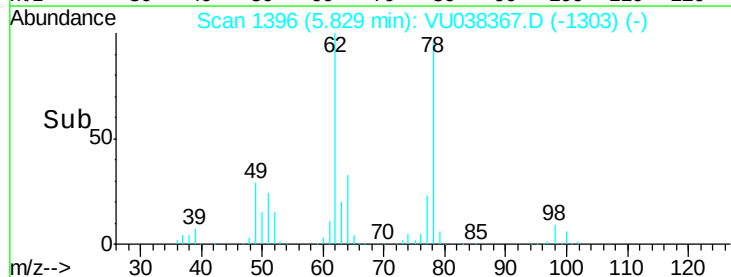
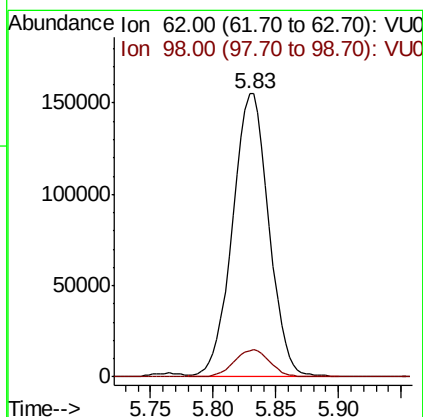
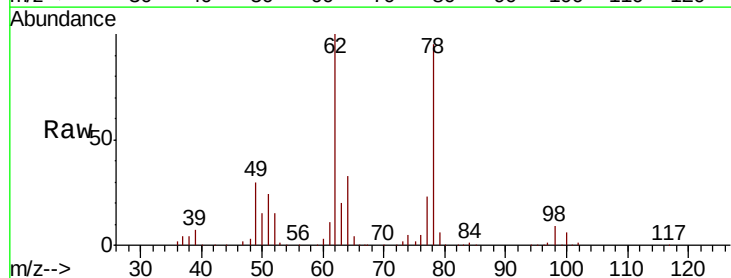
Instrument :  
MSVOA\_U  
ClientSampleId :

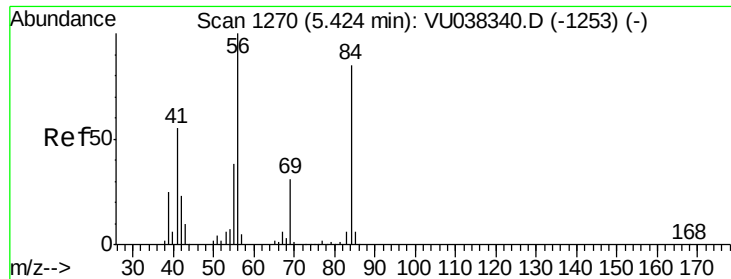
Tot Ion: 83 Resp: 381050  
Ion Ratio Lower Upper  
83 100  
85 64.4 44.9 83.5



#27  
1,2-Dichloroethane  
Concen: 47.485 ug/L  
RT: 5.83 min Scan# 1396  
Delta R.T. -0.00 min  
Lab File: VU038367.D  
Acq: 29 May 2020 08:47

Tgt Ion: 62 Resp: 311814  
Ion Ratio Lower Upper  
62 100  
98 9.3 7.5 11.3

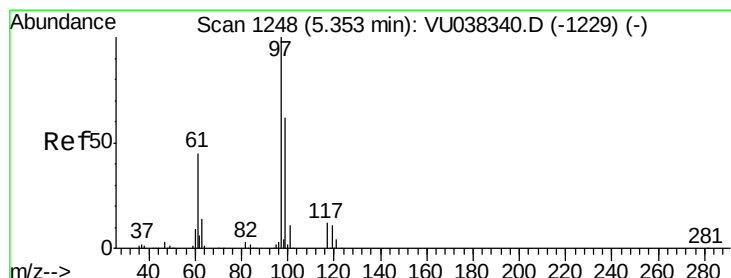
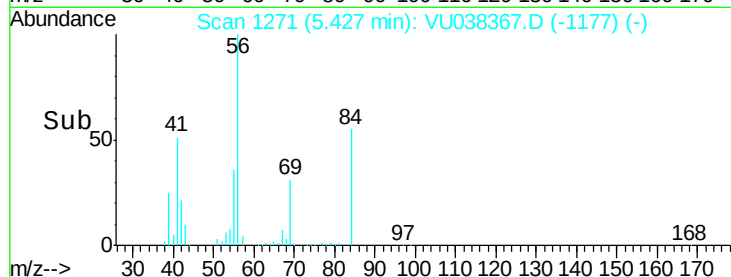
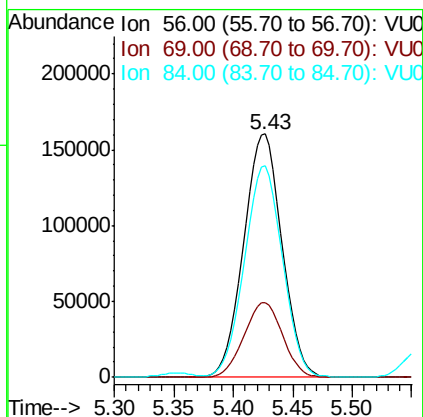
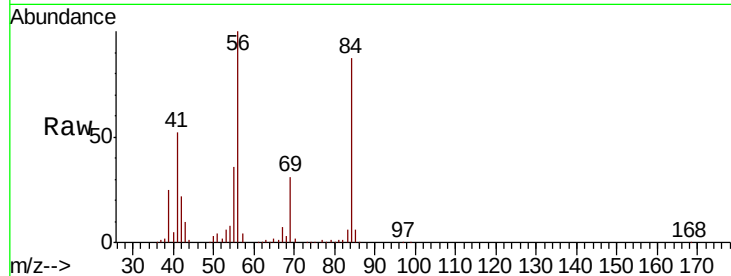




#29  
Cyclohexane  
Concen: 49.638 ug/L  
RT: 5.43 min Scan# 1271  
Delta R.T. 0.00 min  
Lab File: VU038367.D  
Acq: 29 May 2020 08:47

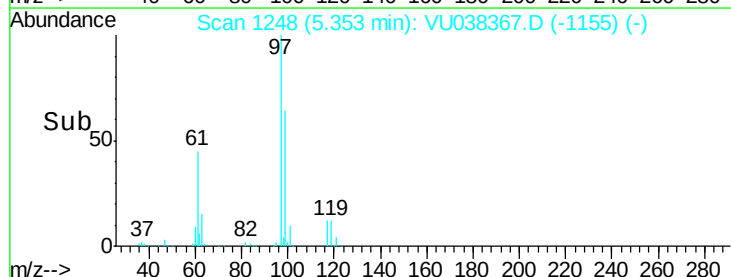
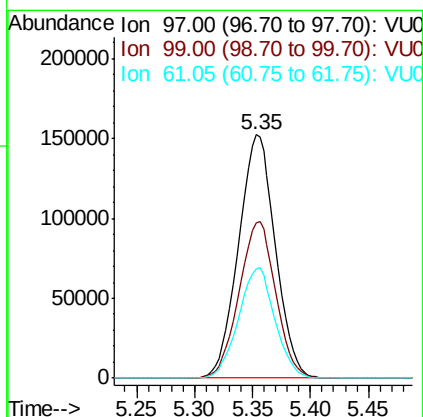
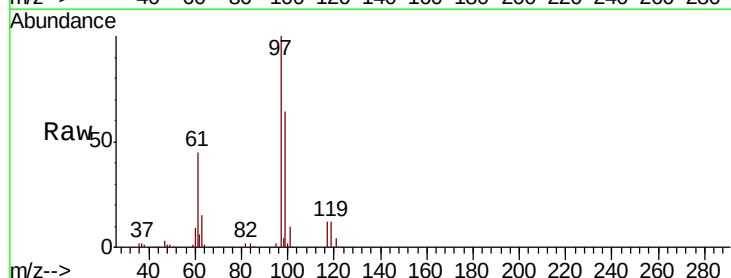
Instrument :  
MSVOA\_U  
ClientSampled :

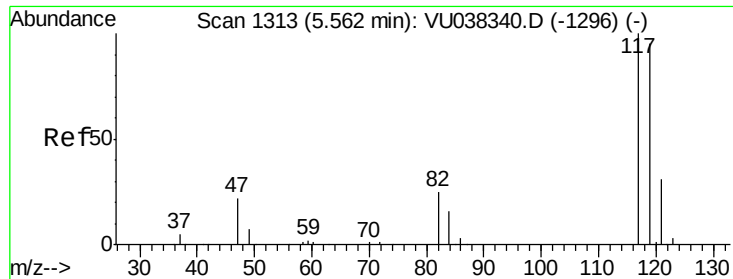
Tot Ion: 56 Resp: 358141  
Ion Ratio Lower Upper  
56 100  
69 31.1 24.7 37.1  
84 86.7 68.2 102.4



#30  
1,1,1-Trichloroethane  
Concen: 49.110 ug/L  
RT: 5.35 min Scan# 1248  
Delta R.T. -0.00 min  
Lab File: VU038367.D  
Acq: 29 May 2020 08:47

Tgt Ion: 97 Resp: 336049  
Ion Ratio Lower Upper  
97 100  
99 64.2 51.2 76.8  
61 44.8 35.9 53.9





#31

Carbon tetrachloride

Concen: 49.336 ug/L

RT: 5.56 min Scan# 1313

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Instrument :

MSVOA\_U

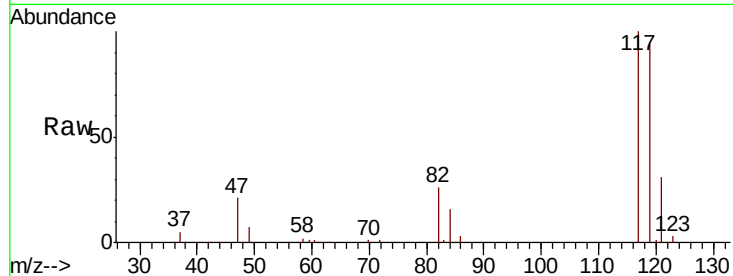
ClientSampled :

Tot Ion:117 Resp: 281363

Ion Ratio Lower Upper

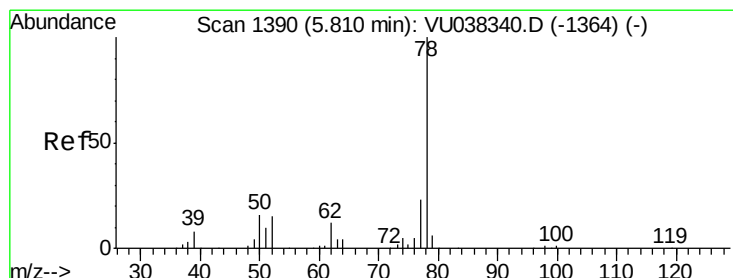
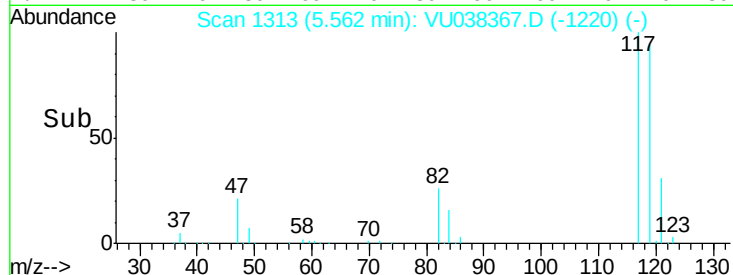
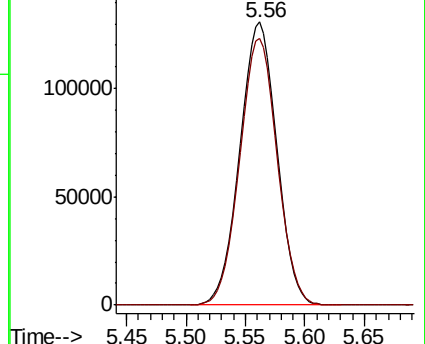
117 100

119 95.5 76.6 114.8



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#33

Benzene

Concen: 48.552 ug/L

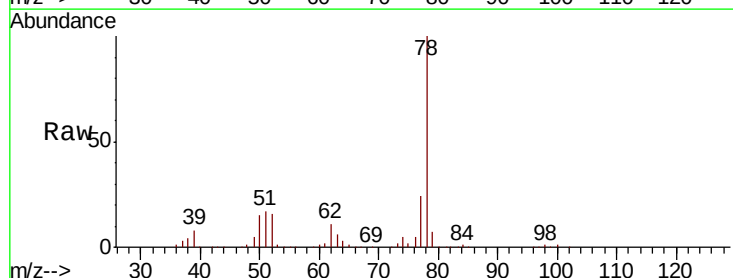
RT: 5.81 min Scan# 1390

Delta R.T. -0.00 min

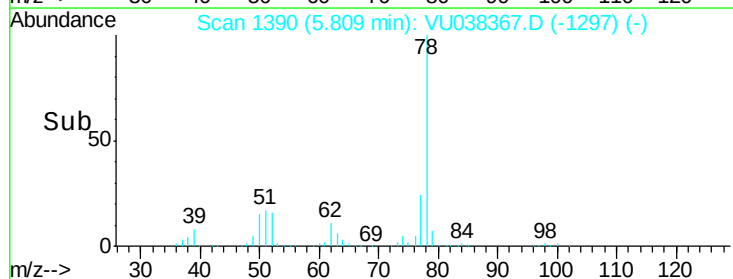
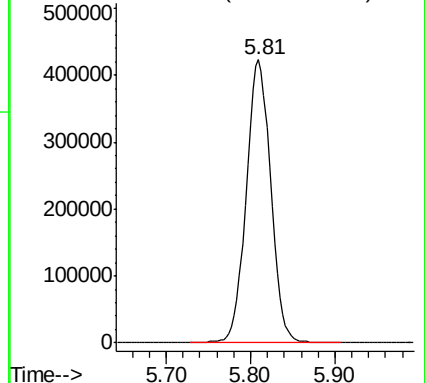
Lab File: VU038367.D

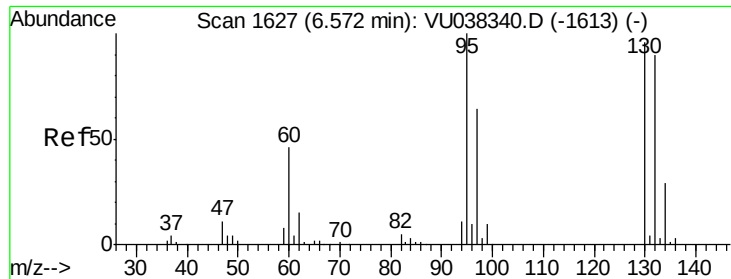
Acq: 29 May 2020 08:47

Tgt Ion: 78 Resp: 858097



Abundance Ion 78.00 (77.70 to 78.70): VU0





#34

Trichloroethene

Concen: 48.379 ug/L

RT: 6.57 min Scan# 1628

Delta R.T. 0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Instrument :

MSVOA\_U

ClientSampleId :

Tot Ion: 95 Resp: 218769

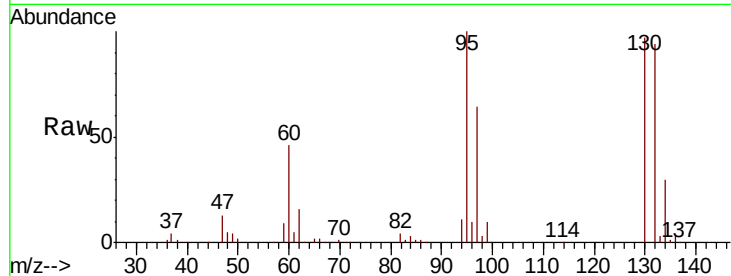
Ion Ratio Lower Upper

95 100

97 64.5 44.3 82.3

132 93.9 64.7 120.1

130 97.4 68.5 127.1

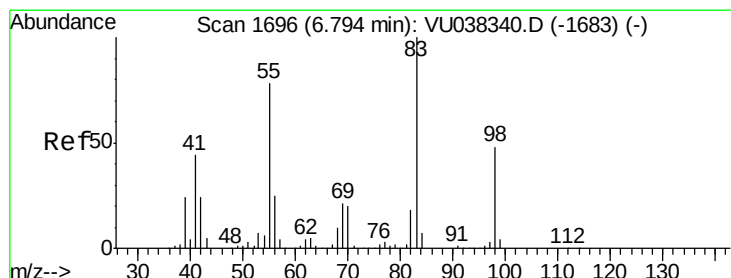
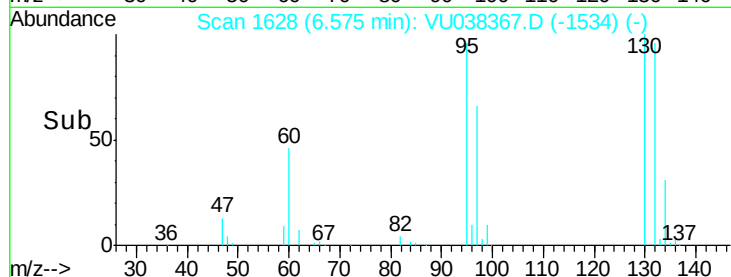
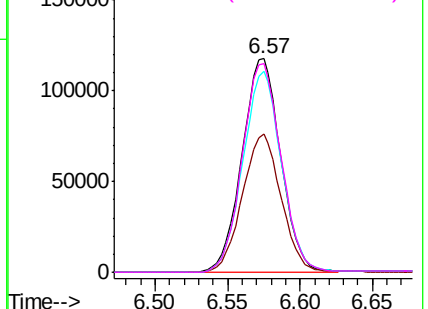


Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 97.00 (96.70 to 97.70): VU0

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V



#35

Methylcyclohexane

Concen: 49.699 ug/L

RT: 6.79 min Scan# 1696

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

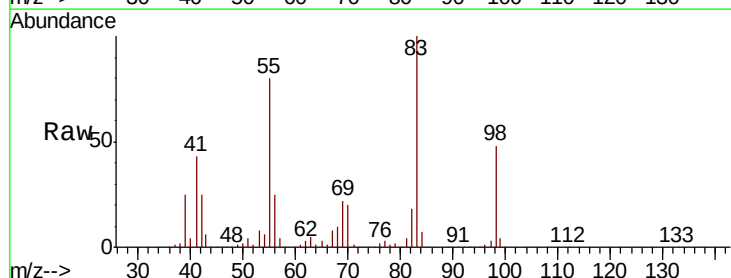
Tgt Ion: 83 Resp: 352846

Ion Ratio Lower Upper

83 100

55 81.0 63.0 94.4

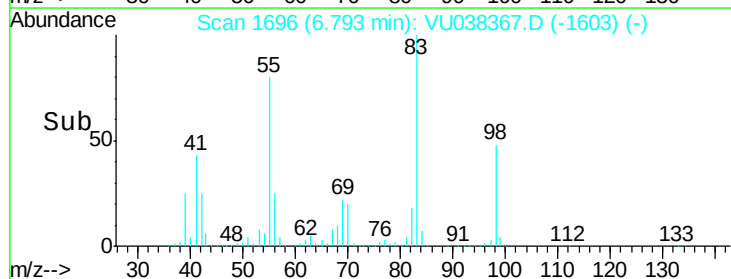
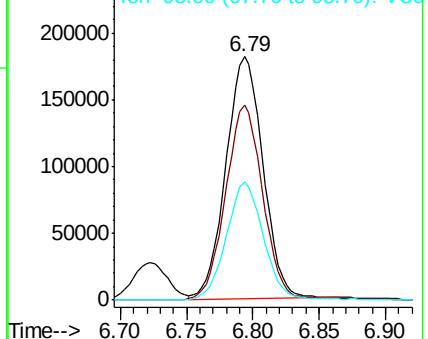
98 48.2 38.6 57.8



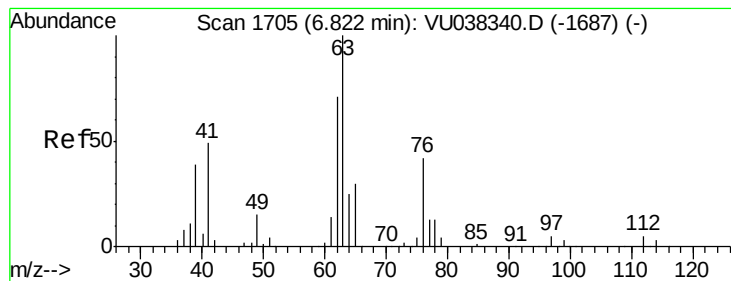
Abundance Ion 83.00 (82.70 to 83.70): VU0

Ion 55.00 (54.70 to 55.70): VU0

Ion 98.00 (97.70 to 98.70): VU0







#37

1,2-Dichloropropane

Concen: 48.683 ug/L

RT: 6.82 min Scan# 1705

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Instrument :

MSVOA\_U

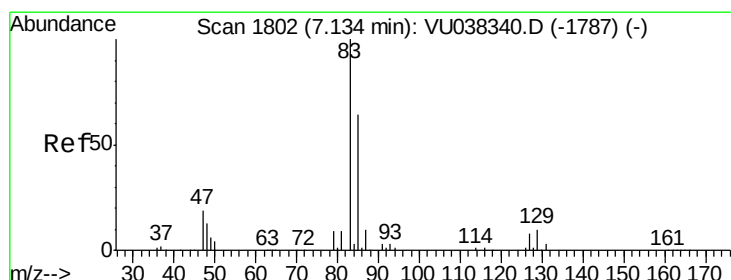
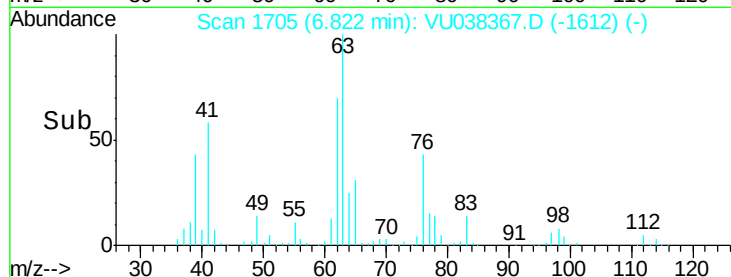
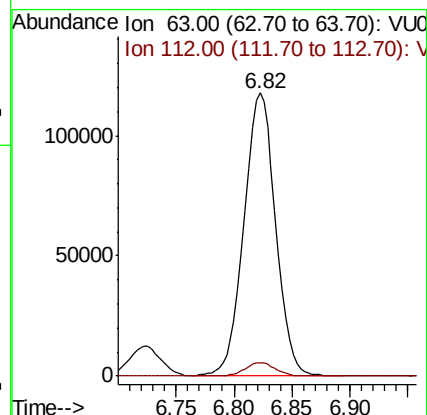
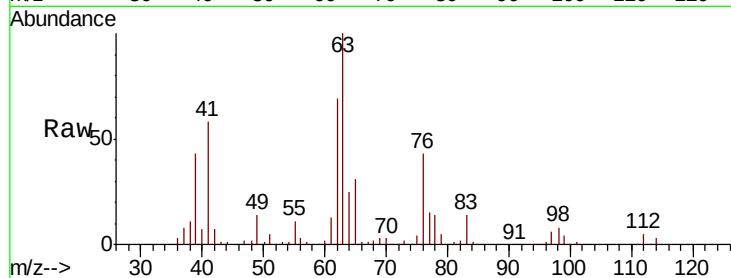
ClientSampled :

Tot Ion: 63 Resp: 223144

Ion Ratio Lower Upper

63 100

112 4.6 3.6 5.4



#38

Bromodichloromethane

Concen: 48.292 ug/L

RT: 7.13 min Scan# 1802

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

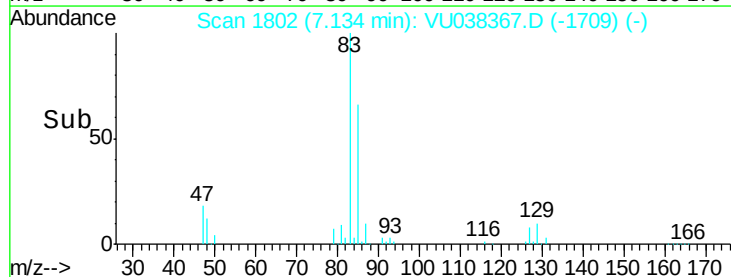
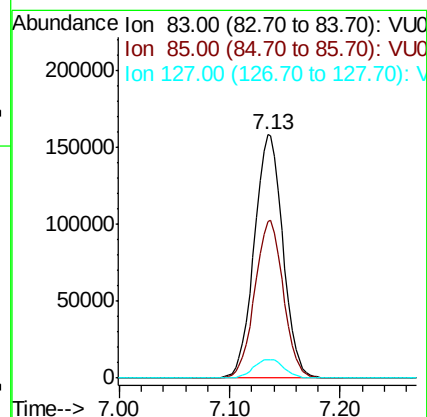
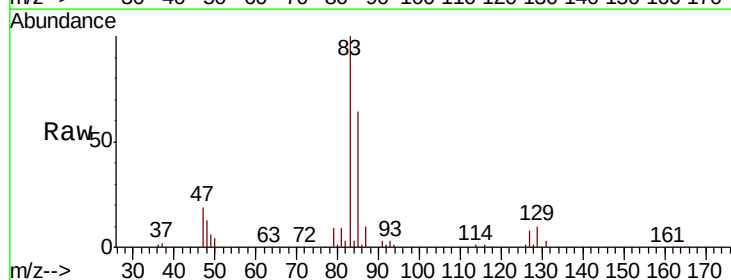
Tgt Ion: 83 Resp: 283666

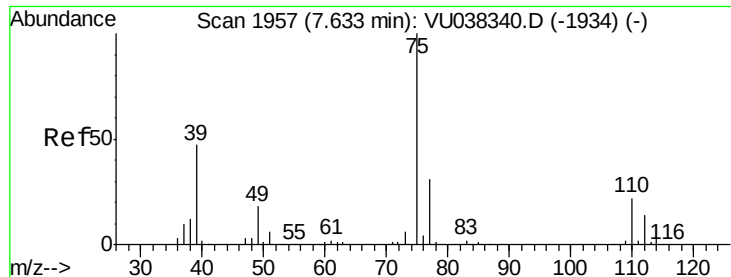
Ion Ratio Lower Upper

83 100

85 64.2 45.5 84.5

127 7.7 7.0 10.4

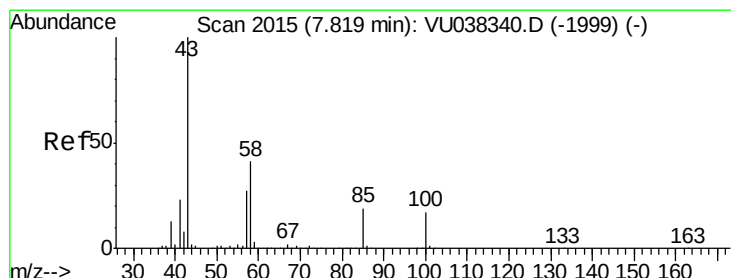
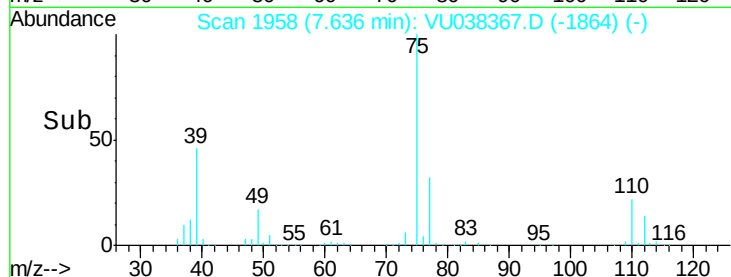
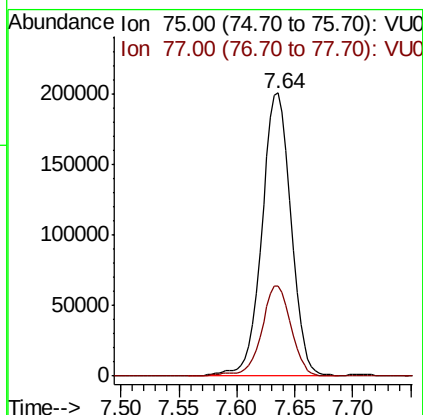
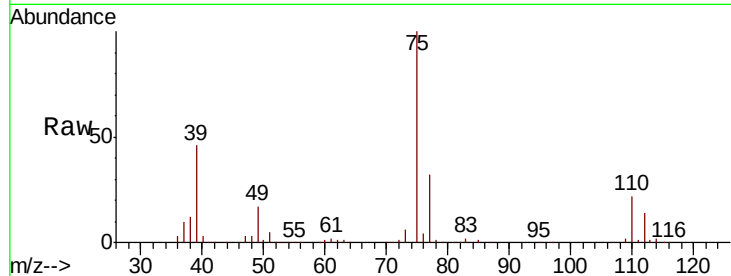




#39  
 cis-1,3-Dichloropropene  
 Concen: 48.255 ug/L  
 RT: 7.64 min Scan# 1958  
 Delta R.T. 0.00 min  
 Lab File: VU038367.D  
 Acq: 29 May 2020 08:47

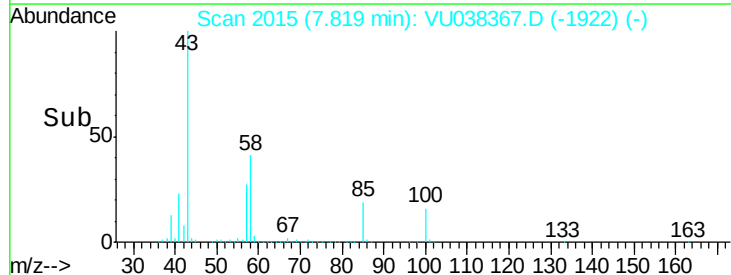
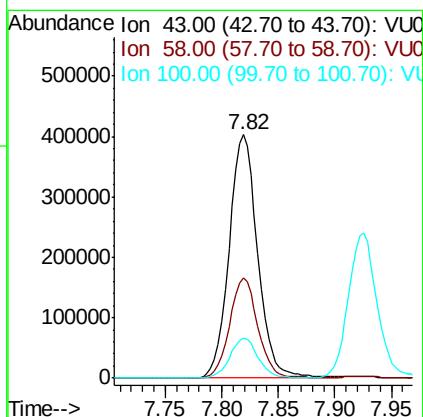
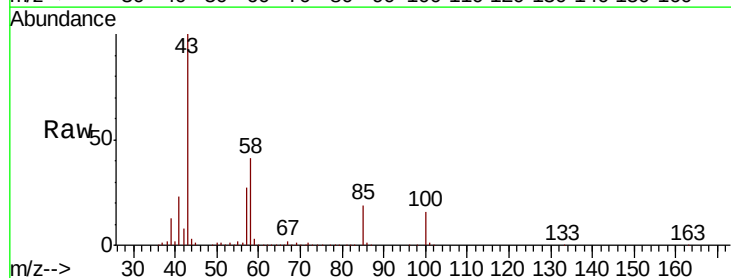
Instrument :  
 MSVOA\_U  
 ClientSampleId :

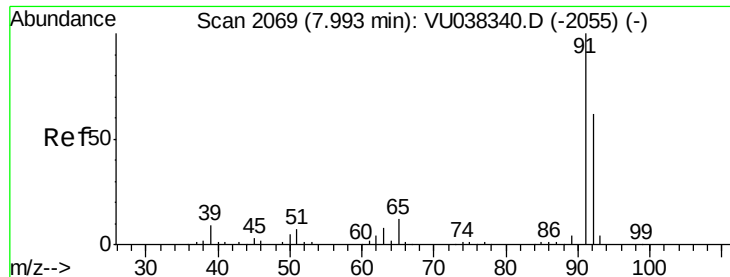
Tot Ion: 75 Resp: 351969  
 Ion Ratio Lower Upper  
 75 100  
 77 32.0 21.6 40.0



#40  
 4-Methyl-2-pentanone  
 Concen: 97.115 ug/L  
 RT: 7.82 min Scan# 2015  
 Delta R.T. -0.00 min  
 Lab File: VU038367.D  
 Acq: 29 May 2020 08:47

Tgt Ion: 43 Resp: 707933  
 Ion Ratio Lower Upper  
 43 100  
 58 40.9 32.6 48.8  
 100 16.2 12.9 19.3





#42

Toluene

Concen: 49.629 ug/L

RT: 8.00 min Scan# 2070

Delta R.T. 0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

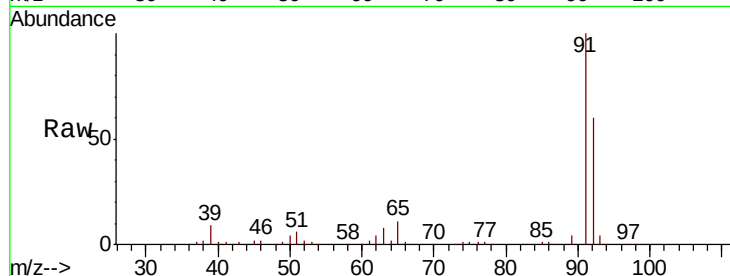
Instrument :  
MSVOA\_U  
ClientSampled :

Tot Ion: 91 Resp: 920871

Ion Ratio Lower Upper

91 100

92 59.6 42.0 78.0



Abundance Ion 91.00 (90.70 to 91.70): VU038340.D (-2055) (-)

Ion 92.00 (91.70 to 92.70): VU038367.D (-1976) (-)

8.00

500000

400000

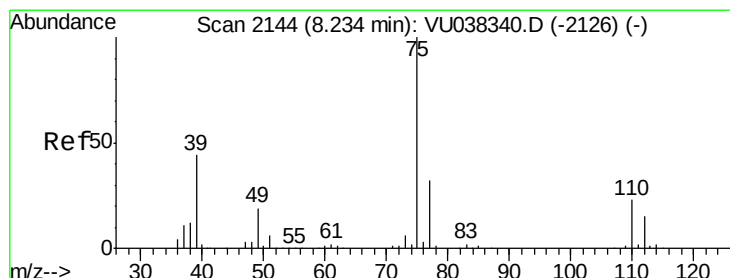
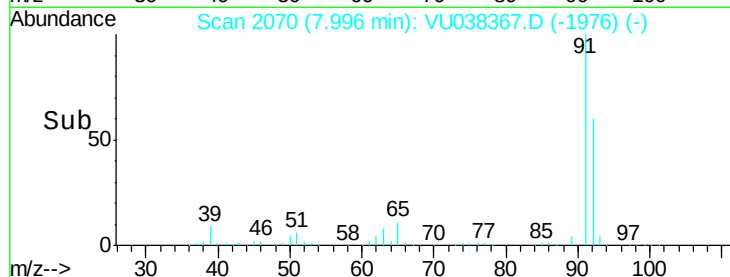
300000

200000

100000

0

Time-->



#44

trans-1,3-Dichloropropene

Concen: 49.336 ug/L

RT: 8.23 min Scan# 2144

Delta R.T. -0.00 min

Lab File: VU038367.D

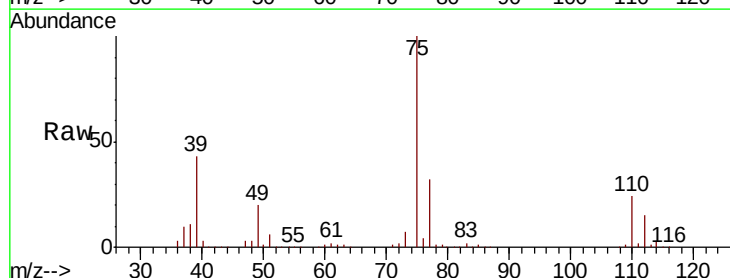
Acq: 29 May 2020 08:47

Tgt Ion: 75 Resp: 336841

Ion Ratio Lower Upper

75 100

77 32.0 22.1 41.1



Abundance Ion 75.00 (74.70 to 75.70): VU038340.D (-2126) (-)

Ion 77.00 (76.70 to 77.70): VU038367.D (-2051) (-)

8.23

200000

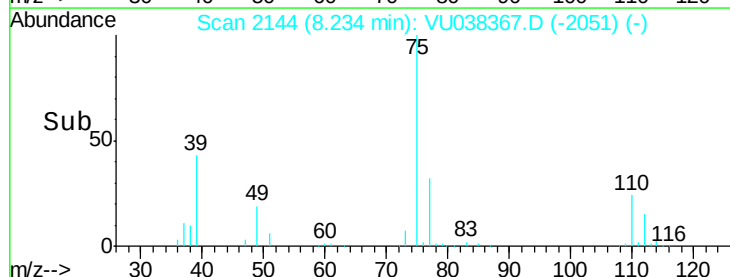
150000

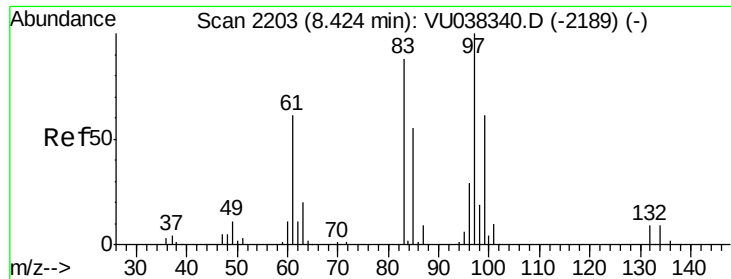
100000

50000

0

Time-->

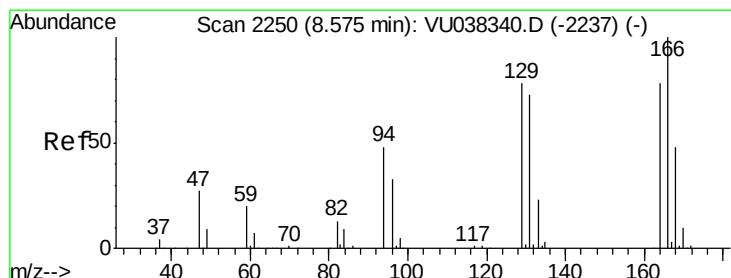
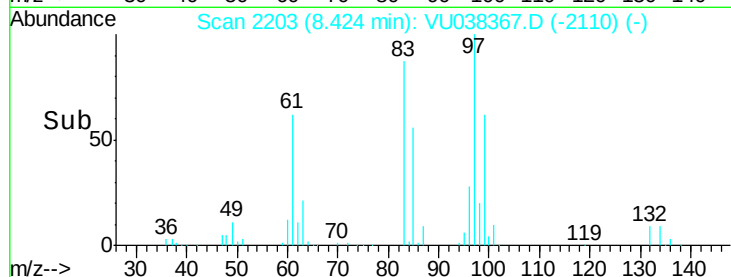
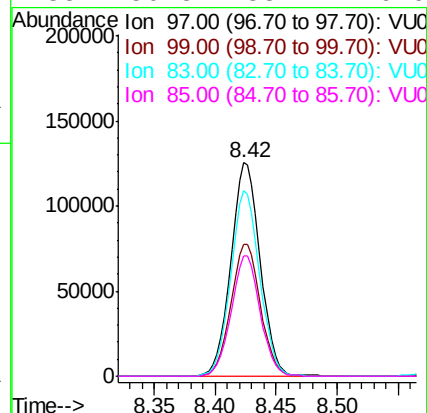
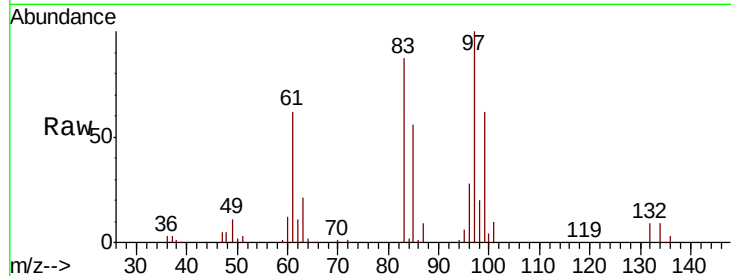




#45  
 1,1,2-Trichloroethane  
 Concen: 48.464 ug/L  
 RT: 8.42 min Scan# 2203  
 Delta R.T. -0.00 min  
 Lab File: VU038367.D  
 Acq: 29 May 2020 08:47

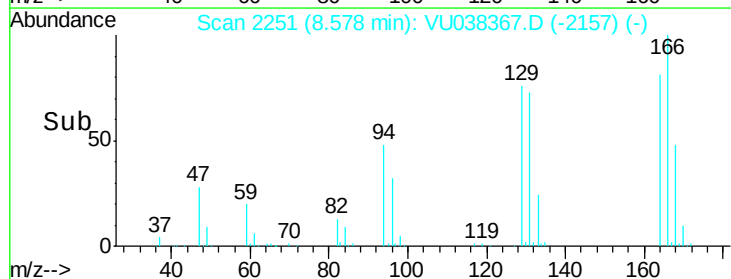
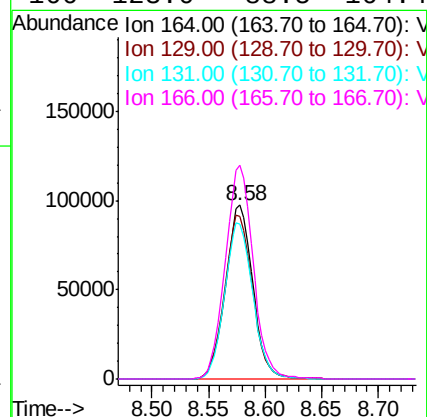
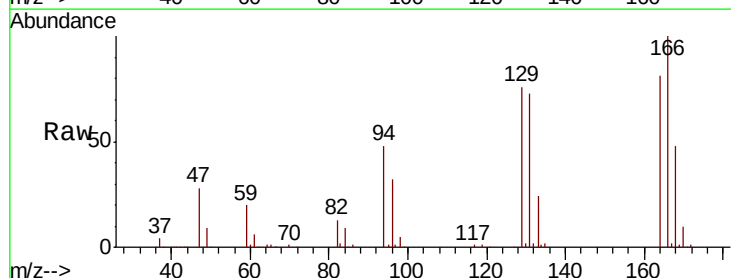
Instrument :  
 MSVOA\_U  
 ClientSampleId :

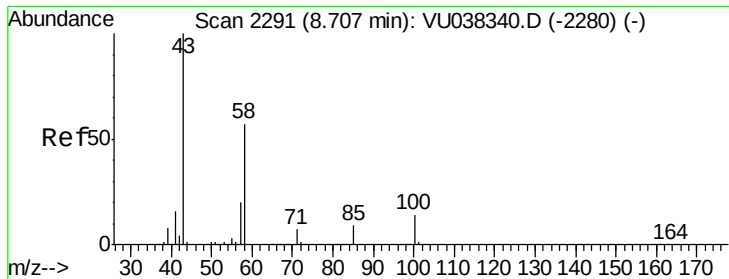
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 97    | Resp: | 210805 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 99       | 61.8  | 44.0  | 81.8   |
| 83       | 87.0  | 60.8  | 113.0  |
| 85       | 56.3  | 38.1  | 70.9   |



#46  
 Tetrachloroethene  
 Concen: 49.595 ug/L  
 RT: 8.58 min Scan# 2251  
 Delta R.T. 0.00 min  
 Lab File: VU038367.D  
 Acq: 29 May 2020 08:47

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 163954 |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 129      | 93.8  | 67.2  | 124.8  |
| 131      | 89.5  | 63.4  | 117.8  |
| 166      | 123.0 | 88.5  | 164.4  |

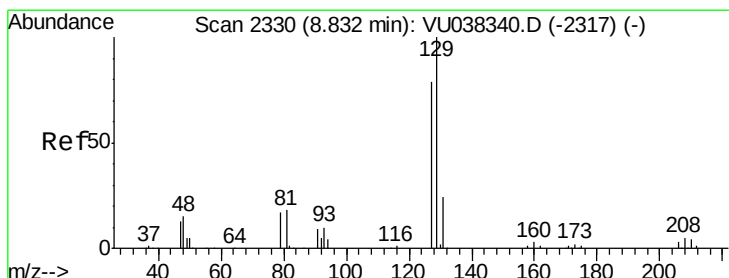
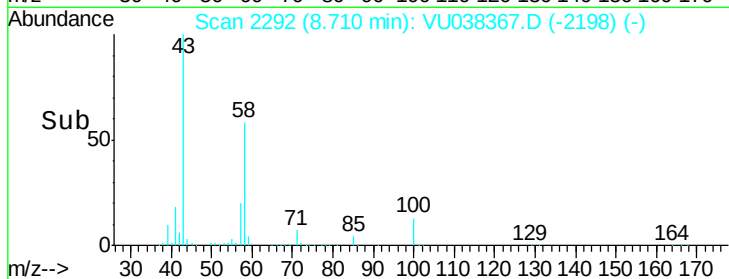
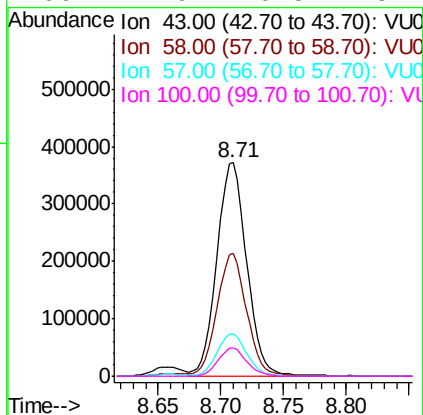
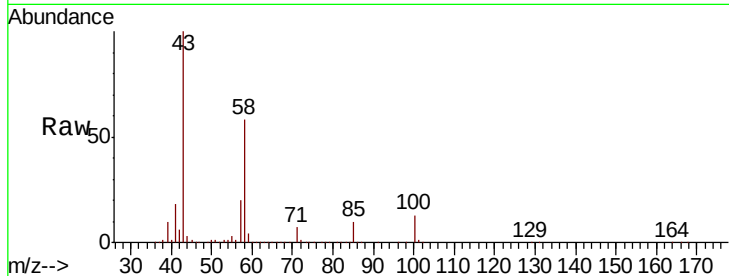




#48  
2-Hexanone  
Concen: 99.575 ug/L  
RT: 8.71 min Scan# 2292  
Delta R.T. 0.00 min  
Lab File: VU038367.D  
Acq: 29 May 2020 08:47

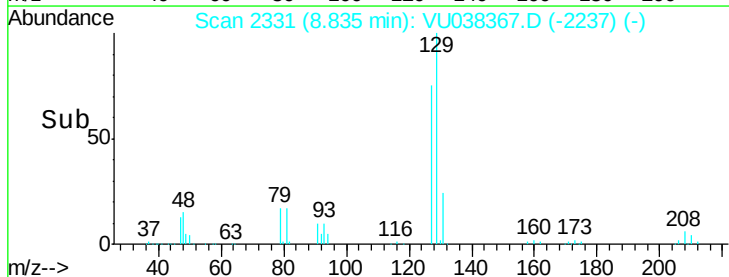
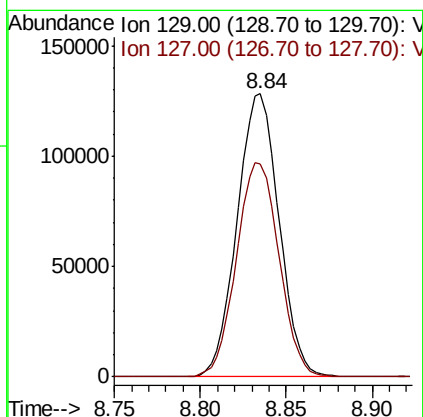
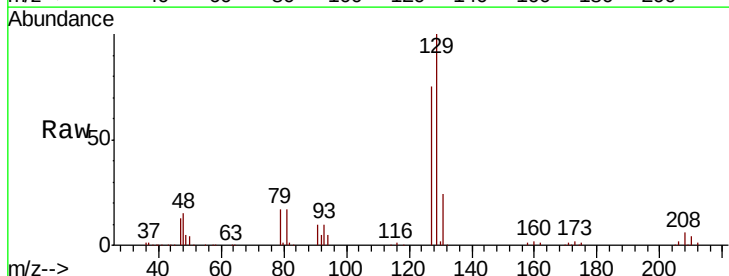
Instrument :  
MSVOA\_U  
ClientSampleId :

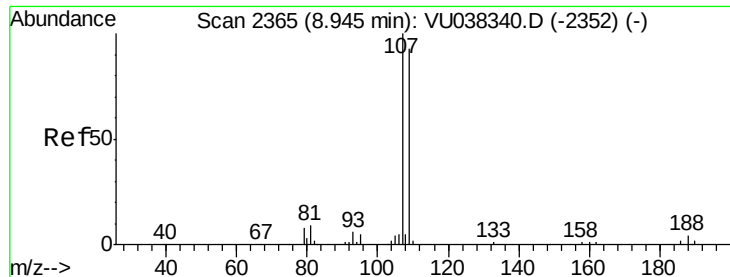
Tot Ion: 43 Resp: 612864  
Ion Ratio Lower Upper  
43 100  
58 57.1 45.5 68.3  
57 19.9 16.3 24.5  
100 12.9 10.5 15.7



#49  
Dibromochloromethane  
Concen: 49.303 ug/L  
RT: 8.84 min Scan# 2331  
Delta R.T. 0.00 min  
Lab File: VU038367.D  
Acq: 29 May 2020 08:47

Tgt Ion: 129 Resp: 217139  
Ion Ratio Lower Upper  
129 100  
127 75.5 55.2 102.6

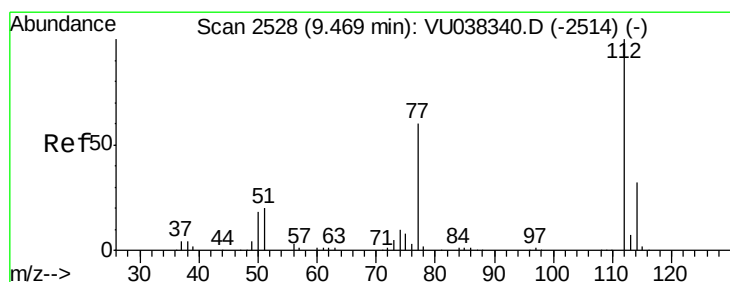
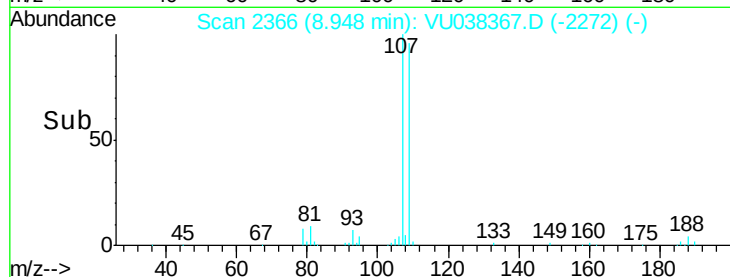
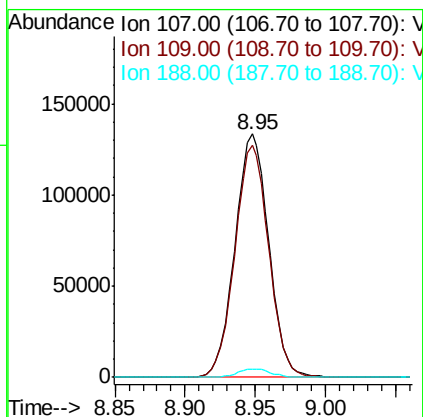
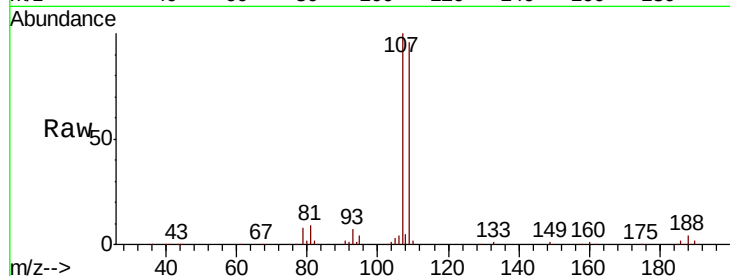




#50  
 1,2-Dibromoethane  
 Concen: 47.932 ug/L  
 RT: 8.95 min Scan# 2366  
 Delta R.T. 0.00 min  
 Lab File: VU038367.D  
 Acq: 29 May 2020 08:47

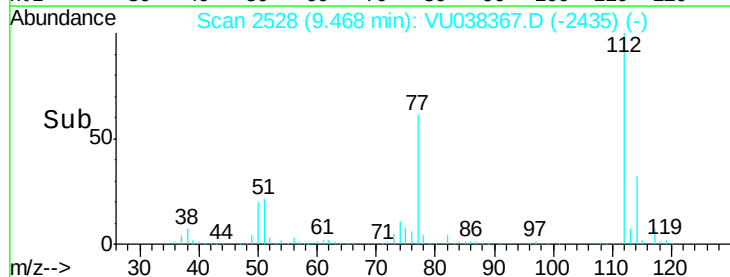
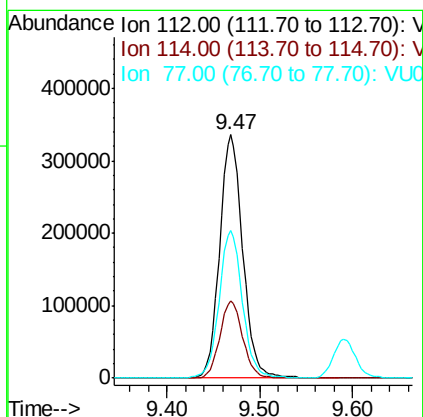
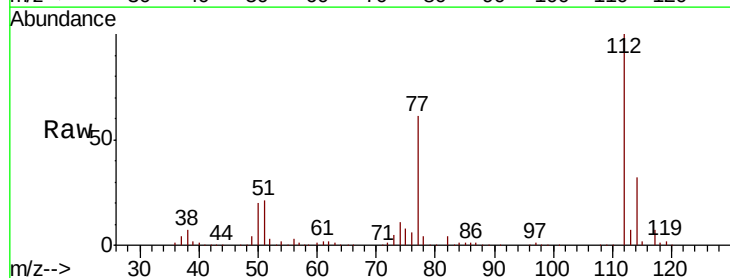
Instrument :  
 MSVOA\_U  
 ClientSampleId :

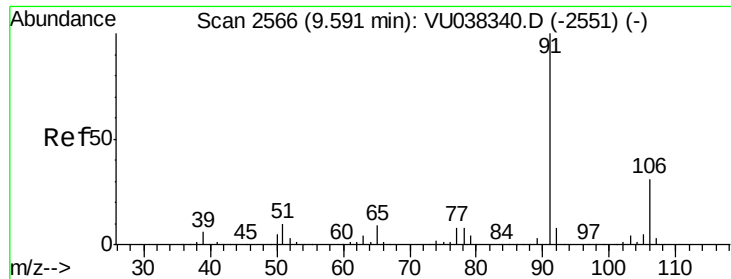
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 109     | 95.6  | 64.3  | 119.5 |
| 188     | 3.6   | 2.8   | 4.2   |



#51  
 Chlorobenzene  
 Concen: 48.532 ug/L  
 RT: 9.47 min Scan# 2528  
 Delta R.T. -0.00 min  
 Lab File: VU038367.D  
 Acq: 29 May 2020 08:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 114     | 31.6  | 22.6  | 42.0  |
| 77      | 60.8  | 48.8  | 73.2  |

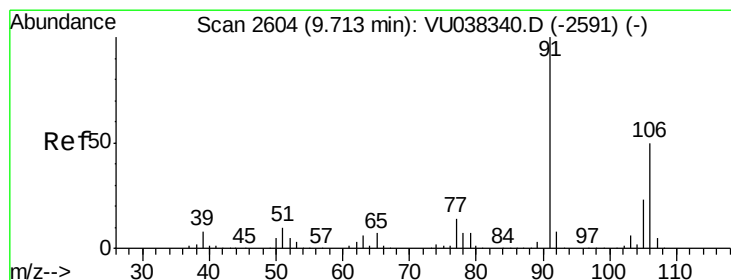
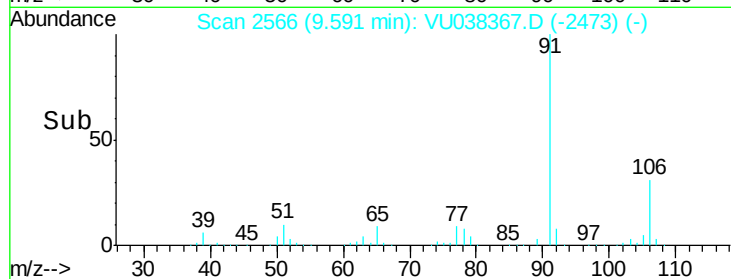
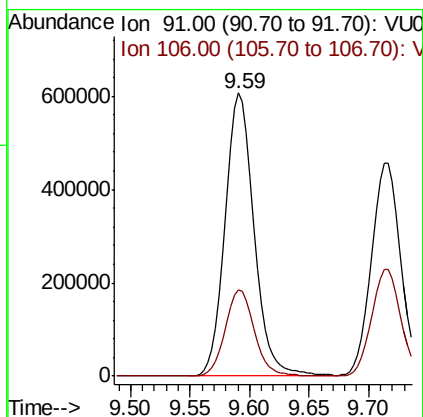
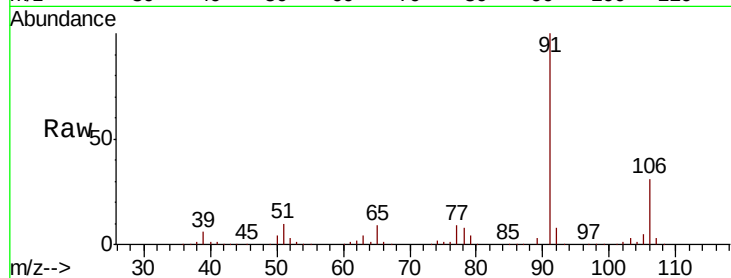




#52  
Ethylbenzene  
Concen: 49.402 ug/L  
RT: 9.59 min Scan# 2566  
Delta R.T. -0.00 min  
Lab File: VU038367.D  
Acq: 29 May 2020 08:47

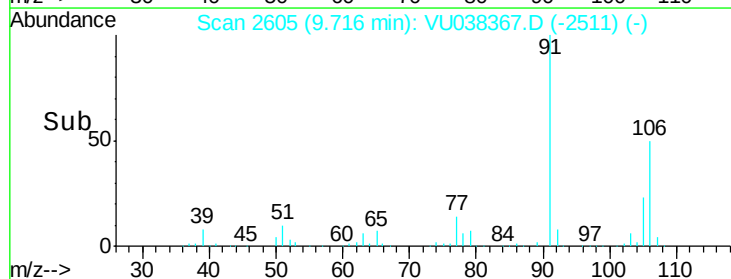
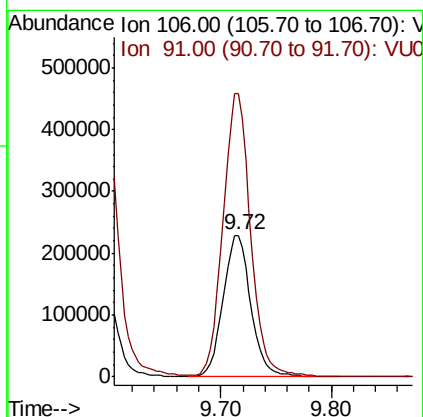
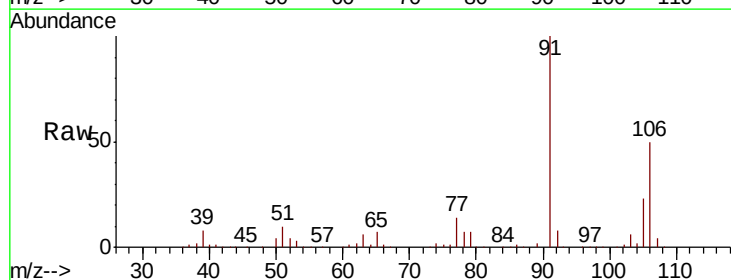
Instrument :  
MSVOA\_U  
ClientSampleId :

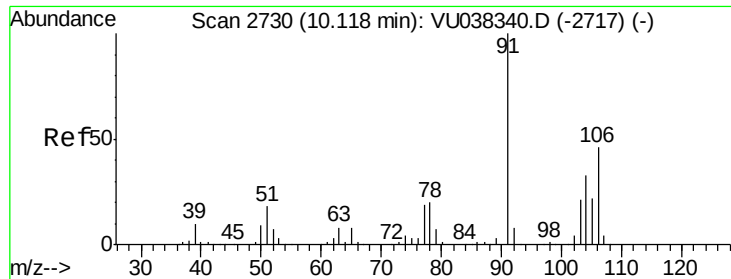
Tot Ion: 91 Resp: 1027079  
Ion Ratio Lower Upper  
91 100  
106 30.7 21.2 39.4



#53  
m,p-Xylene  
Concen: 50.226 ug/L  
RT: 9.72 min Scan# 2605  
Delta R.T. 0.00 min  
Lab File: VU038367.D  
Acq: 29 May 2020 08:47

Tgt Ion: 106 Resp: 399327  
Ion Ratio Lower Upper  
106 100  
91 200.1 140.8 261.4





#54

o-xylene

Concen: 49.658 ug/L

RT: 10.12 min Scan# 2731

Delta R.T. 0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Instrument :

MSVOA\_U

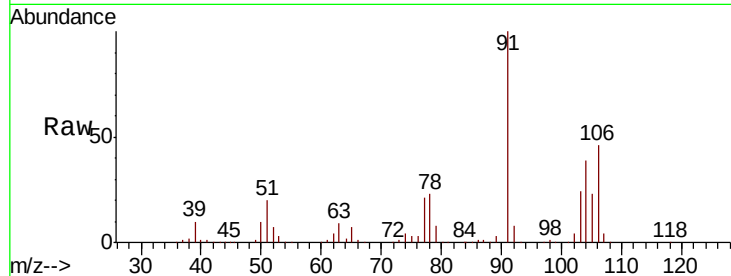
ClientSampleId :

Tot Ion:106 Resp: 383854

Ion Ratio Lower Upper

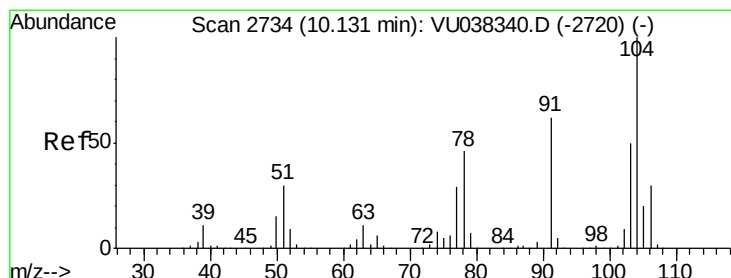
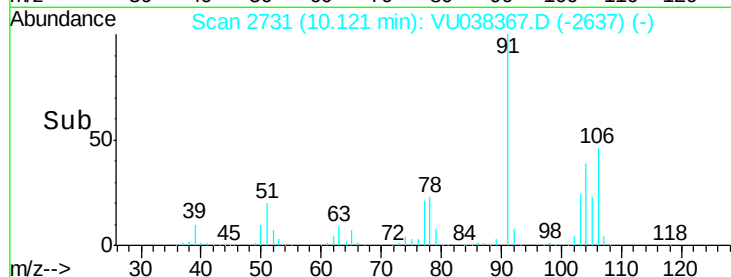
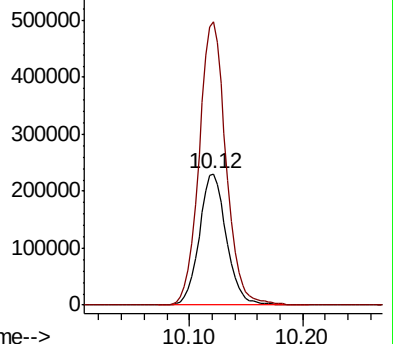
106 100

91 215.4 151.3 280.9



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0



#55

Styrene

Concen: 49.909 ug/L

RT: 10.13 min Scan# 2735

Delta R.T. 0.00 min

Lab File: VU038367.D

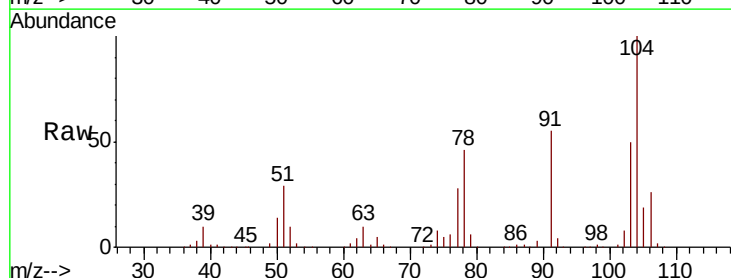
Acq: 29 May 2020 08:47

Tgt Ion:104 Resp: 663069

Ion Ratio Lower Upper

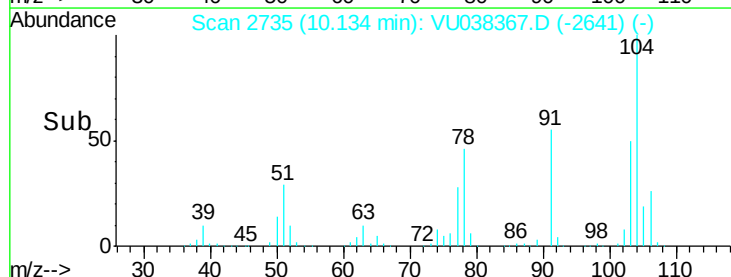
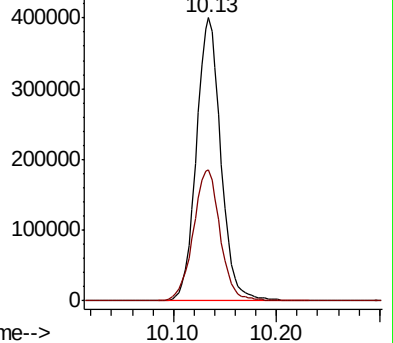
104 100

78 46.1 32.1 59.7

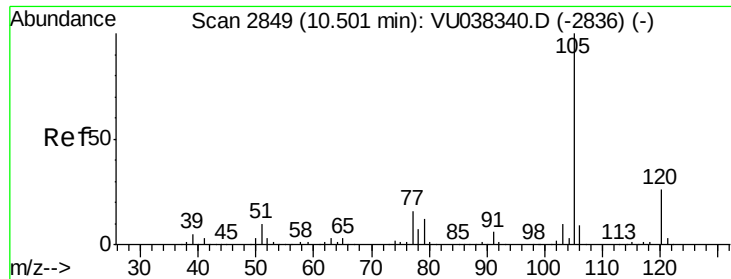


Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VU0







#56

Isopropylbenzene

Concen: 50.216 ug/L

RT: 10.50 min Scan# 2850

Delta R.T. 0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Instrument :

MSVOA\_U

ClientSampleId :

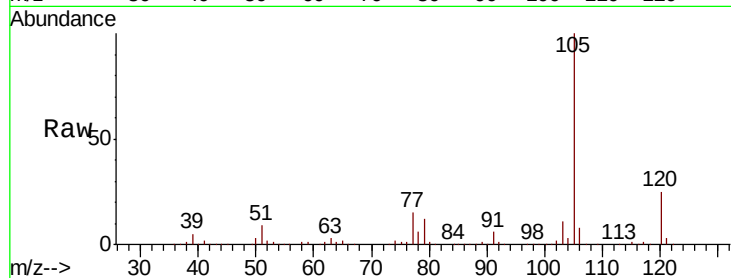
Tot Ion:105 Resp: 1014389

Ion Ratio Lower Upper

105 100

120 25.5 20.6 31.0

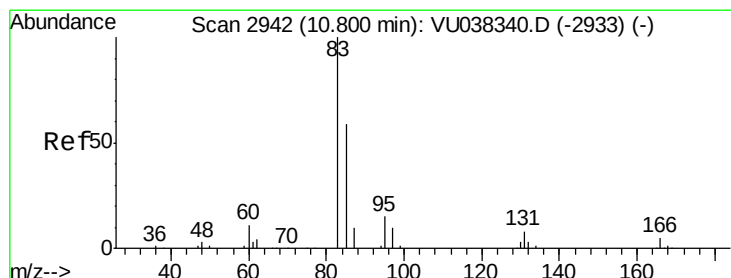
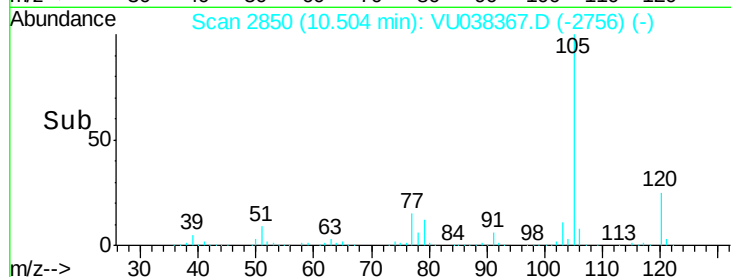
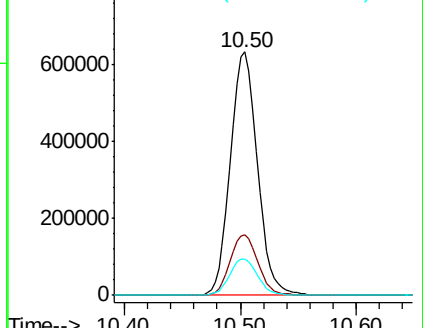
77 15.5 12.8 19.2



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): V



#58

1,1,2,2-Tetrachloroethane

Concen: 47.812 ug/L

RT: 10.80 min Scan# 2942

Delta R.T. -0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

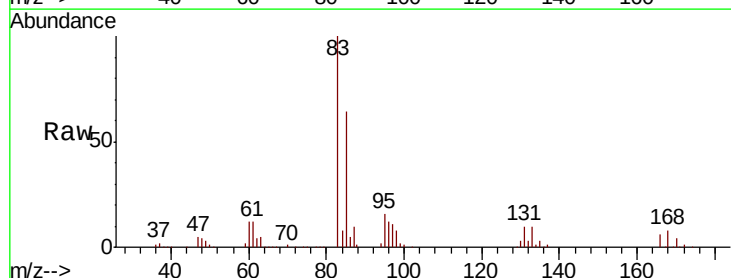
Tgt Ion: 83 Resp: 355894

Ion Ratio Lower Upper

83 100

85 64.2 45.5 84.5

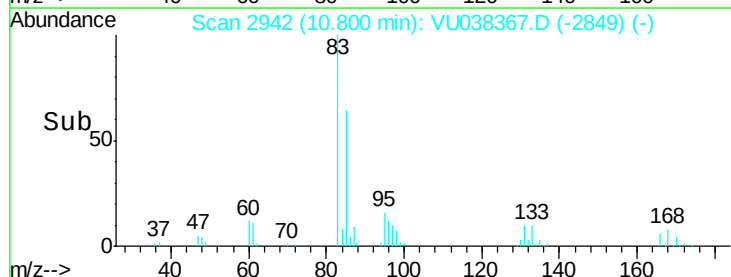
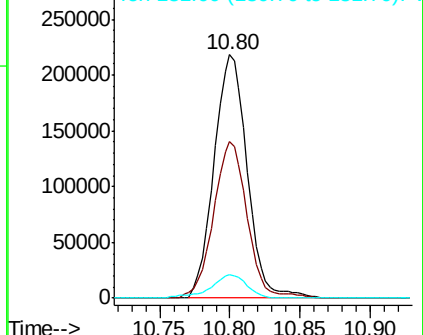
131 9.5 7.3 10.9

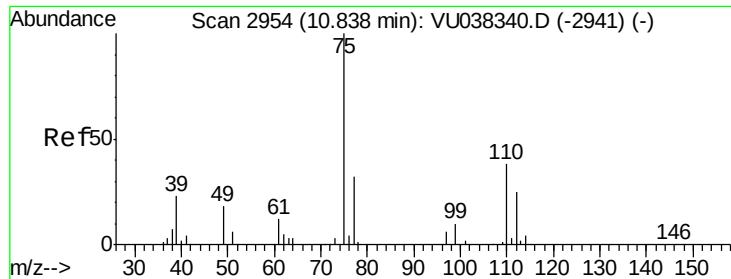


Abundance Ion 83.00 (82.70 to 83.70): VU0

Ion 85.00 (84.70 to 85.70): VU0

Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 47.899 ug/L

RT: 10.84 min Scan# 2955

Delta R.T. 0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Instrument :

MSVOA\_U

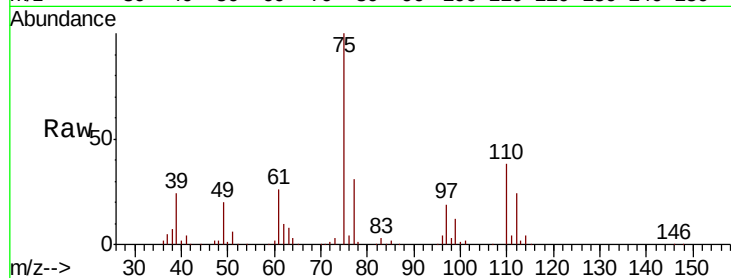
ClientSampled :

Tot Ion: 75 Resp: 307017

Ion Ratio Lower Upper

75 100

77 31.7 25.8 38.8



Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 77.00 (76.70 to 77.70): VU0

10.84

200000

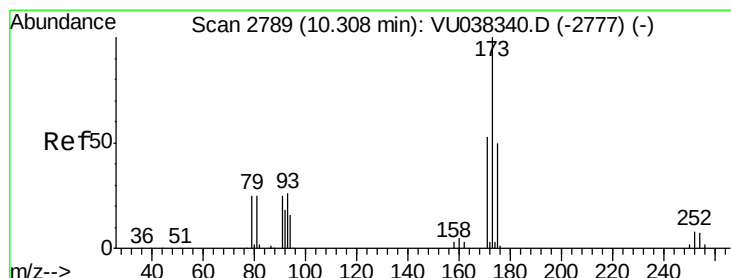
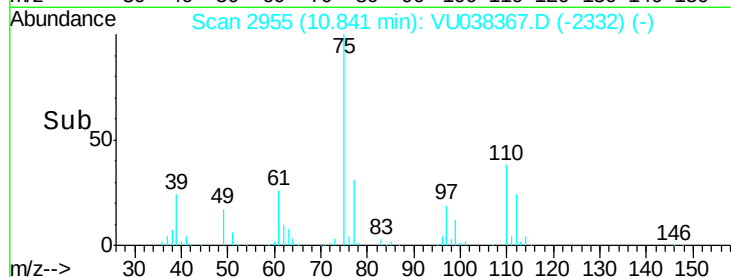
150000

100000

50000

0

Time--> 10.75 10.80 10.85 10.90



#61

Bromoform

Concen: 48.191 ug/L

RT: 10.31 min Scan# 2790

Delta R.T. 0.00 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

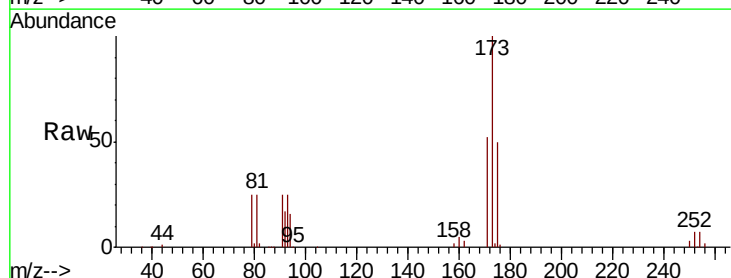
Tgt Ion: 173 Resp: 152771

Ion Ratio Lower Upper

173 100

175 49.6 39.0 58.4

254 7.0 5.3 7.9



Abundance Ion 173.00 (172.70 to 173.70): V

Ion 175.00 (174.70 to 175.70): V

Ion 254.00 (253.70 to 254.70): V

10.31

120000

100000

80000

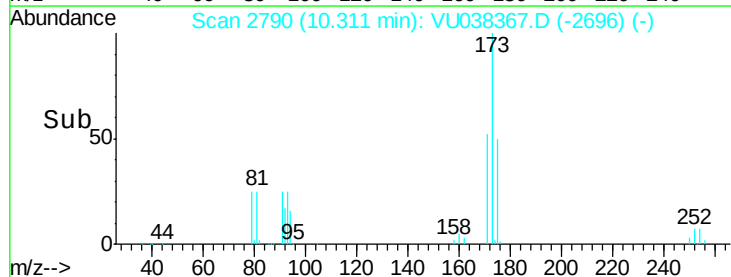
60000

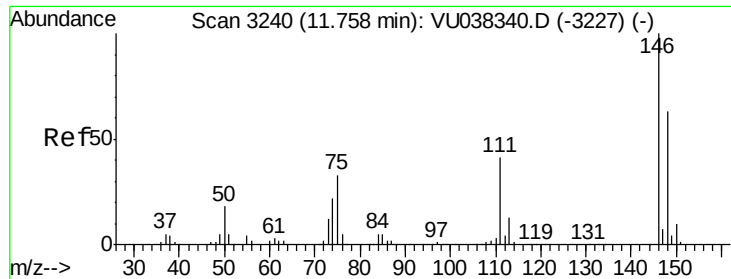
40000

20000

0

Time--> 10.25 10.30 10.35

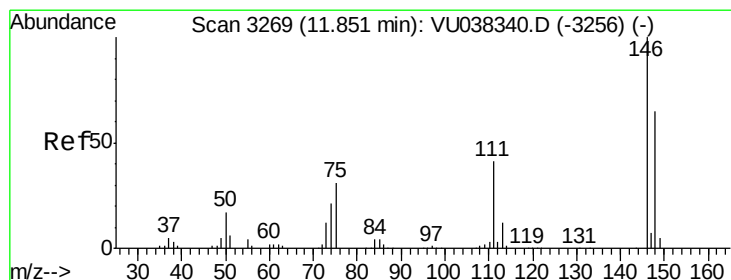
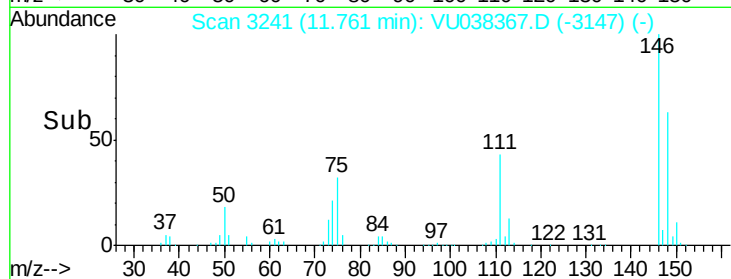
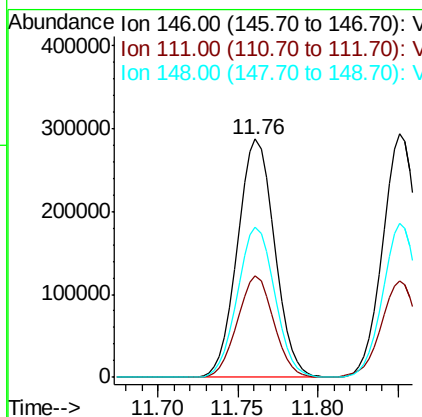
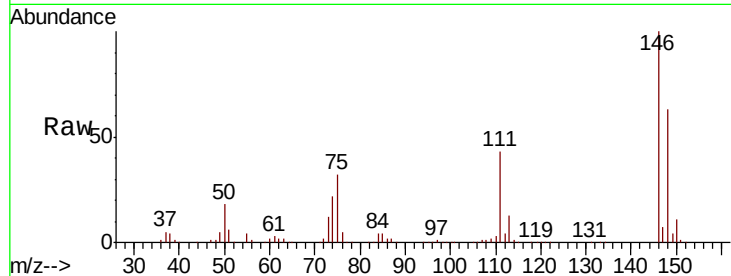




#62  
 1,3-Dichlorobenzene  
 Concen: 49.136 ug/L  
 RT: 11.76 min Scan# 3241  
 Delta R.T. 0.00 min  
 Lab File: VU038367.D  
 Acq: 29 May 2020 08:47

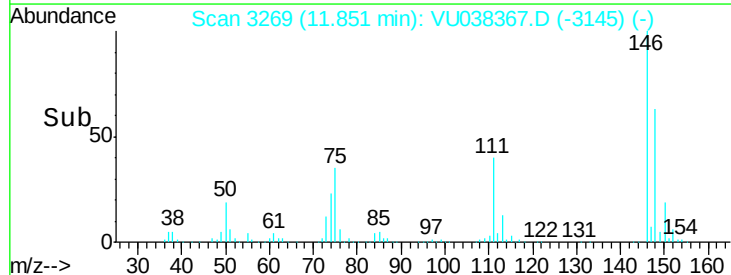
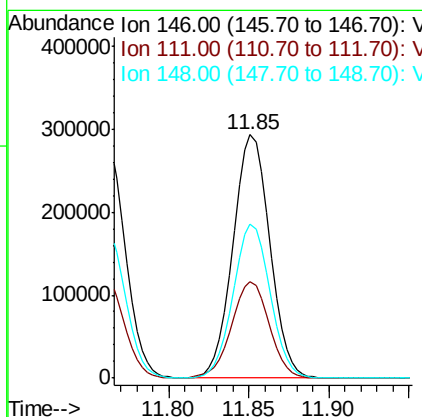
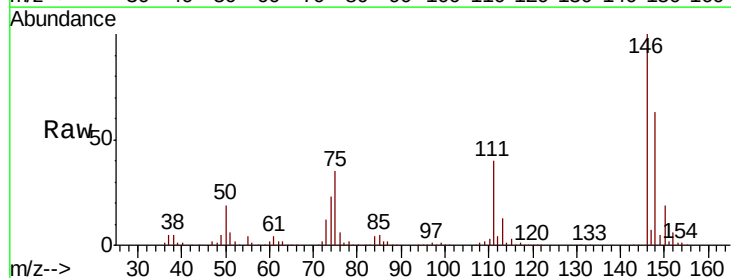
Instrument :  
 MSVOA\_U  
 ClientSampleId :

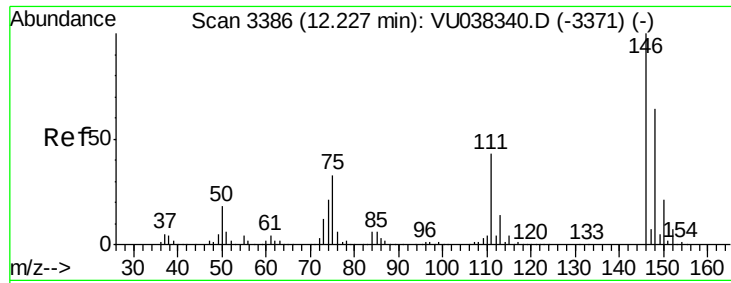
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 42.6  | 29.4  | 54.6  |
| 148     | 63.2  | 45.8  | 85.0  |



#63  
 1,4-Dichlorobenzene  
 Concen: 48.981 ug/L  
 RT: 11.85 min Scan# 3269  
 Delta R.T. -0.00 min  
 Lab File: VU038367.D  
 Acq: 29 May 2020 08:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 39.7  | 27.7  | 51.5  |
| 148     | 63.1  | 44.7  | 83.1  |

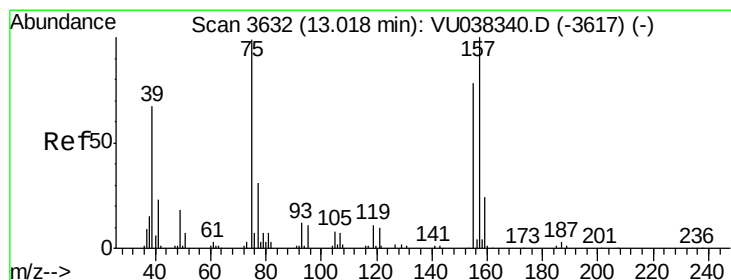
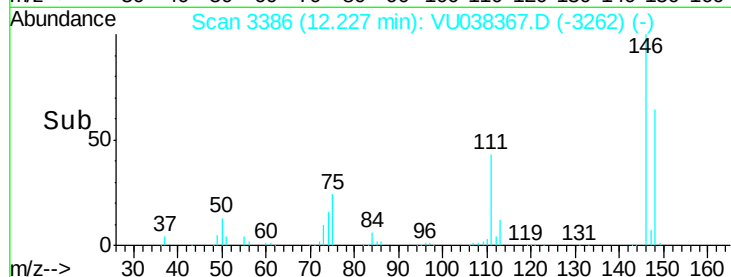
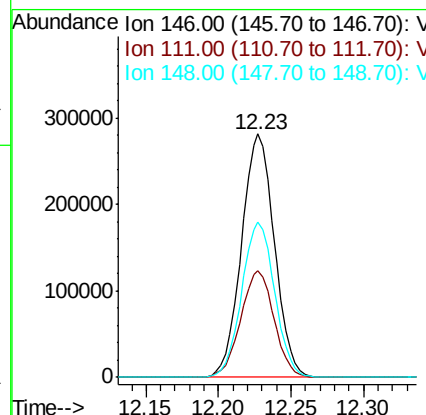
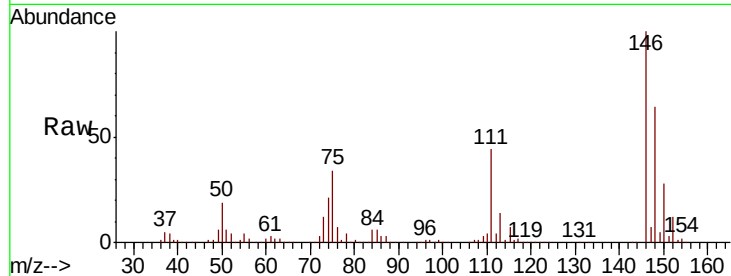




#65  
 1,2-Dichlorobenzene  
 Concen: 48.501 ug/L  
 RT: 12.23 min Scan# 3386  
 Delta R.T. -0.00 min  
 Lab File: VU038367.D  
 Acq: 29 May 2020 08:47

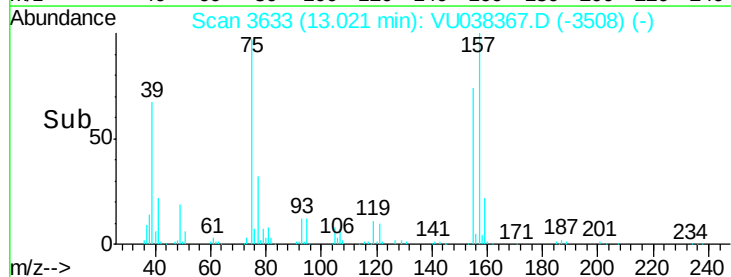
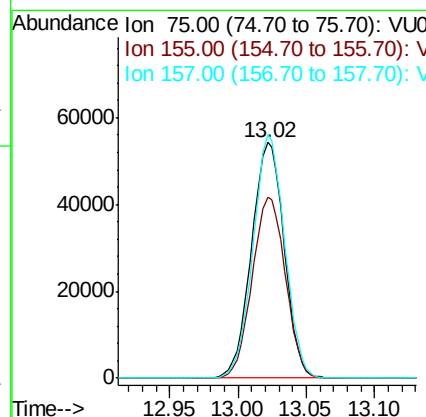
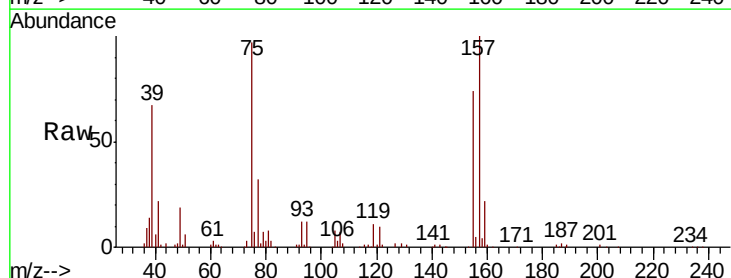
Instrument :  
 MSVOA\_U  
 ClientSampled :

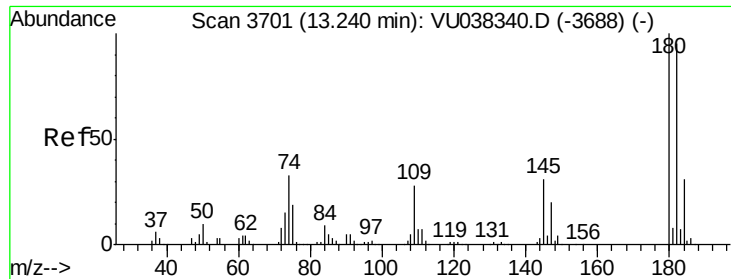
Tot Ion:146 Resp: 443682  
 Ion Ratio Lower Upper  
 146 100  
 111 43.8 35.3 52.9  
 148 63.6 52.5 78.7



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 48.241 ug/L  
 RT: 13.02 min Scan# 3633  
 Delta R.T. 0.00 min  
 Lab File: VU038367.D  
 Acq: 29 May 2020 08:47

Tgt Ion: 75 Resp: 90344  
 Ion Ratio Lower Upper  
 75 100  
 155 76.6 63.1 94.7  
 157 103.4 82.7 124.1

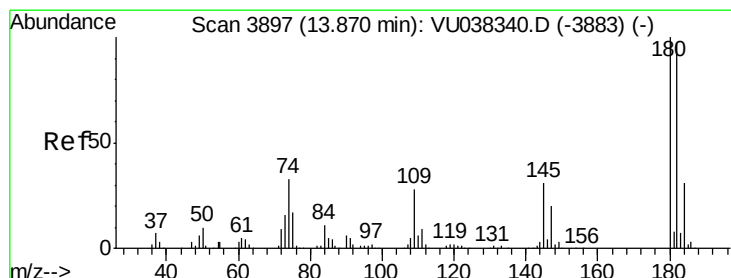
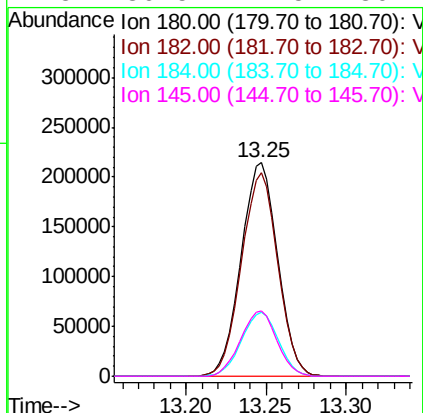
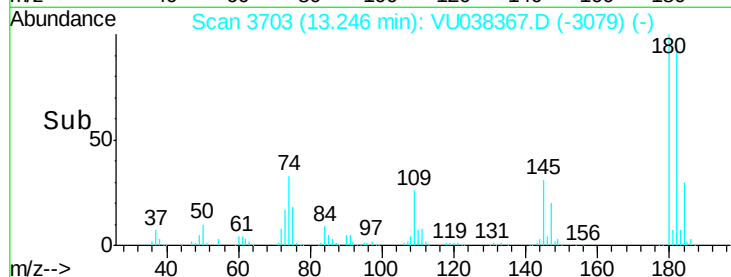
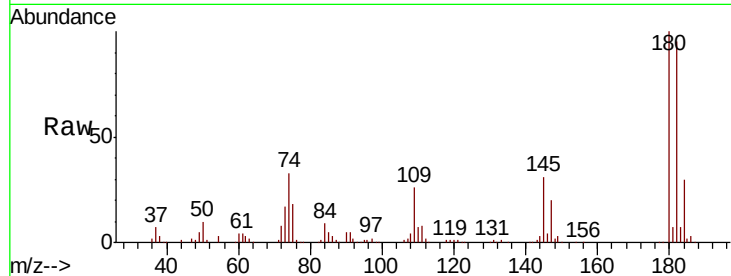




#67  
 1,3,5-Trichlorobenzene  
 Concen: 50.959 ug/L  
 RT: 13.25 min Scan# 3703  
 Delta R.T. 0.01 min  
 Lab File: VU038367.D  
 Acq: 29 May 2020 08:47

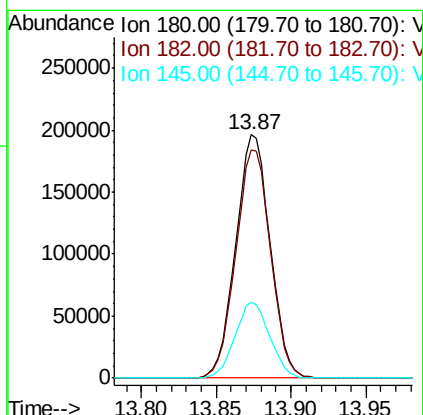
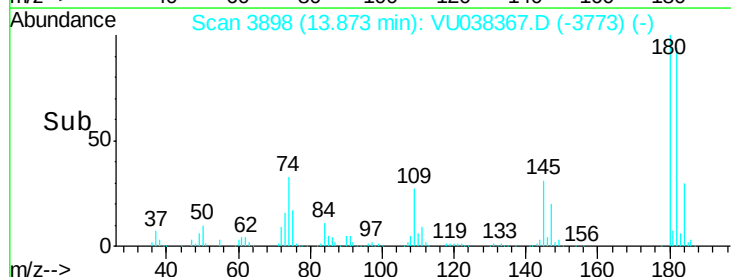
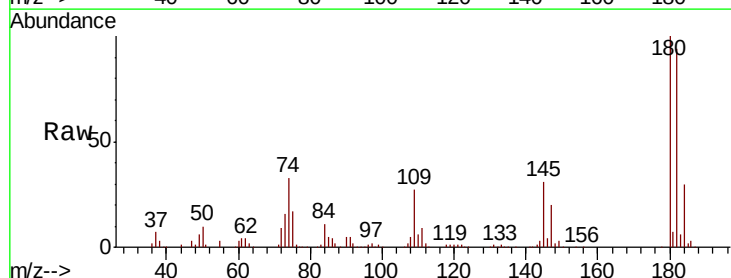
Instrument :  
 MSVOA\_U  
 ClientSampleId :

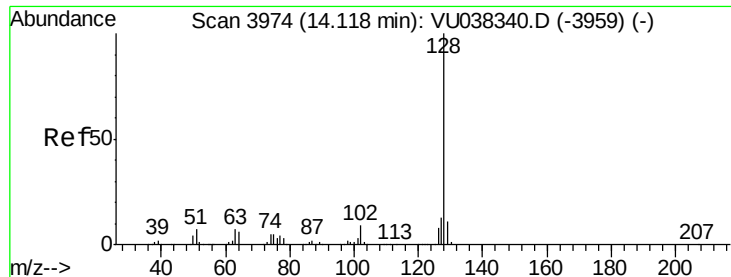
|             |       |            |
|-------------|-------|------------|
| Tot Ion:180 | Resp: | 334552     |
| Ion Ratio   | Lower | Upper      |
| 180         | 100   |            |
| 182         | 94.8  | 77.4 116.2 |
| 184         | 30.3  | 24.3 36.5  |
| 145         | 30.5  | 24.5 36.7  |



#68  
 1,2,4-trichlorobenzene  
 Concen: 49.924 ug/L  
 RT: 13.87 min Scan# 3898  
 Delta R.T. 0.00 min  
 Lab File: VU038367.D  
 Acq: 29 May 2020 08:47

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:180 | Resp: | 314353     |
| Ion Ratio   | Lower | Upper      |
| 180         | 100   |            |
| 182         | 94.6  | 77.1 115.7 |
| 145         | 31.2  | 25.8 38.8  |





#69

Naphthalene

Concen: 50.134 ug/L

RT: 14.12 min Scan# 3976

Delta R.T. 0.01 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

Instrument :

MSVOA\_U

ClientSampleId :

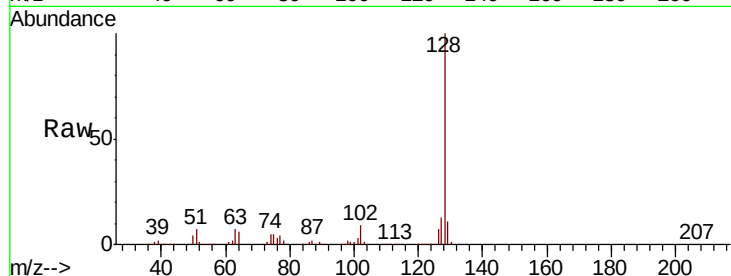
Tot Ion:128 Resp: 1130275

Ion Ratio Lower Upper

128 100

127 13.1 10.4 15.6

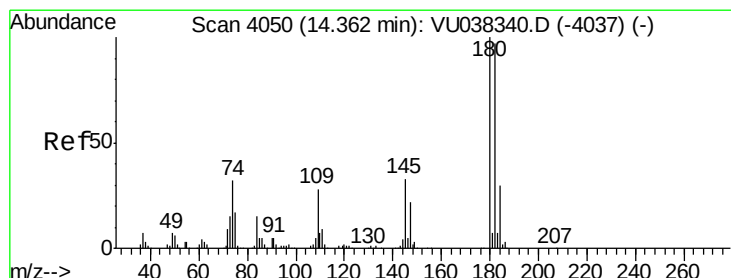
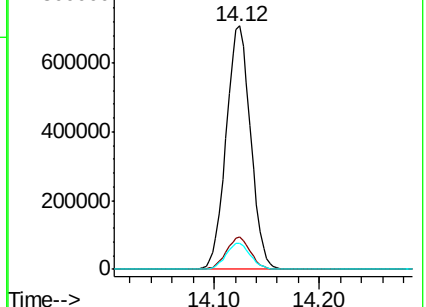
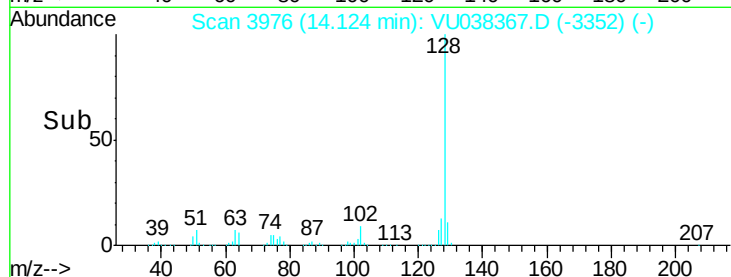
129 10.8 8.6 12.8



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



#70

1,2,3-Trichlorobenzene

Concen: 49.987 ug/L

RT: 14.37 min Scan# 4053

Delta R.T. 0.01 min

Lab File: VU038367.D

Acq: 29 May 2020 08:47

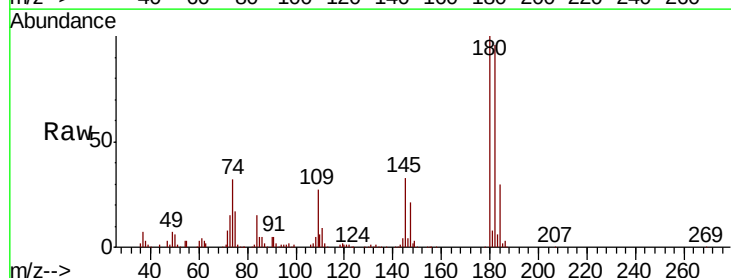
Tgt Ion:180 Resp: 314425

Ion Ratio Lower Upper

180 100

182 95.1 75.5 113.3

145 33.6 26.6 40.0



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

