

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_U\DATA\VU030719\  
 Data File : VU029838.D  
 Acq On : 06 Mar 2019 14:15  
 Operator : JC/SP  
 Sample : MDL01  
 Misc : 25.0mL/MSVOA\_U/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL01

Manual Integrations  
 APPROVED

MMDadoda  
 3/11/2019 4:49:33 PM

Quant Time: Mar 08 22:22:50 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\524U030719DW.M  
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER  
 QLast Update : Fri Mar 08 00:30:10 2019  
 Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|--------------------|------|------|----------|------|-------|----------|
| 1) Fluorobenzene   | 5.74 | 96   | 62136    | 1.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                            |       |     |          |      |        |      |
|----------------------------|-------|-----|----------|------|--------|------|
| 57) 4-Bromofluorobenzene   | 10.31 | 95  | 18831    | 0.84 | ug/l   | 0.00 |
| Spiked Amount 1.000        |       |     | Recovery | =    | 84.00% |      |
| 68) 1,2-Dichlorobenzene-d4 | 11.86 | 152 | 23132    | 0.89 | ug/l   | 0.00 |
| Spiked Amount 1.000        |       |     | Recovery | =    | 89.00% |      |

## Target Compounds

|                               | R.T. | QIon | Response | Conc  | Units  | Qvalue |
|-------------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85   | 4877     | 0.235 | ug/l   | 100    |
| 3) Chloromethane              | 1.32 | 50   | 5253     | 0.284 | ug/l   | 93     |
| 4) Vinyl Chloride             | 1.40 | 62   | 5433     | 0.261 | ug/l   | 91     |
| 5) Bromomethane               | 1.63 | 94   | 4374     | 0.308 | ug/l   | 92     |
| 6) Chloroethane               | 1.70 | 64   | 2905     | 0.233 | ug/l # | 88     |
| 7) Trichlorofluoromethane     | 1.88 | 101  | 6684     | 0.236 | ug/l   | 97     |
| 8) 1,1,2-Trichloro-1,2,2-trif | 2.28 | 101  | 4239     | 0.257 | ug/l   | 96     |
| 9) 1,1-Dichloroethene         | 2.28 | 96   | 4226     | 0.261 | ug/l   | 87     |
| 10) Iodomethane               | 2.41 | 142  | 3913     | 0.786 | ug/l   | 99     |
| 11) Allyl Chloride            | 2.59 | 41   | 5515     | 0.243 | ug/l   | 97     |
| 12) Acrylonitrile             | 2.94 | 53   | 2206     | 0.626 | ug/l # | 84     |
| 13) Acetone                   | 2.32 | 43   | 4525     | 1.550 | ug/l   | 99     |
| 14) Carbon Disulfide          | 2.47 | 76   | 14720    | 0.281 | ug/l   | 97     |
| 15) Methylene Chloride        | 2.70 | 84   | 7234     | 0.373 | ug/l   | 93     |
| 16) trans-1,2-Dichloroethene  | 2.98 | 96   | 4975     | 0.272 | ug/l   | 95     |
| 17) 1,1-Dichloroethane        | 3.44 | 63   | 8245     | 0.270 | ug/l   | 98     |
| 18) 2-Butanone                | 4.29 | 43   | 4220     | 1.064 | ug/l   | 97     |
| 19) Cyclohexane               | 4.99 | 56   | 5619m    | 0.237 | ug/l   |        |
| 20) Methylcyclohexane         | 6.41 | 83   | 6332     | 0.229 | ug/l   | 96     |
| 21) 2,2-Dichloropropane       | 4.21 | 77   | 6667     | 0.267 | ug/l   | 96     |
| 22) cis-1,2-Dichloroethene    | 4.22 | 96   | 4789     | 0.247 | ug/l   | 93     |
| 23) Diethyl Ether             | 2.10 | 59   | 3020     | 0.249 | ug/l # | 76     |
| 24) tert-Butyl Alcohol        | 2.84 | 59   | 4600     | 3.680 | ug/l # | 83     |
| 25) Methyl tert-Butyl Ether   | 3.00 | 73   | 10657    | 0.262 | ug/l # | 91     |
| 26) Bromochloromethane        | 4.54 | 128  | 2134     | 0.248 | ug/l   | 95     |
| 27) Chloroform                | 4.67 | 83   | 7878     | 0.255 | ug/l   | 87     |
| 28) 1,1,1-Trichloroethane     | 4.91 | 97   | 6006     | 0.229 | ug/l   | 88     |
| 29) 1,1-Dichloropropene       | 5.13 | 75   | 5815     | 0.249 | ug/l # | 86     |
| 30) Carbon Tetrachloride      | 5.12 | 117  | 5280m    | 0.231 | ug/l   |        |
| 31) Isopropyl Ether           | 3.57 | 45   | 10646    | 0.253 | ug/l   | 93     |
| 32) Ethyl-t-butyl ether       | 4.07 | 59   | 10419    | 0.254 | ug/l   | 97     |
| 33) Tert-Amyl methyl ether    | 5.58 | 73   | 9754     | 0.258 | ug/l   | 95     |
| 34) Propionitrile             | 4.35 | 54   | 1177m    | 0.998 | ug/l   |        |
| 35) Benzene                   | 5.38 | 78   | 16848    | 0.245 | ug/l   | 97     |
| 36) 1,2-Dichloroethane        | 5.41 | 62   | 4299     | 0.229 | ug/l   | 95     |
| 37) Trichloroethene           | 6.18 | 130  | 5280     | 0.263 | ug/l   | 85     |
| 38) 1,2-Dichloropropane       | 6.43 | 63   | 3831     | 0.220 | ug/l   | 98     |
| 39) Methacrylonitrile         | 4.56 | 41   | 1366m    | 0.275 | ug/l   |        |
| 41) Tetrahydrofuran           | 4.66 | 42   | 1371     | 0.528 | ug/l # | 82     |
| 42) 1-Chlorobutane            | 5.06 | 56   | 7601     | 0.255 | ug/l   | 92     |
| 43) Dibromomethane            | 6.56 | 93   | 2263     | 0.251 | ug/l   | 92     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_U\DATA\VU030719\  
 Data File : VU029838.D  
 Acq On : 06 Mar 2019 14:15  
 Operator : JC/SP  
 Sample : MDL01  
 Misc : 25.0mL/MSVOA\_U/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL01

Manual Integrations  
 APPROVED

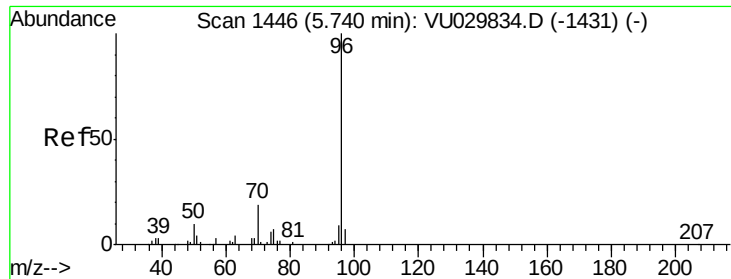
MMDadoda  
 3/11/2019 4:49:33 PM

Quant Time: Mar 08 22:22:50 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\524U030719DW.M  
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER  
 QLast Update : Fri Mar 08 00:30:10 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| -----                         |       |      |          |       |        |          |
| 44) Bromodichloromethane      | 6.75  | 83   | 4622     | 0.209 | ug/l # | 89       |
| 45) 4-Methyl-2-Pentanone      | 7.47  | 43   | 10943    | 1.165 | ug/l   | 92       |
| 46) t-1,4-Dichloro-2-butene   | 10.52 | 75   | 1349m    | 0.343 | ug/l   |          |
| 47) Methyl methacrylate       | 6.63  | 69   | 3152     | 0.408 | ug/l   | 95       |
| 49) Toluene                   | 7.64  | 92   | 9569     | 0.227 | ug/l   | 99       |
| 50) t-1,3-Dichloropropene     | 7.89  | 75   | 4215     | 0.217 | ug/l   | 96       |
| 51) cis-1,3-Dichloropropene   | 7.27  | 75   | 5227     | 0.218 | ug/l   | 92       |
| 52) 1,1,2-Trichloroethane     | 8.07  | 97   | 3166     | 0.237 | ug/l   | 95       |
| 53) 1,3-Dichloropropane       | 8.24  | 76   | 4989     | 0.228 | ug/l # | 85       |
| 54) 2-Hexanone                | 8.37  | 43   | 6936     | 1.063 | ug/l   | 95       |
| 56) 1,2-Dibromoethane         | 8.59  | 107  | 3111     | 0.246 | ug/l   | 93       |
| 58) Tetrachloroethene         | 8.22  | 164  | 5169     | 0.252 | ug/l   | 92       |
| 59) Chlorobenzene             | 9.12  | 112  | 12064    | 0.249 | ug/l   | 99       |
| 60) 1,1,1,2-Tetrachloroethane | 9.21  | 131  | 3882     | 0.223 | ug/l   | 92       |
| 61) Pentachloroethane         | 11.10 | 117  | 2682     | 0.222 | ug/l   | 92       |
| 62) Hexachloroethane          | 12.14 | 117  | 2763     | 0.217 | ug/l   | 95       |
| 63) Ethyl Benzene             | 9.25  | 91   | 17050    | 0.215 | ug/l   | 100      |
| 64) m/p-Xylenes               | 9.37  | 106  | 13981    | 0.446 | ug/l   | 99       |
| 65) o-Xylene                  | 9.78  | 106  | 6600     | 0.219 | ug/l   | 95       |
| 66) Styrene                   | 9.79  | 104  | 10345    | 0.207 | ug/l   | 99       |
| 67) Bromoform                 | 9.95  | 173  | 2089     | 0.225 | ug/l # | 94       |
| 69) Isopropylbenzene          | 10.16 | 105  | 16667    | 0.209 | ug/l   | 98       |
| 70) 1,1,2,2-Tetrachloroethane | 10.46 | 83   | 4061     | 0.250 | ug/l # | 91       |
| 71) 1,2,3-Trichloropropane    | 10.49 | 75   | 2656m    | 0.220 | ug/l   |          |
| 72) Bromobenzene              | 10.46 | 156  | 5257     | 0.249 | ug/l   | 96       |
| 73) n-propylbenzene           | 10.58 | 120  | 4572     | 0.203 | ug/l   | 99       |
| 74) 2-Chlorotoluene           | 10.66 | 126  | 4806     | 0.241 | ug/l   | 83       |
| 75) 1,3,5-Trimethylbenzene    | 10.77 | 105  | 13878    | 0.206 | ug/l   | 100      |
| 76) 4-Chlorotoluene           | 10.77 | 126  | 4168     | 0.205 | ug/l   | 96       |
| 77) tert-Butylbenzene         | 11.10 | 119  | 13930    | 0.209 | ug/l   | 97       |
| 78) 1,2,4-Trimethylbenzene    | 11.15 | 105  | 13789    | 0.203 | ug/l   | 94       |
| 79) sec-Butylbenzene          | 11.32 | 105  | 17890    | 0.203 | ug/l   | 97       |
| 82) 1,3-Dichlorobenzene       | 11.41 | 146  | 9890     | 0.236 | ug/l   | 96       |
| 83) 1,4-Dichlorobenzene       | 11.51 | 146  | 9378     | 0.229 | ug/l   | 97       |
| 85) 1,2-Dichlorobenzene       | 11.88 | 146  | 9547     | 0.242 | ug/l   | 97       |
| 87) 1,2,4-Trichlorobenzene    | 13.51 | 180  | 5381     | 0.213 | ug/l # | 88       |
| 88) Hexachlorobutadiene       | 13.69 | 225  | 3388     | 0.213 | ug/l   | 97       |
| 89) Naphthalene               | 13.75 | 128  | 7724     | 0.609 | ug/l # | 91       |
| 90) 1,2,3-Trichlorobenzene    | 13.99 | 180  | 5533     | 0.233 | ug/l   | 97       |
| -----                         |       |      |          |       |        |          |

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





#1

Fluorobenzene

Concen: 1.000 ug/l

RT: 5.74 min Scan# 1446

Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

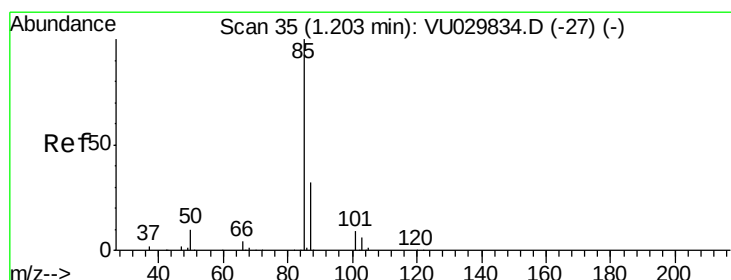
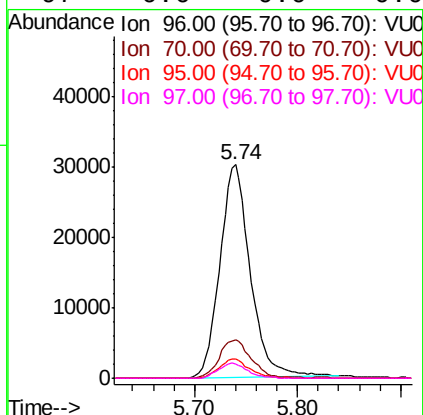
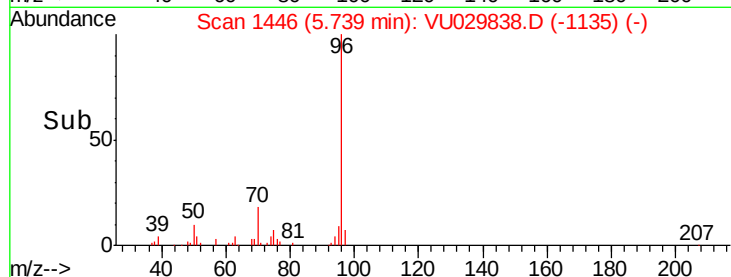
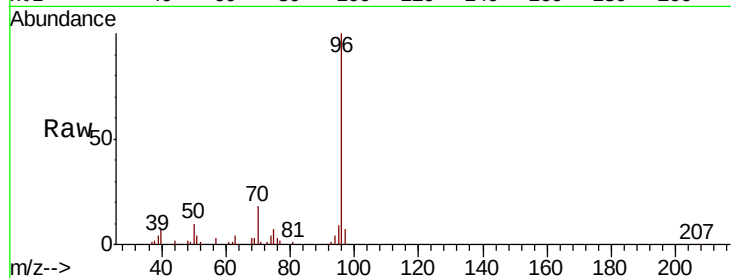
ClientSampleId :

MDL01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 96    | Resp: | 62136 |
| Ion      | Ratio | Lower | Upper |
| 96       | 100   |       |       |
| 70       | 18.9  | 14.4  | 21.6  |
| 95       | 8.8   | 7.0   | 10.6  |
| 97       | 6.6   | 0.0   | 0.0#  |

Manual Integrations  
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#2

Dichlorodifluoromethane

Concen: 0.235 ug/l

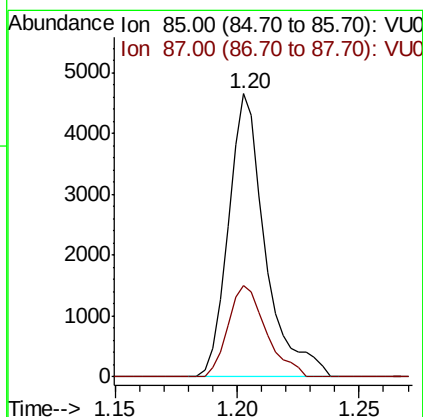
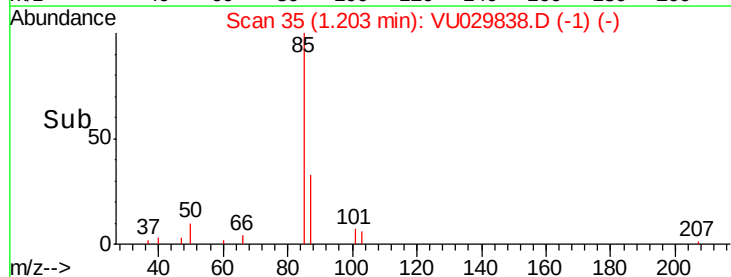
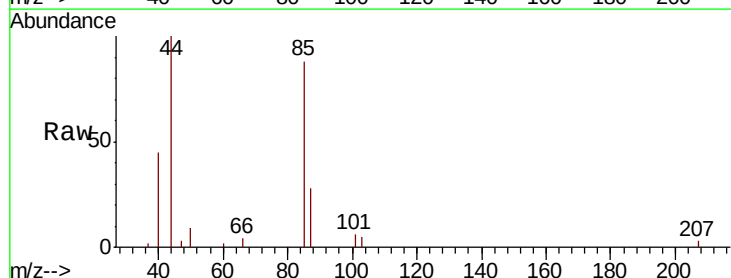
RT: 1.20 min Scan# 35

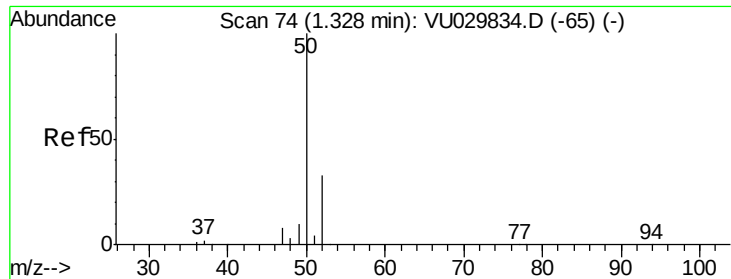
Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 85    | Resp: | 4877  |
| Ion      | Ratio | Lower | Upper |
| 85       | 100   |       |       |
| 87       | 32.5  | 16.2  | 48.6  |





#3

Chloromethane

Concen: 0.284 ug/l

RT: 1.32 min Scan# 73

Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampled :

MDL01

Tgt Ion: 50 Resp: 5253

Ion Ratio Lower Upper

50 100

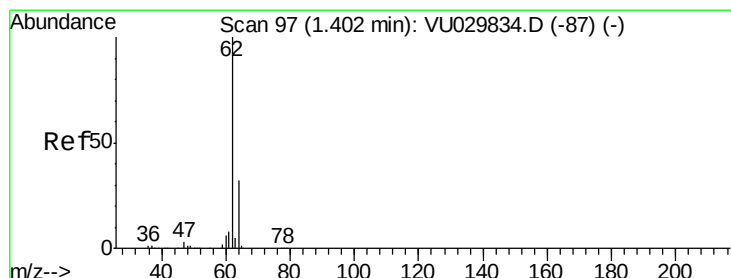
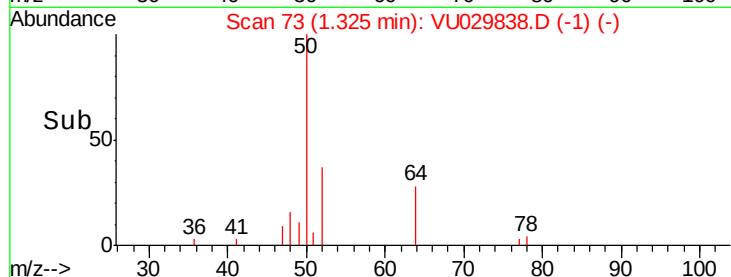
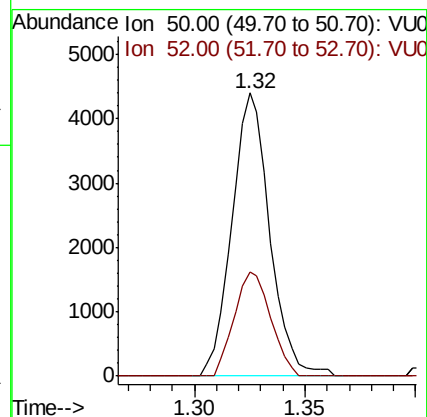
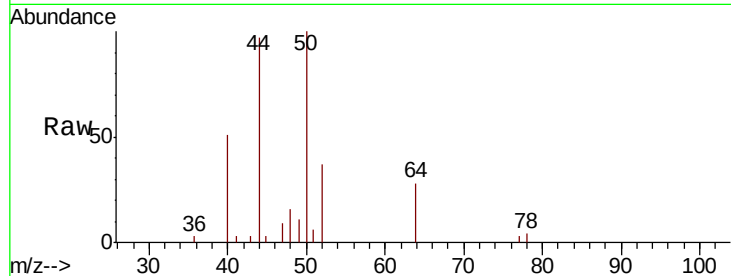
52 37.0 26.5 39.7

Manual Integrations

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3/11/2019 4:49:33 PM



#4

Vinyl Chloride

Concen: 0.261 ug/l

RT: 1.40 min Scan# 96

Delta R.T. -0.00 min

Lab File: VU029838.D

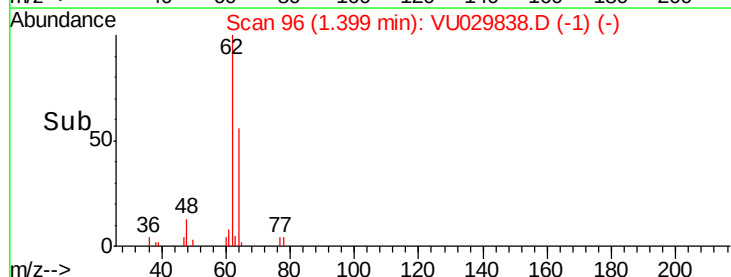
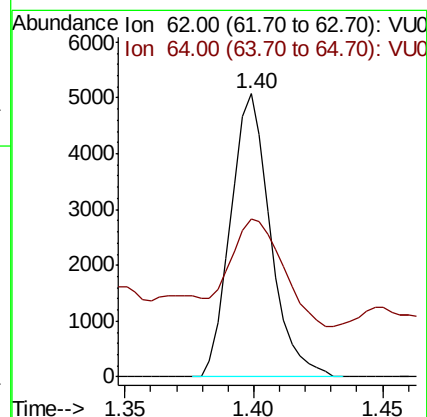
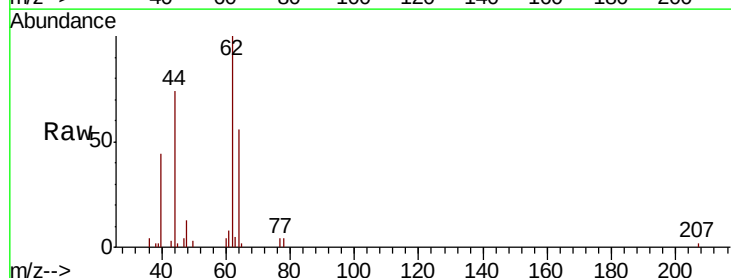
Acq: 06 Mar 2019 14:15

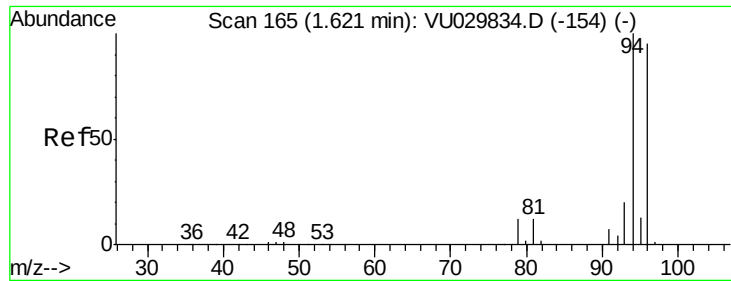
Tgt Ion: 62 Resp: 5433

Ion Ratio Lower Upper

62 100

64 37.2 25.7 38.5





#5

Bromomethane

Concen: 0.308 ug/l

RT: 1.63 min Scan# 167

Delta R.T. 0.01 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampleId :

MDL01

Tgt Ion: 94 Resp: 4374

Ion Ratio Lower Upper

94 100

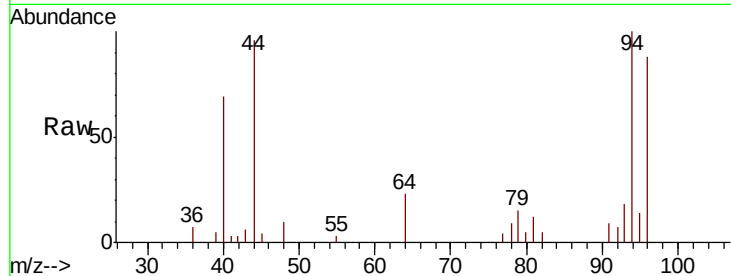
96 88.2 76.4 114.6

Manual Integrations

APPROVED

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Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0

1.63

4000

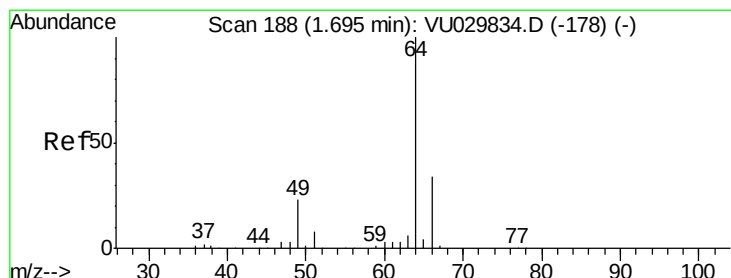
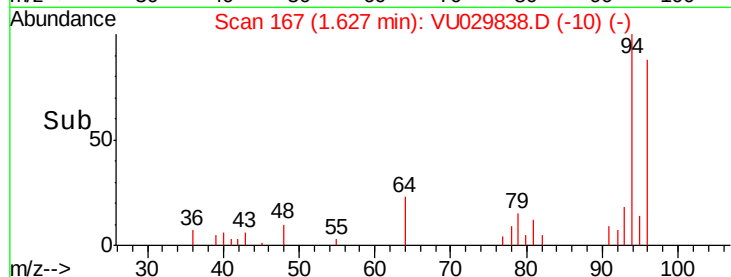
3000

2000

1000

0

Time-->



#6

Chloroethane

Concen: 0.233 ug/l

RT: 1.70 min Scan# 189

Delta R.T. 0.00 min

Lab File: VU029838.D

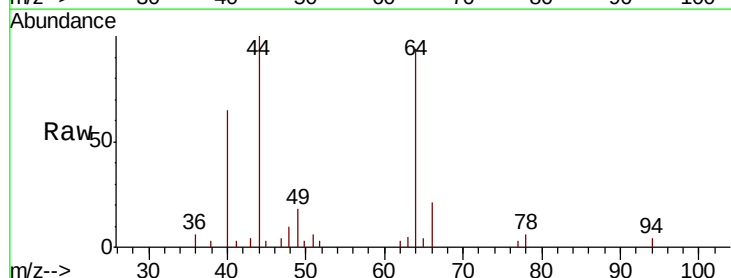
Acq: 06 Mar 2019 14:15

Tgt Ion: 64 Resp: 2905

Ion Ratio Lower Upper

64 100

66 27.1 27.3 40.9#



Abundance Ion 64.00 (63.70 to 64.70): VU0

Ion 66.00 (65.70 to 66.70): VU0

1.70

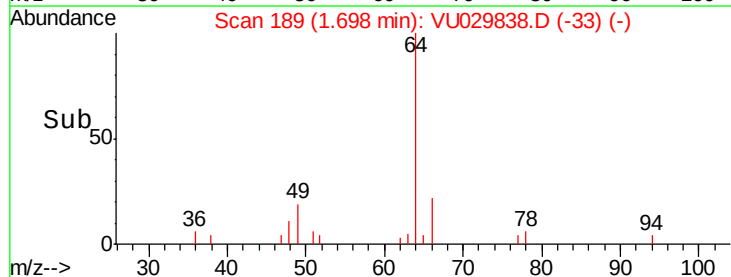
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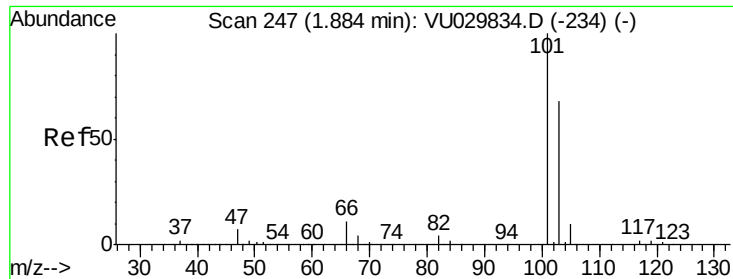
2000

1000

0

Time-->





#7

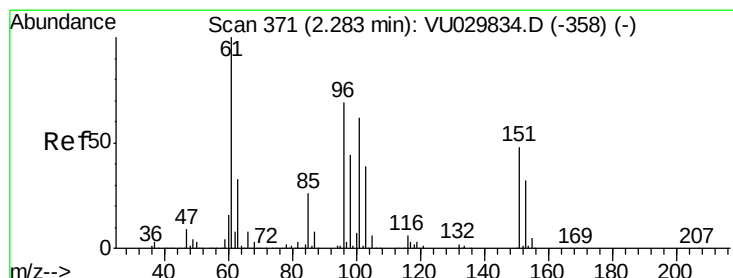
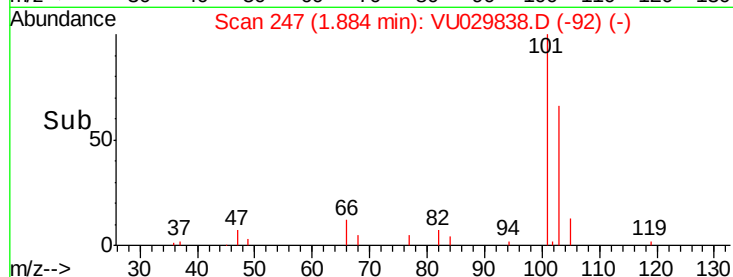
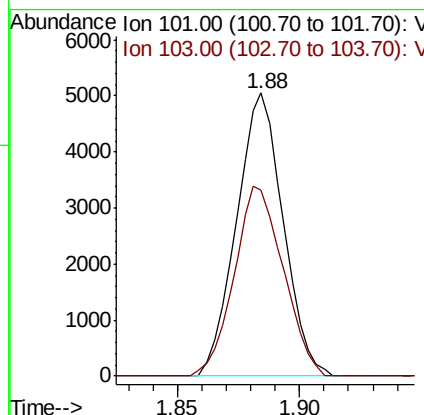
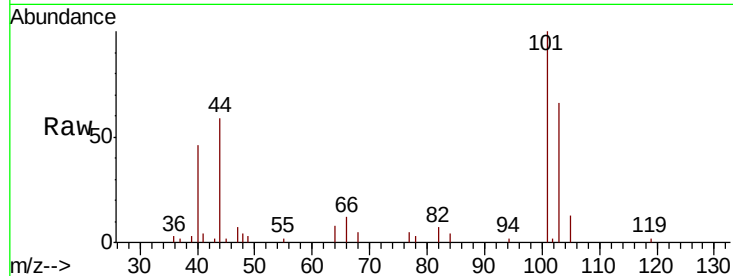
Trichlorofluoromethane  
Concen: 0.236 ug/l  
RT: 1.88 min Scan# 247  
Delta R.T. -0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

Instrument :  
MSVOA\_U  
ClientSampleId :  
MDL01

Tgt Ion:101 Resp: 6684  
Ion Ratio Lower Upper  
101 100  
103 65.6 54.2 81.2

Manual Integrations  
APPROVED

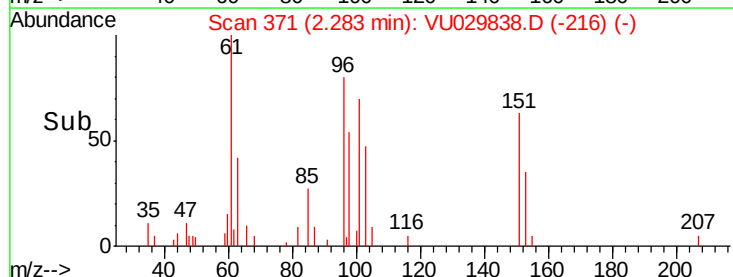
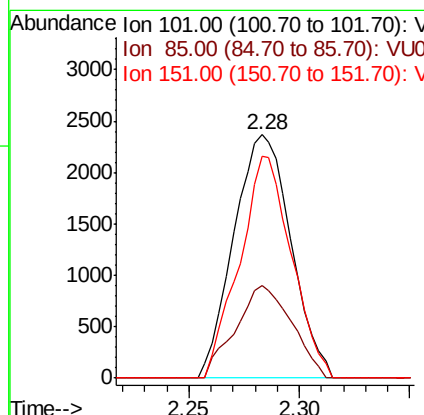
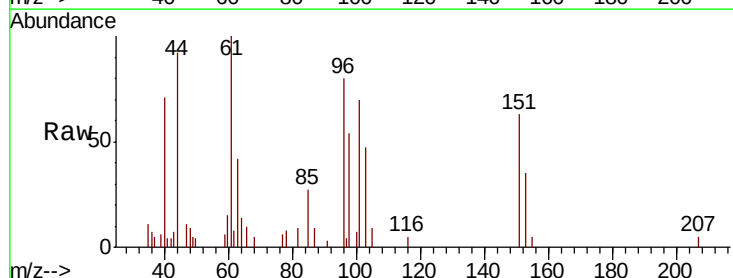
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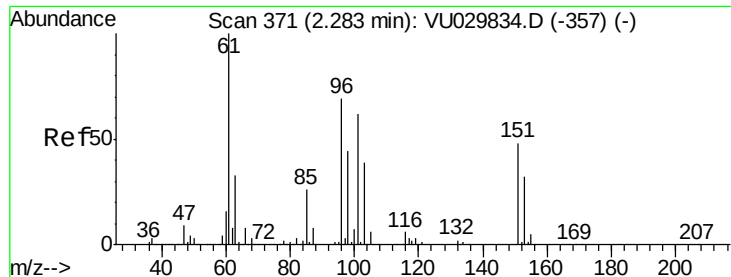
#8

1,1,2-Trichloro-1,2,2-trifluoroethane  
Concen: 0.257 ug/l  
RT: 2.28 min Scan# 371  
Delta R.T. -0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

Tgt Ion:101 Resp: 4239  
Ion Ratio Lower Upper  
101 100  
85 37.4 33.4 50.0  
151 83.1 64.6 97.0







#9

1,1-Dichloroethene

Concen: 0.261 ug/l

RT: 2.28 min Scan# 370

Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

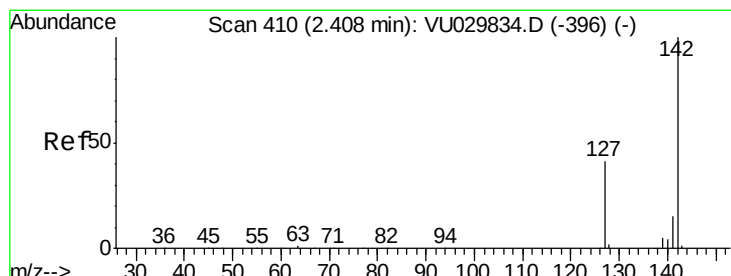
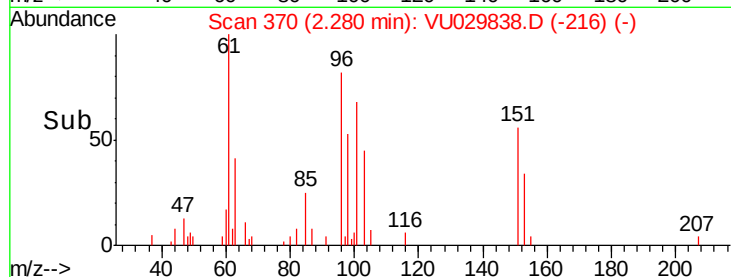
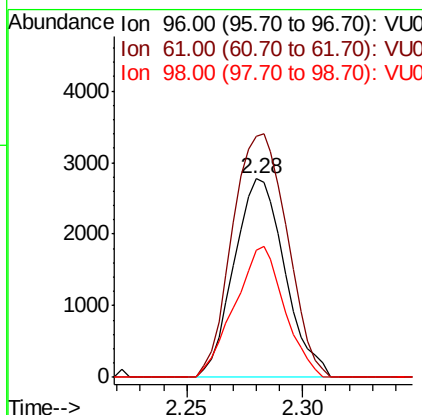
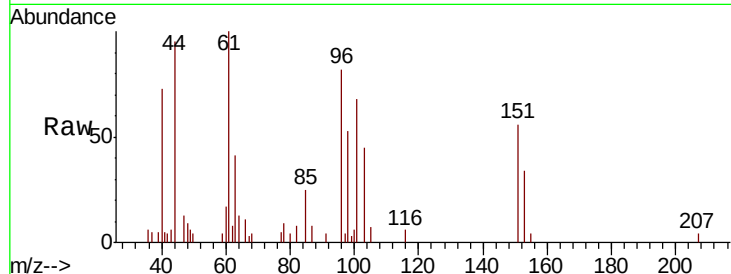
ClientSampled :

MDL01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 96    | Resp: | 4226  |
| Ion Ratio | Lower | Upper |       |
| 96        | 100   |       |       |
| 61        | 121.6 | 0.0   | 435.3 |
| 98        | 63.8  | 0.0   | 128.6 |

Manual Integrations  
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#10

Iodomethane

Concen: 0.786 ug/l

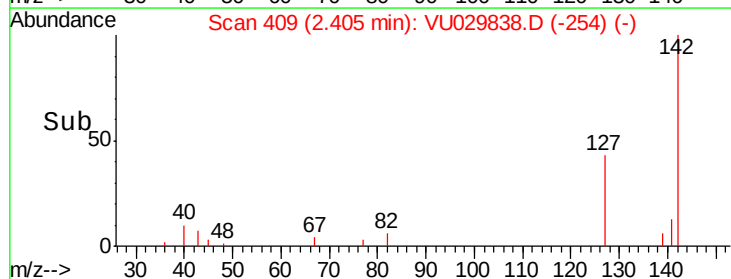
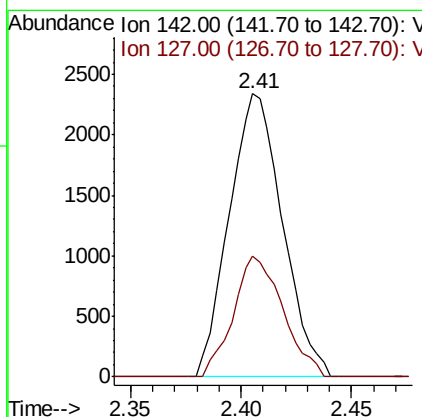
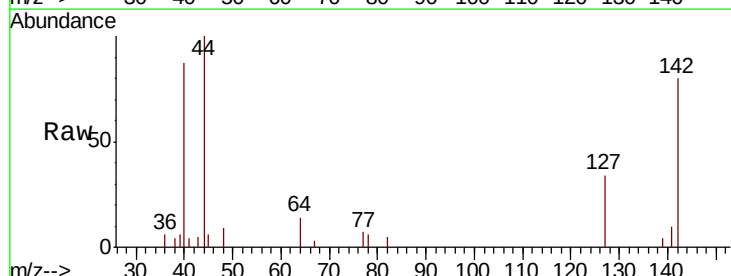
RT: 2.41 min Scan# 409

Delta R.T. -0.00 min

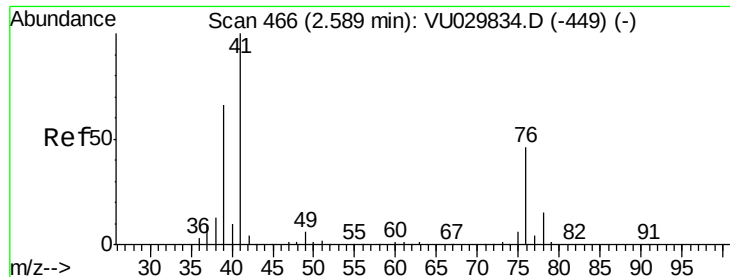
Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 142   | Resp: | 3913 |
| Ion Ratio | Lower | Upper |      |
| 142       | 100   |       |      |
| 127       | 39.7  | 32.3  | 48.5 |







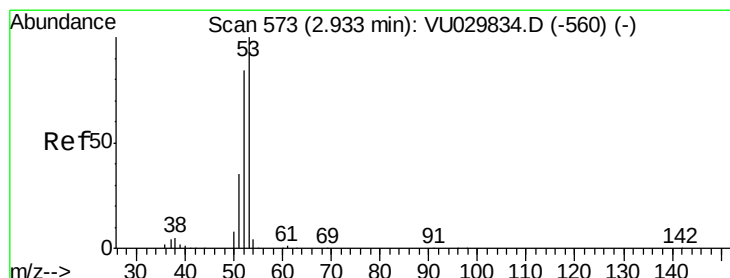
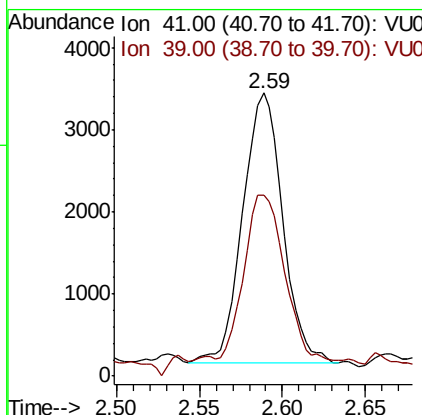
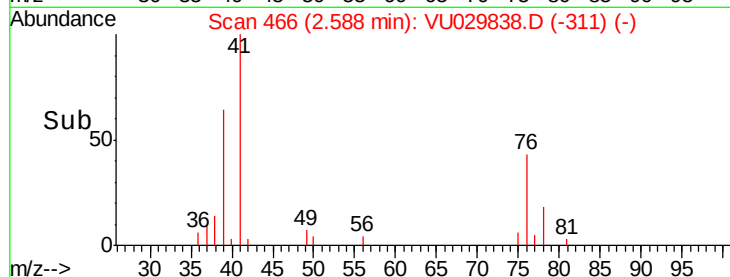
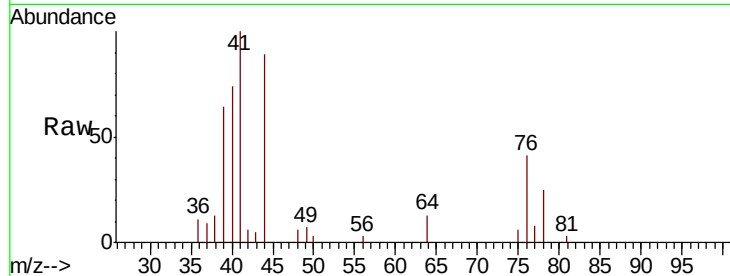
#11  
 Allyl Chloride  
 Concen: 0.243 ug/l  
 RT: 2.59 min Scan# 466  
 Delta R.T. -0.00 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL01

Tgt Ion: 41 Resp: 5515  
 Ion Ratio Lower Upper  
 41 100  
 39 66.7 51.6 77.4

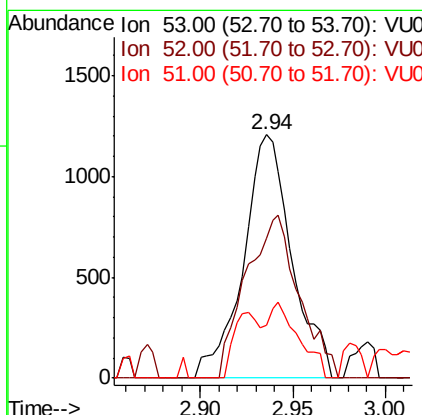
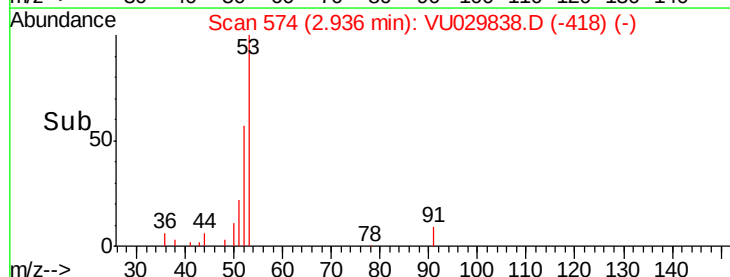
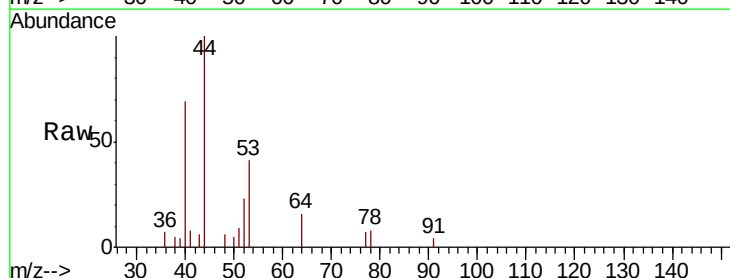
Manual Integrations  
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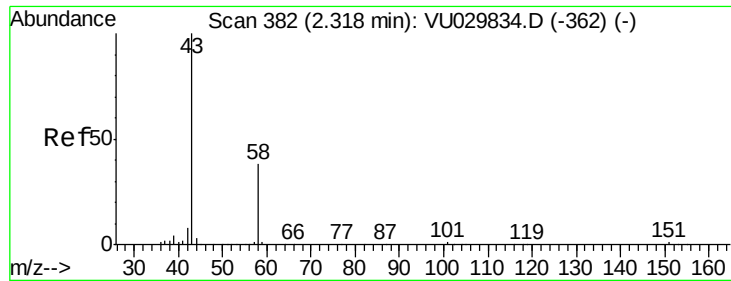
MMDadoda  
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#12  
 Acrylonitrile  
 Concen: 0.626 ug/l  
 RT: 2.94 min Scan# 574  
 Delta R.T. 0.00 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Tgt Ion: 53 Resp: 2206  
 Ion Ratio Lower Upper  
 53 100  
 52 72.9 66.5 99.7  
 51 20.3 28.6 42.8#





#13

Acetone

Concen: 1.550 ug/l

RT: 2.32 min Scan# 383

Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampled :

MDL01

Tgt Ion: 43 Resp: 4525

Ion Ratio Lower Upper

43 100

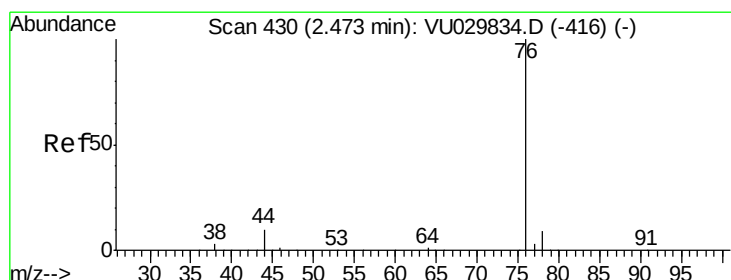
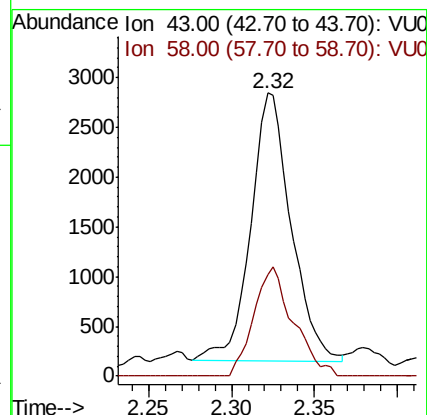
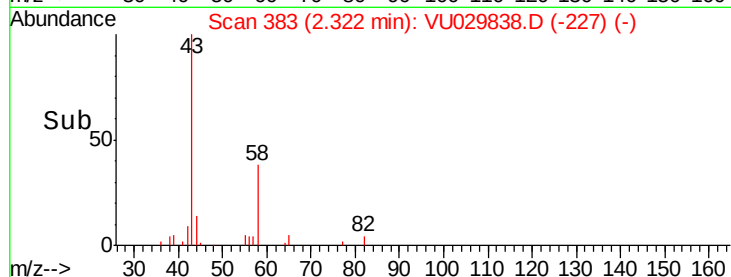
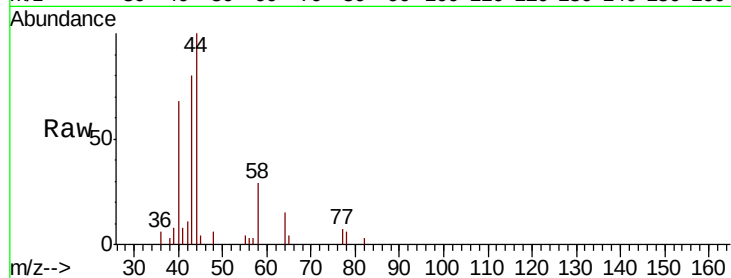
58 38.3 30.2 45.2

Manual Integrations

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#14

Carbon Disulfide

Concen: 0.281 ug/l

RT: 2.47 min Scan# 430

Delta R.T. -0.00 min

Lab File: VU029838.D

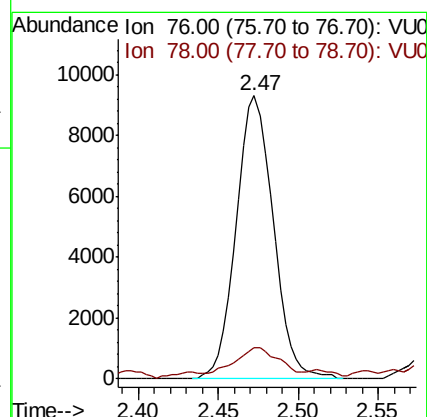
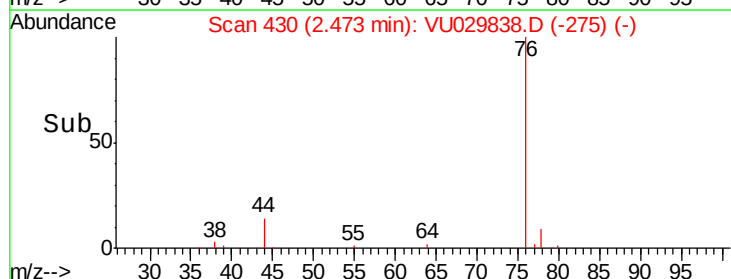
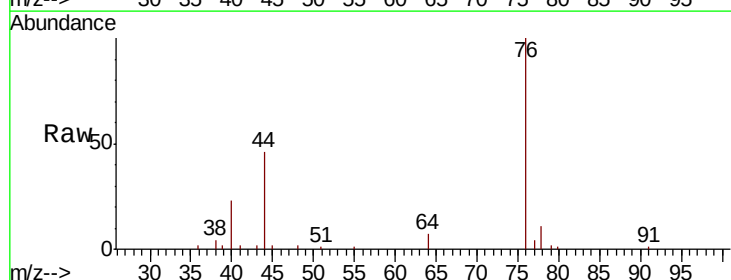
Acq: 06 Mar 2019 14:15

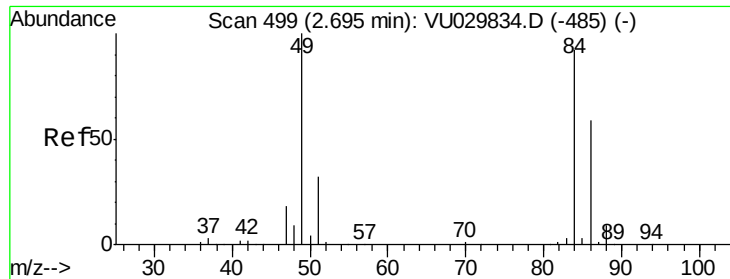
Tgt Ion: 76 Resp: 14720

Ion Ratio Lower Upper

76 100

78 9.9 7.2 10.8





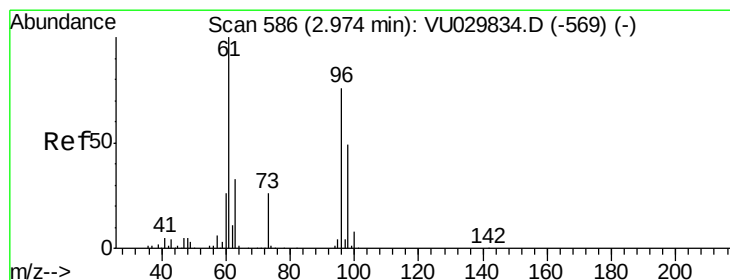
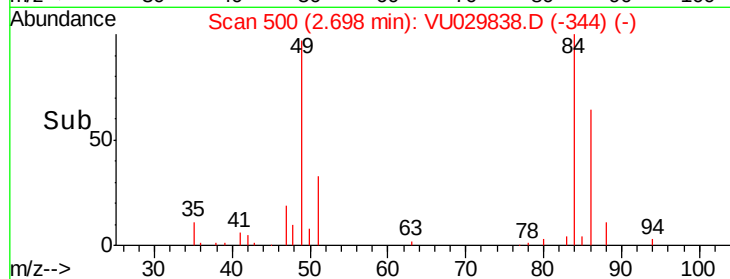
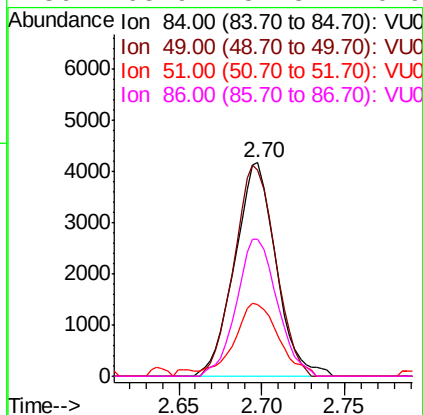
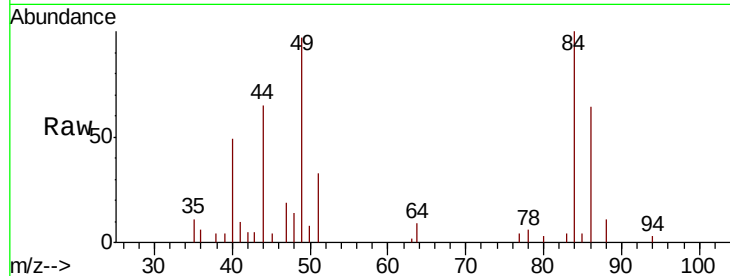
#15  
Methylene Chloride  
Concen: 0.373 ug/l  
RT: 2.70 min Scan# 500  
Delta R.T. 0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

Instrument :  
MSVOA\_U  
ClientSampled :  
MDL01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 7234  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 96.6  | 87.2  | 130.8 |
| 51       | 33.4  | 0.0   | 69.0  |
| 86       | 63.9  | 51.3  | 76.9  |

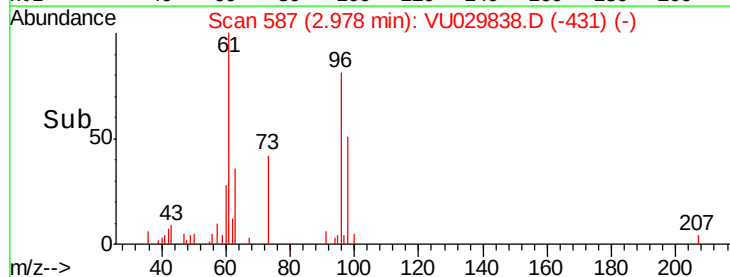
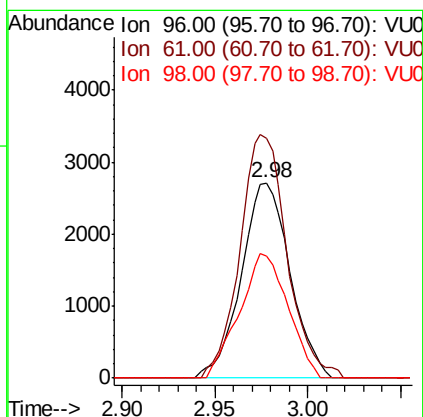
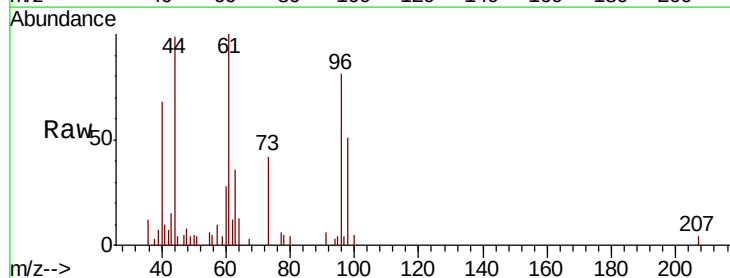
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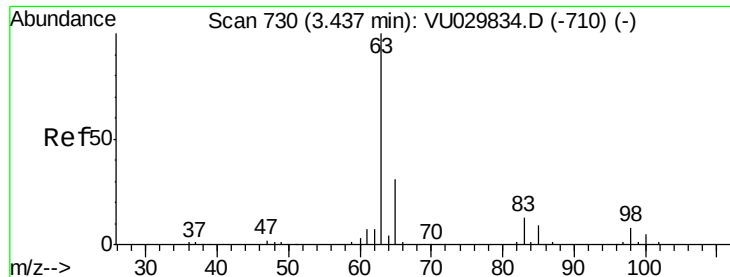
MMDadoda  
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#16  
trans-1,2-Dichloroethene  
Concen: 0.272 ug/l  
RT: 2.98 min Scan# 587  
Delta R.T. 0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 96    | Resp: | 4975  |
| Ion      | Ratio | Lower | Upper |
| 96       | 100   |       |       |
| 61       | 123.0 | 104.7 | 157.1 |
| 98       | 62.7  | 50.9  | 76.3  |





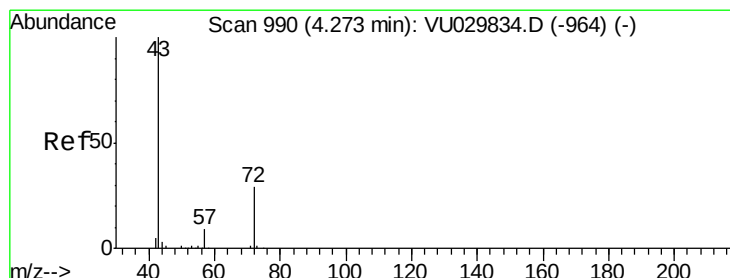
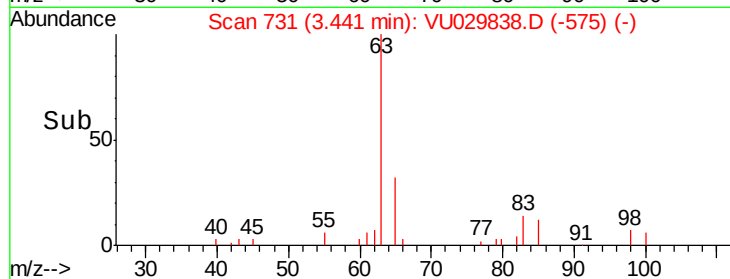
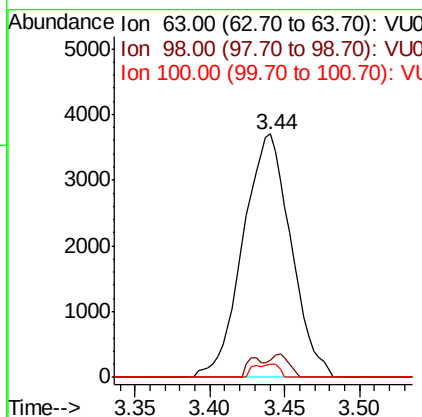
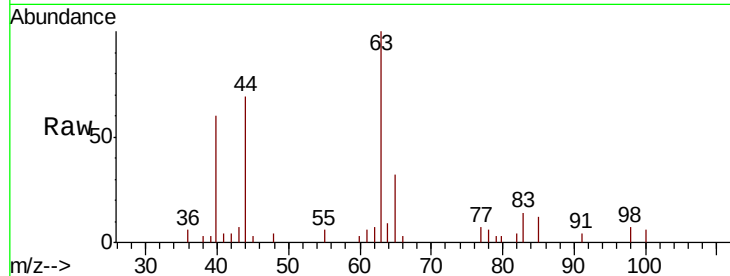
#17  
 1,1-Dichloroethane  
 Concen: 0.270 ug/l  
 RT: 3.44 min Scan# 731  
 Delta R.T. 0.00 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Instrument :  
 MSVOA\_U  
 ClientSampleID :  
 MDL01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 8245  |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 98       | 7.1   | 3.8   | 11.4  |
| 100      | 5.7   | 2.4   | 7.1   |

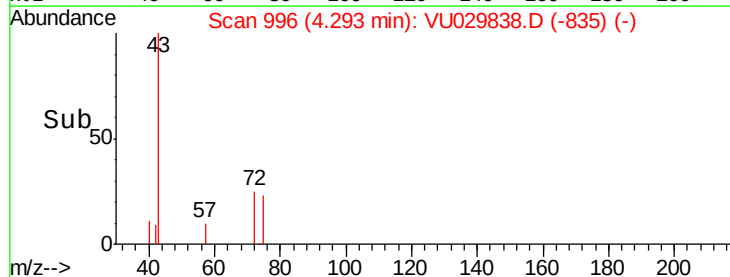
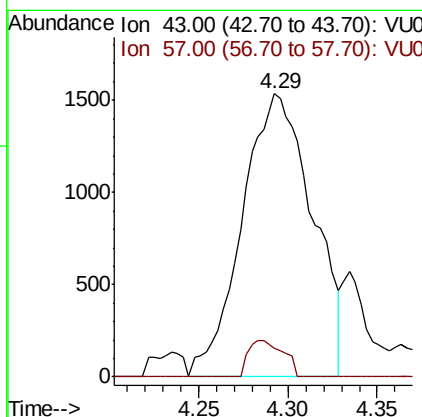
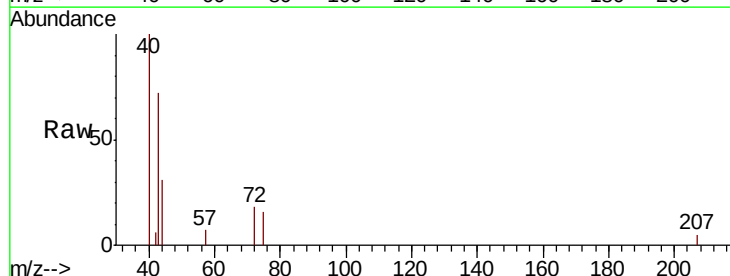
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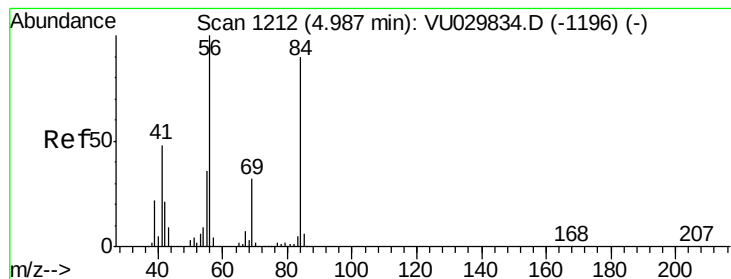
MMDadoda  
 3/11/2019 4:49:33 PM



#18  
 2-Butanone  
 Concen: 1.064 ug/l  
 RT: 4.29 min Scan# 996  
 Delta R.T. 0.02 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 4220  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 57       | 10.2  | 0.0   | 18.6  |





#19

Cyclohexane

Concen: 0.237 ug/l m

RT: 4.99 min Scan# 1212

Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampleId :

MDL01

Tgt Ion: 56 Resp: 5619

Ion Ratio Lower Upper

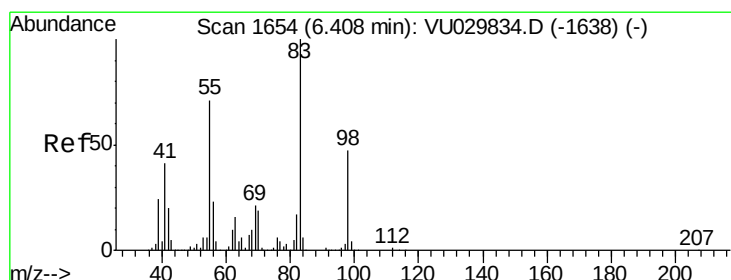
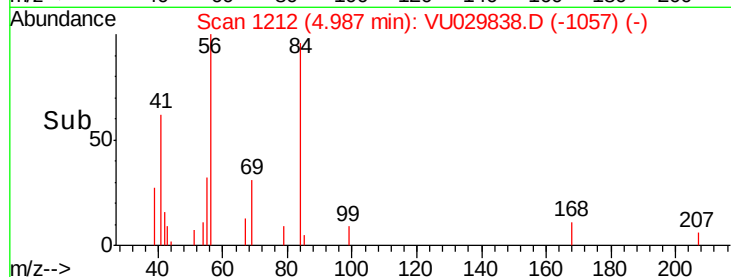
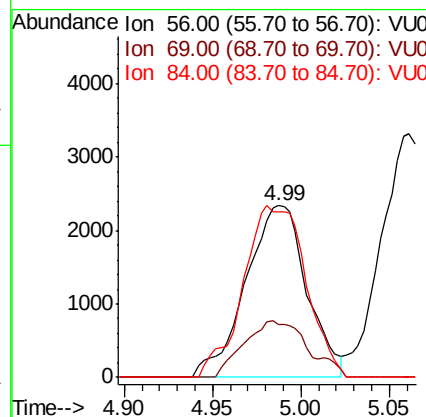
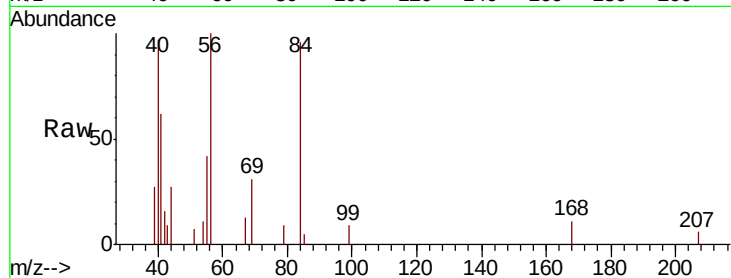
56 100

69 34.3 29.4 44.2

84 102.1 84.6 127.0

Manual Integrations  
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#20

Methylcyclohexane

Concen: 0.229 ug/l

RT: 6.41 min Scan# 1654

Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

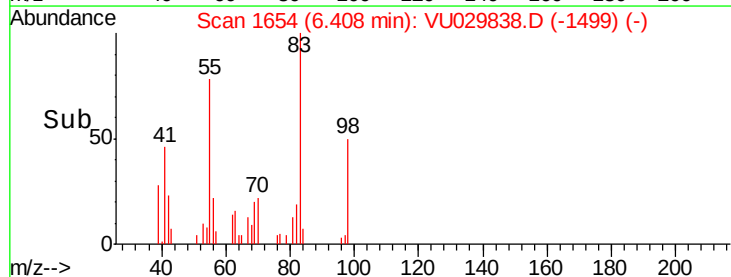
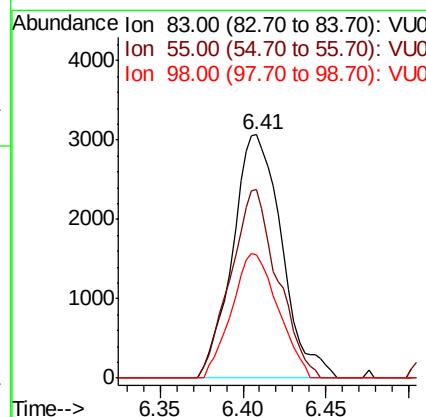
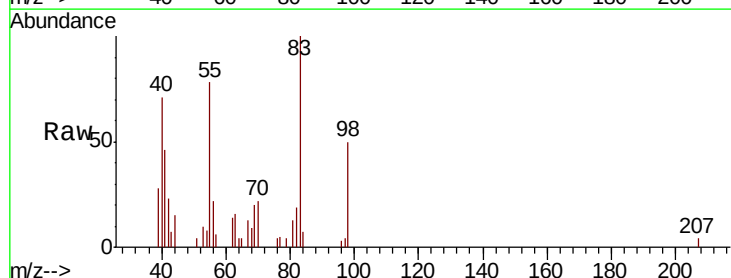
Tgt Ion: 83 Resp: 6332

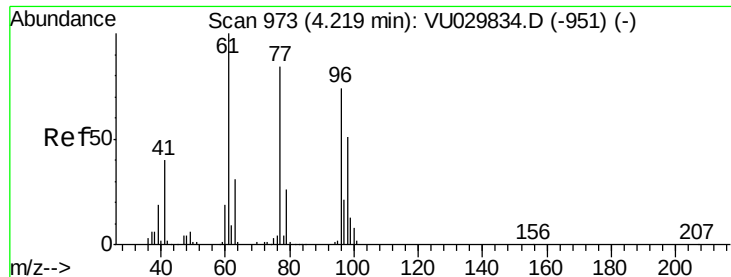
Ion Ratio Lower Upper

83 100

55 73.8 55.9 83.9

98 48.2 37.0 55.4





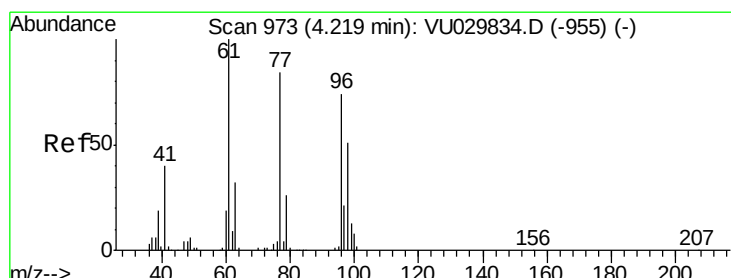
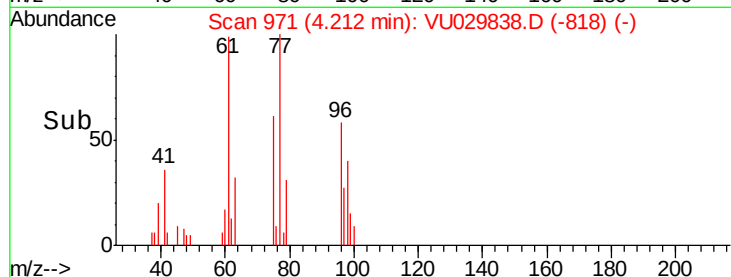
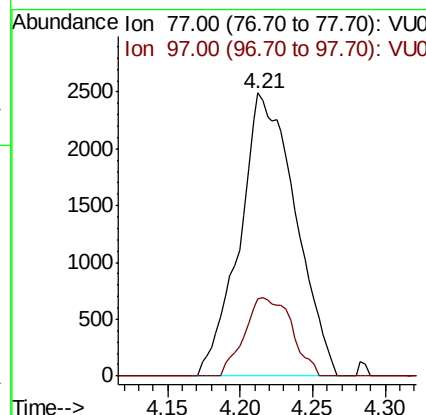
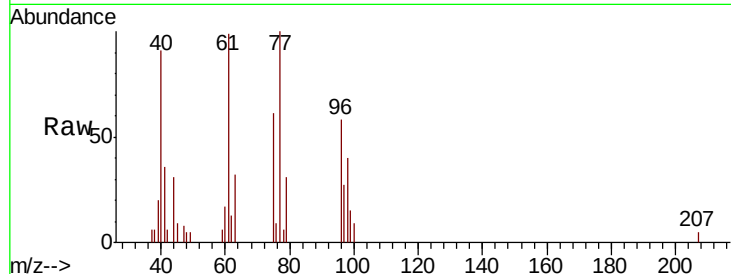
#21  
 2,2-Dichloropropane  
 Concen: 0.267 ug/l  
 RT: 4.21 min Scan# 971  
 Delta R.T. -0.01 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Instrument :  
 MSVOA\_U  
 ClientSampled :  
 MDL01

Tgt Ion: 77 Resp: 6667  
 Ion Ratio Lower Upper  
 77 100  
 97 23.4 20.2 30.2

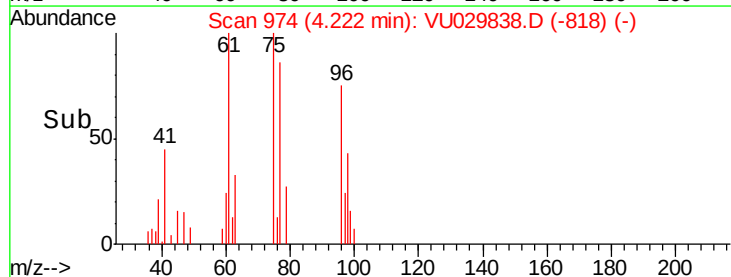
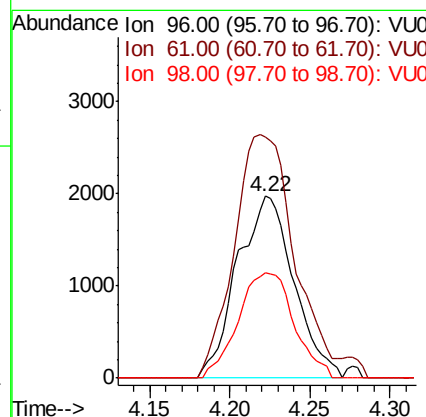
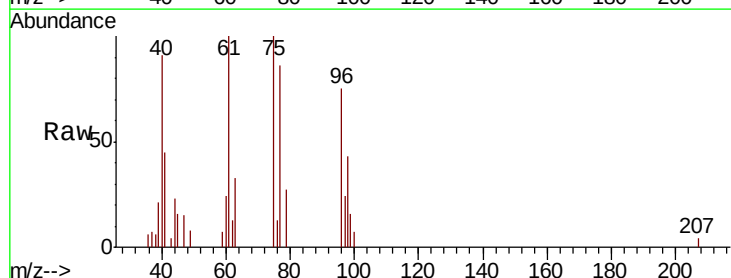
Manual Integrations  
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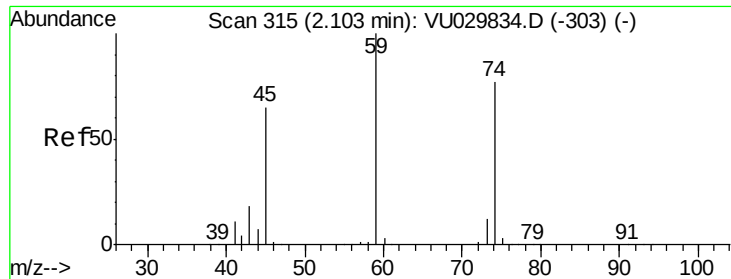
MMDadoda  
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#22  
 cis-1,2-Dichloroethene  
 Concen: 0.247 ug/l  
 RT: 4.22 min Scan# 974  
 Delta R.T. 0.00 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Tgt Ion: 96 Resp: 4789  
 Ion Ratio Lower Upper  
 96 100  
 61 141.6 0.0 339.0  
 98 57.1 33.1 99.5





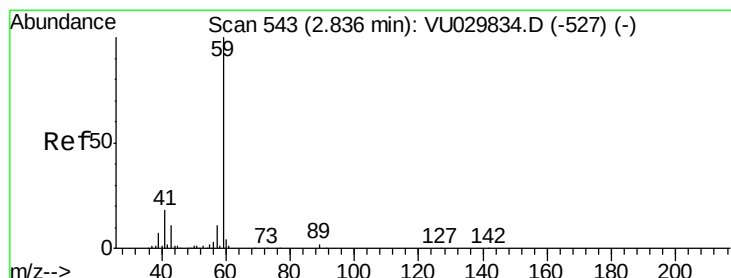
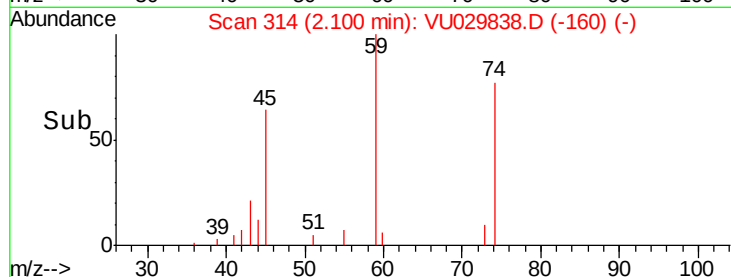
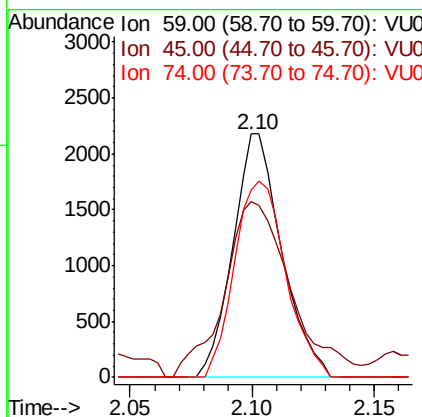
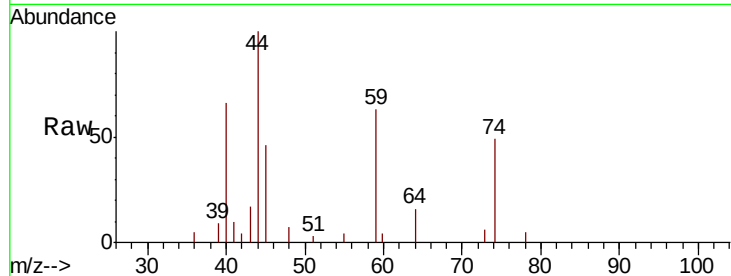
#23  
Diethyl Ether  
Concen: 0.249 ug/l  
RT: 2.10 min Scan# 314  
Delta R.T. -0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

Instrument :  
MSVOA\_U  
ClientSampleId :  
MDL01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 59      | 100   |       |       |
| 45      | 99.0  | 52.7  | 79.1# |
| 74      | 84.6  | 61.8  | 92.6  |

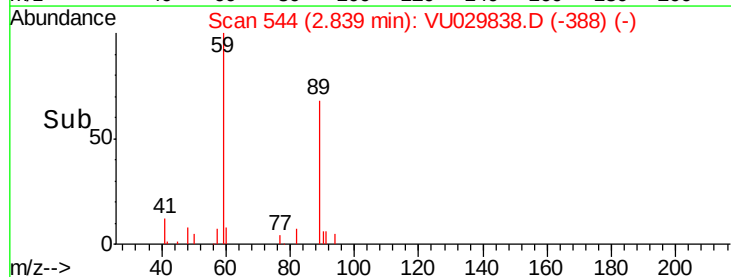
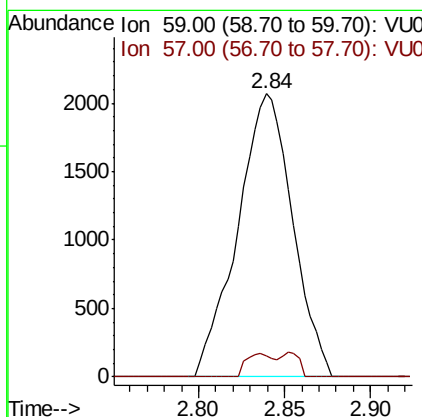
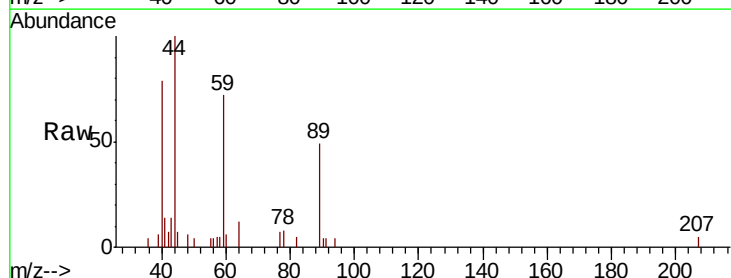
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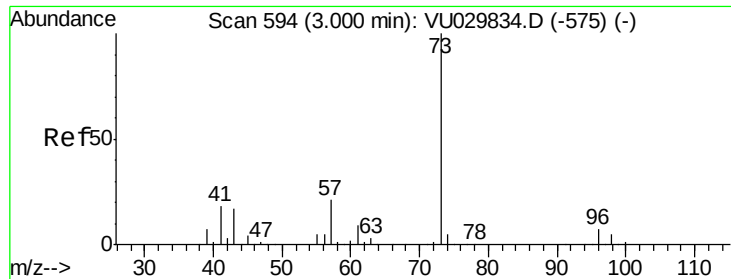


#24  
tert-Butyl Alcohol  
Concen: 3.680 ug/l  
RT: 2.84 min Scan# 544  
Delta R.T. 0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 59      | 100   |       |       |
| 57      | 4.2   | 8.5   | 12.7# |







#25

Methyl tert-Butyl Ether

Concen: 0.262 ug/l

RT: 3.00 min Scan# 595

Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampled :

MDL01

Tgt Ion: 73 Resp: 10657

Ion Ratio Lower Upper

73 100

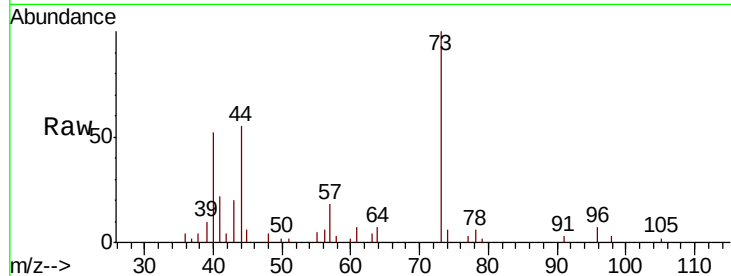
43 20.3 13.1 19.7#

Manual Integrations

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MMDadoda

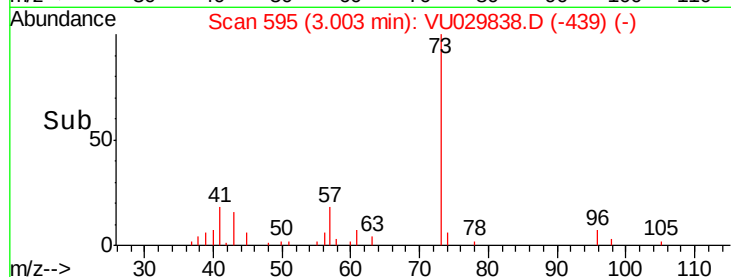
3/11/2019 4:49:33 PM



Abundance Ion 73.00 (72.70 to 73.70): VU029838.D (-575) (-)

Ion 43.00 (42.70 to 43.70): VU029838.D (-575) (-)

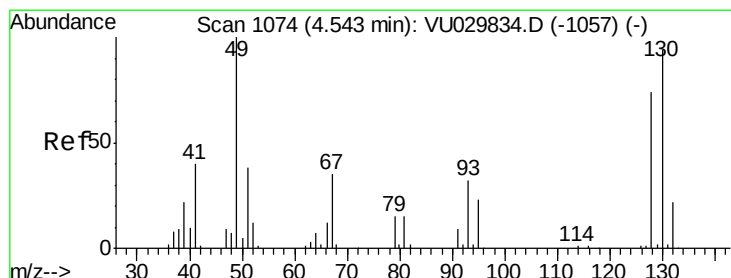
Time-->



Abundance Ion 73.00 (72.70 to 73.70): VU029838.D (-439) (-)

Ion 43.00 (42.70 to 43.70): VU029838.D (-439) (-)

Time-->



#26

Bromochloromethane

Concen: 0.248 ug/l

RT: 4.54 min Scan# 1074

Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

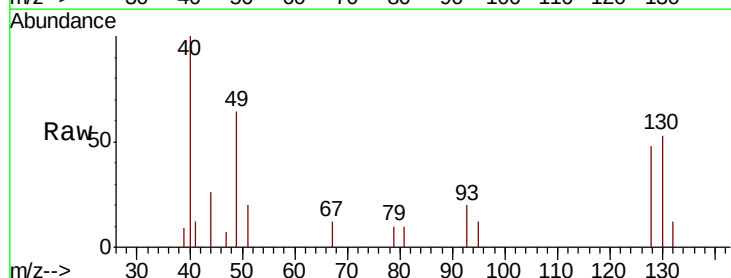
Tgt Ion: 128 Resp: 2134

Ion Ratio Lower Upper

128 100

49 128.4 0.0 270.6

130 126.1 104.2 156.4

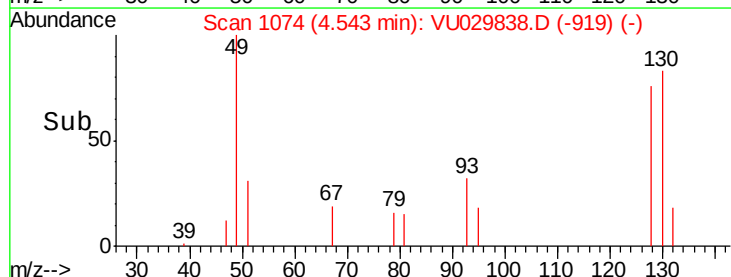


Abundance Ion 128.00 (127.70 to 128.70): VU029838.D (-1057) (-)

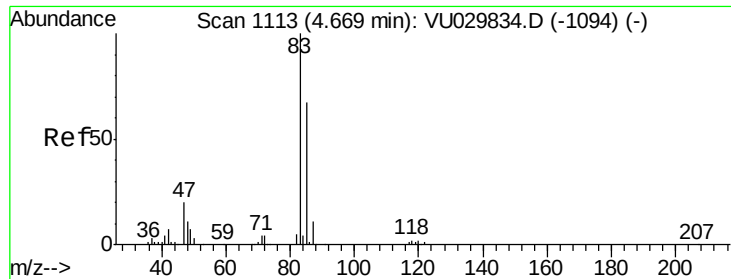
Ion 49.00 (48.70 to 49.70): VU029838.D (-1057) (-)

Ion 130.00 (129.70 to 130.70): VU029838.D (-1057) (-)

Time-->



Time-->



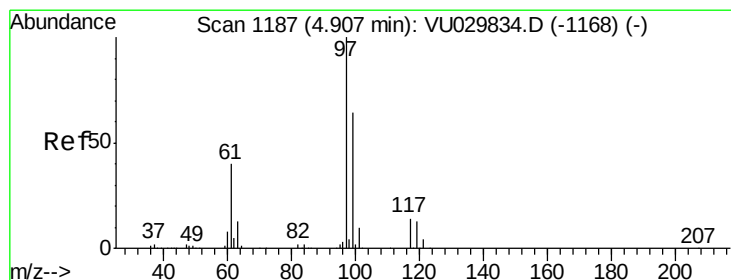
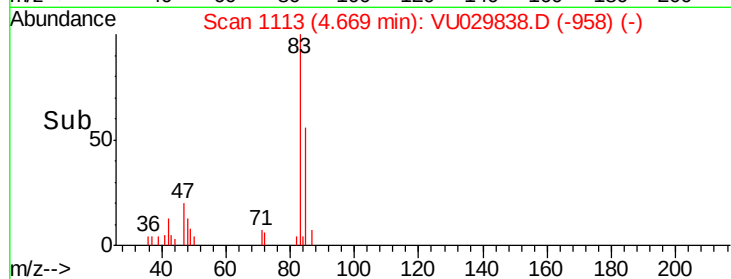
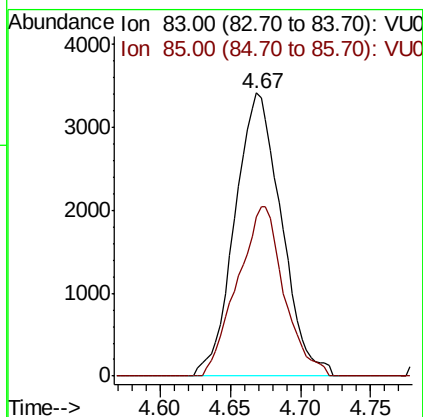
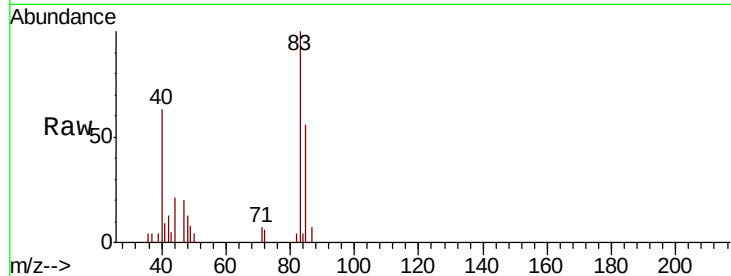
#27  
Chloroform  
Concen: 0.255 ug/l  
RT: 4.67 min Scan# 1113  
Delta R.T. -0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

Instrument :  
MSVOA\_U  
ClientSampleId :  
MDL01

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 83      | 100   | 7878 |       |       |
| 85      | 56.3  | 0.0  | 133.2 |       |

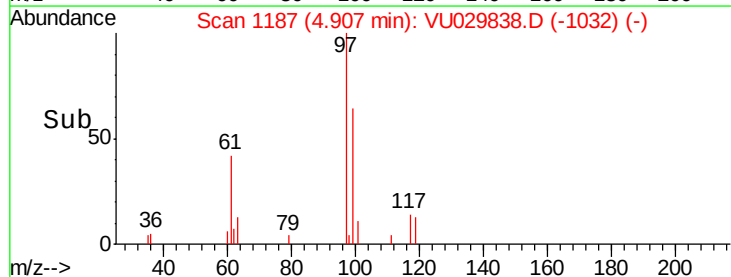
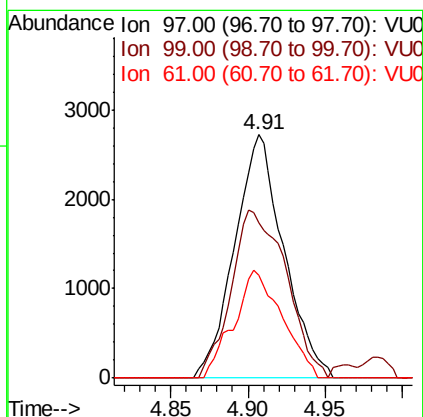
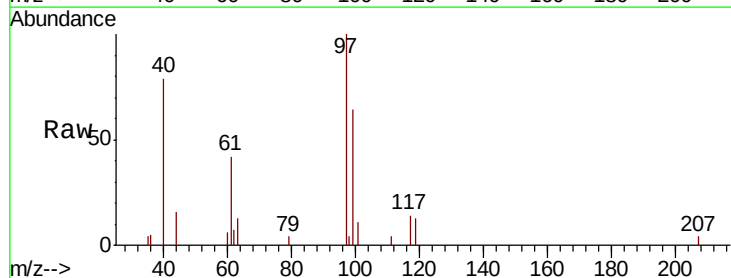
Manual Integrations  
APPROVED

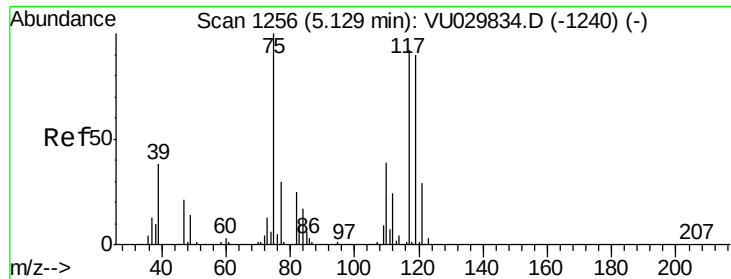
MMDadoda  
3/11/2019 4:49:33 PM



#28  
1,1,1-Trichloroethane  
Concen: 0.229 ug/l  
RT: 4.91 min Scan# 1187  
Delta R.T. -0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 97      | 100   | 6006 |       |       |
| 99      | 76.7  | 31.9 | 95.9  |       |
| 61      | 43.6  | 20.4 | 61.3  |       |





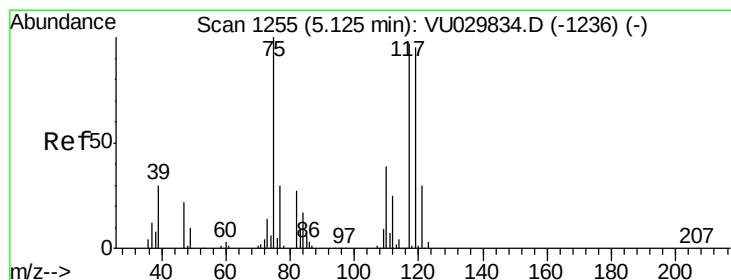
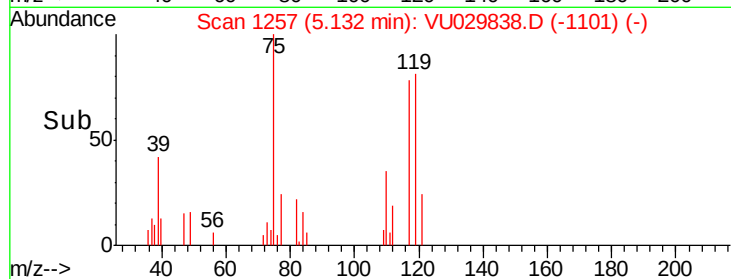
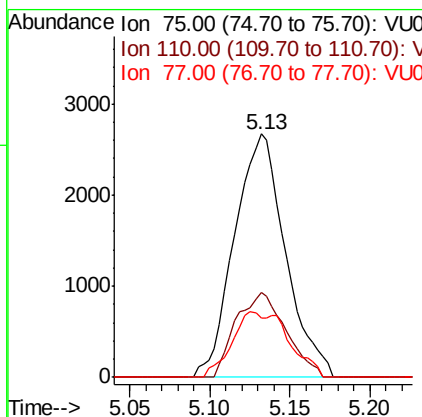
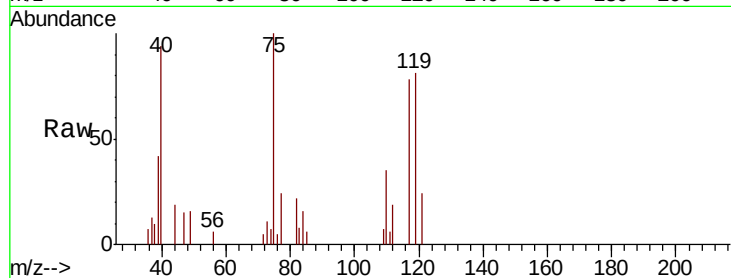
#29  
 1,1-Dichloropropene  
 Concen: 0.249 ug/l  
 RT: 5.13 min Scan# 1257  
 Delta R.T. 0.00 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL01

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 75      | 100   |            |            |
| 110     | 34.2  | 19.1       | 57.5       |
| 77      | 17.7  | 23.9       | 35.9#      |

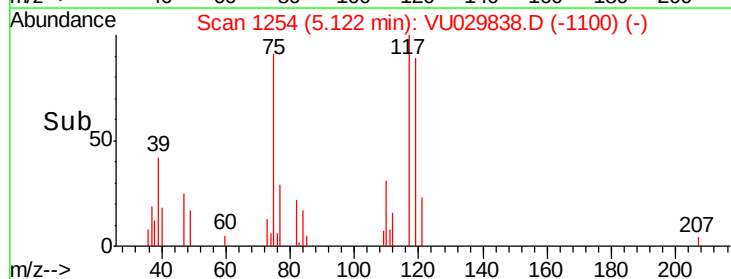
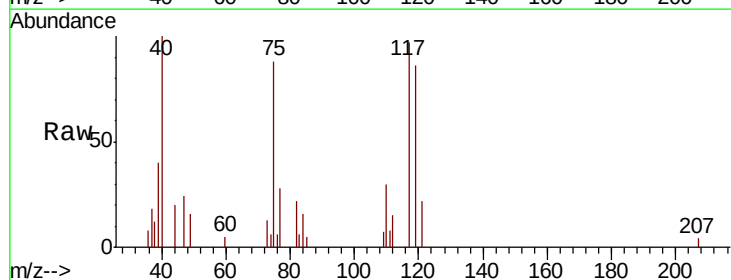
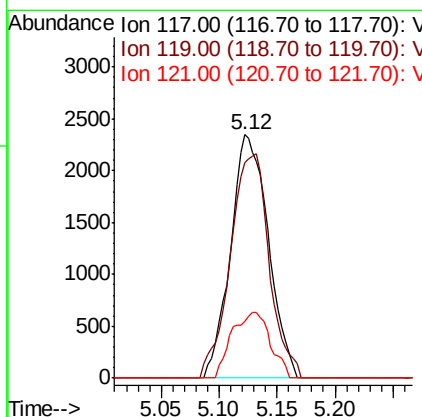
Manual Integrations  
 APPROVED

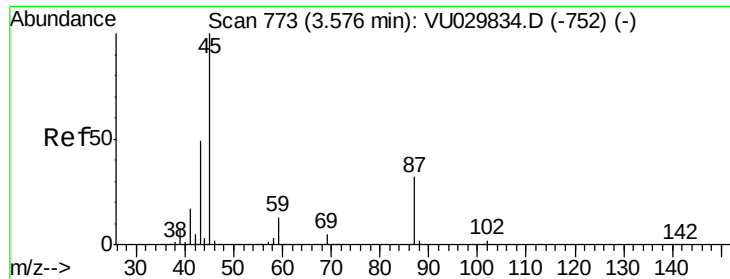
MMDadoda  
 3/11/2019 4:49:33 PM



#30  
 Carbon Tetrachloride  
 Concen: 0.231 ug/l m  
 RT: 5.12 min Scan# 1254  
 Delta R.T. -0.00 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 117     | 100   |            |            |
| 119     | 88.7  | 78.4       | 117.6      |
| 121     | 23.2  | 25.0       | 37.4#      |





#31

Isopropyl Ether

Concen: 0.253 ug/l

RT: 3.57 min Scan# 772

Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampled :

MDL01

Tgt Ion: 45 Resp: 10646

Ion Ratio Lower Upper

45 100

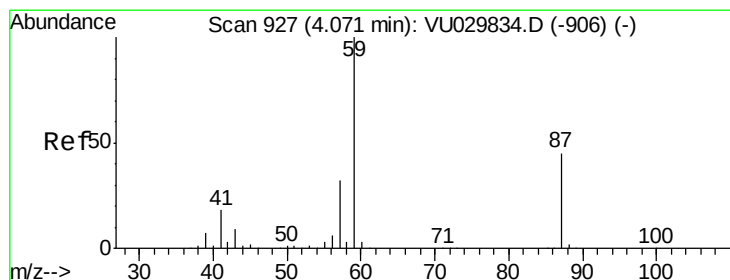
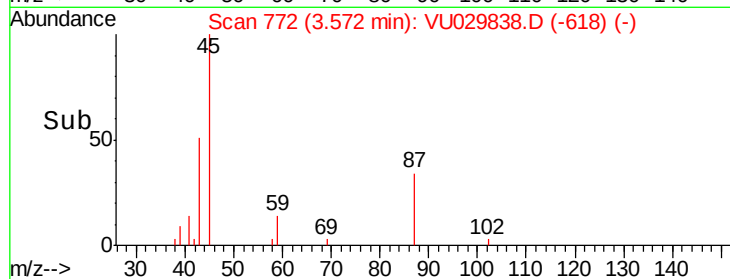
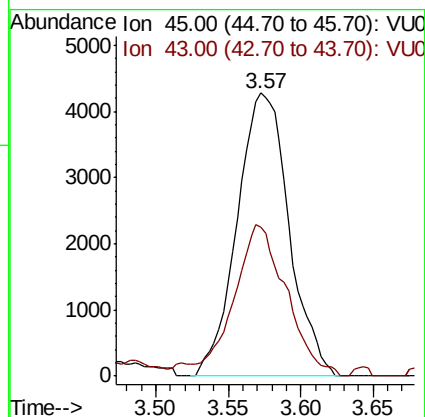
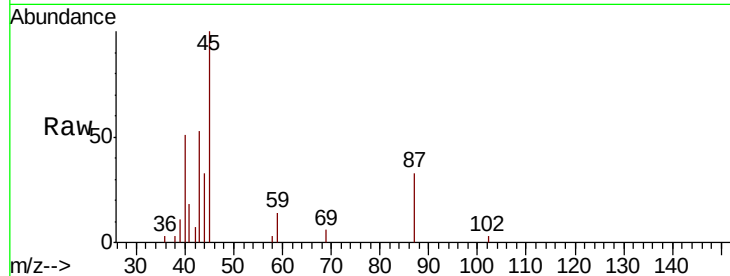
43 53.6 24.3 72.9

Manual Integrations

APPROVED

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3/11/2019 4:49:33 PM



#32

Ethyl-t-butyl ether

Concen: 0.254 ug/l

RT: 4.07 min Scan# 926

Delta R.T. -0.00 min

Lab File: VU029838.D

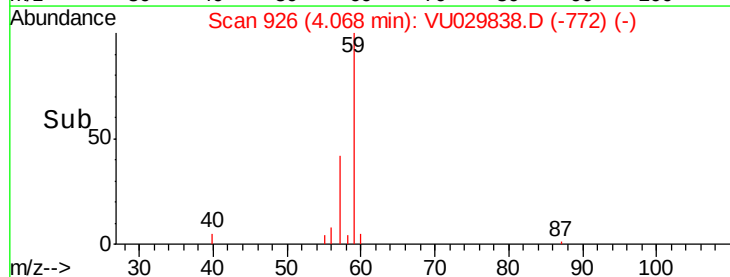
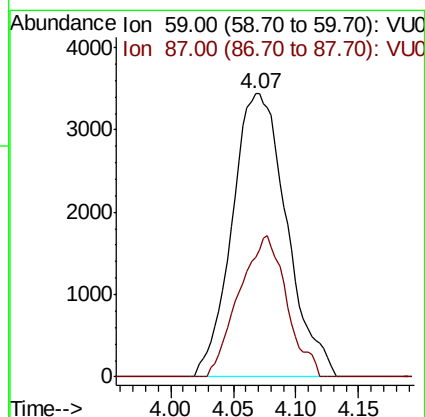
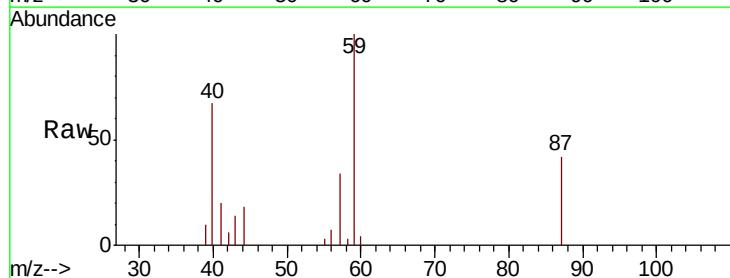
Acq: 06 Mar 2019 14:15

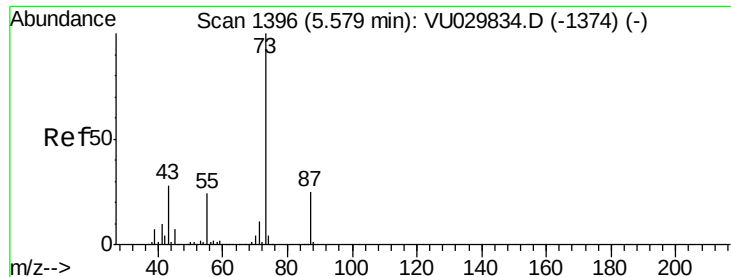
Tgt Ion: 59 Resp: 10419

Ion Ratio Lower Upper

59 100

87 43.3 36.2 54.4





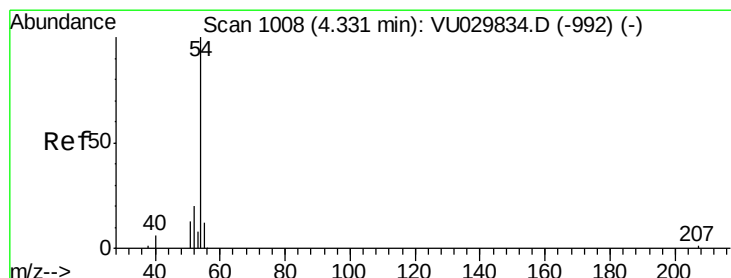
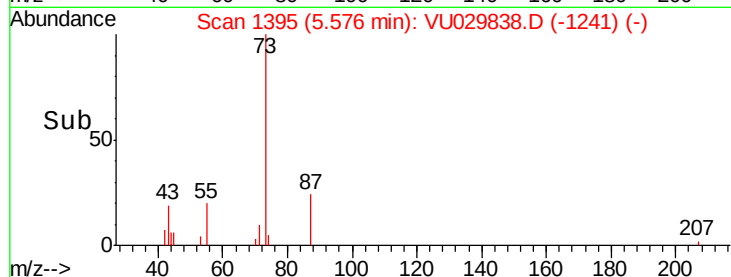
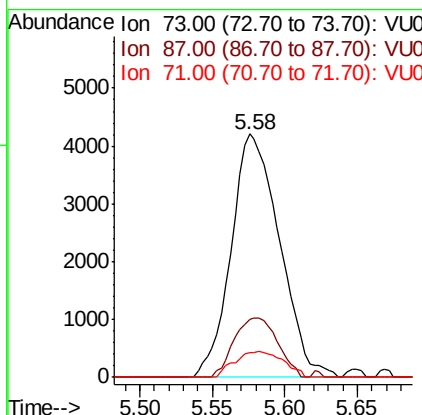
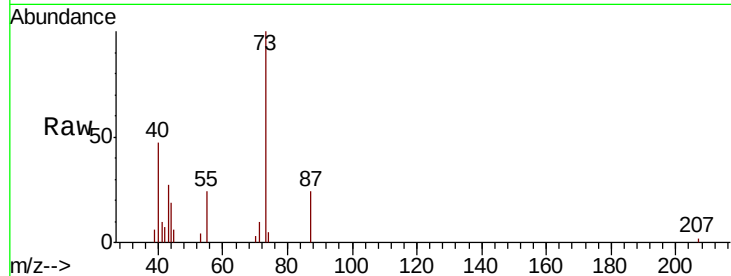
#33  
Tert-Amyl methyl ether  
Concen: 0.258 ug/l  
RT: 5.58 min Scan# 1395  
Delta R.T. -0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

Instrument :  
MSVOA\_U  
ClientSampleId :  
MDL01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 73      | 100   |       |       |
| 87      | 21.9  | 19.7  | 29.5  |
| 71      | 10.7  | 9.4   | 14.2  |

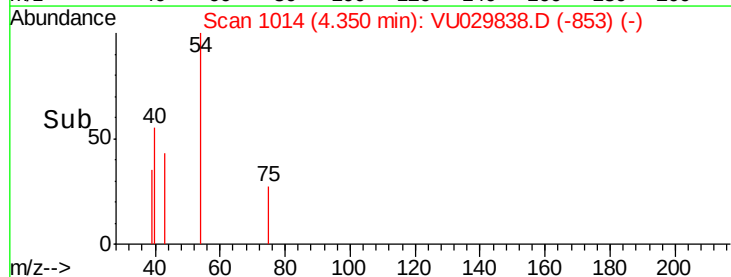
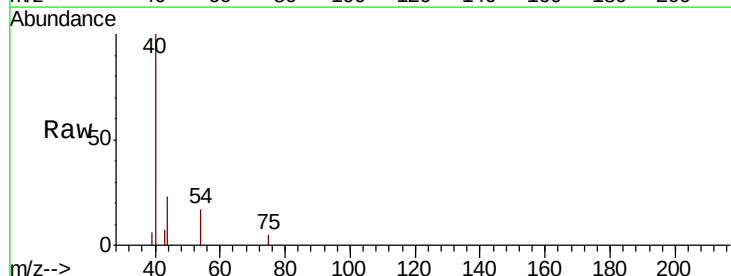
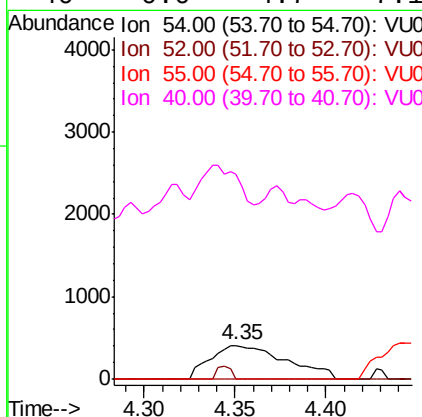
Manual Integrations  
APPROVED

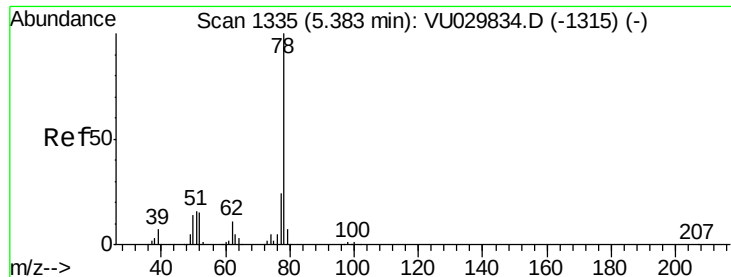
MMDadoda  
3/11/2019 4:49:33 PM



#34  
Propionitrile  
Concen: 0.998 ug/l m  
RT: 4.35 min Scan# 1014  
Delta R.T. 0.02 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 54      | 100   |       |       |
| 52      | 0.0   | 16.1  | 24.1# |
| 55      | 0.0   | 11.2  | 16.8# |
| 40      | 0.0   | 4.7   | 7.1#  |





#35

Benzene

Concen: 0.245 ug/l

RT: 5.38 min Scan# 1335

Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampleId :

MDL01

Tgt Ion: 78 Resp: 16848

Ion Ratio Lower Upper

78 100

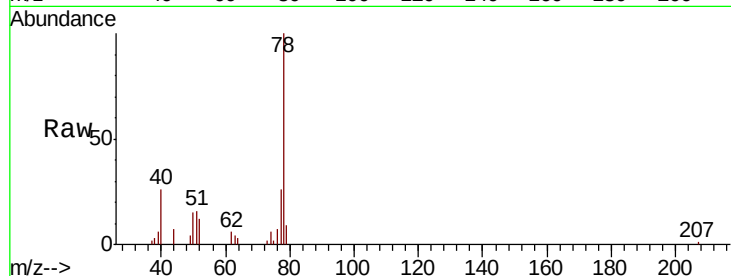
77 25.6 19.2 28.8

Manual Integrations

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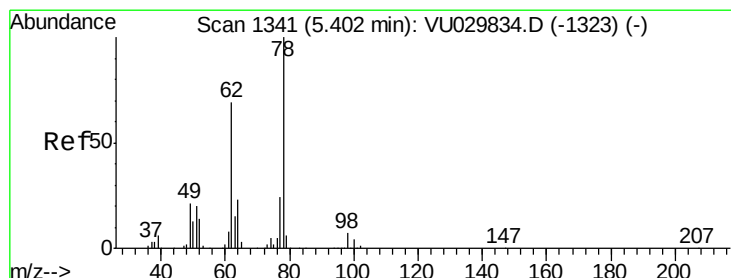
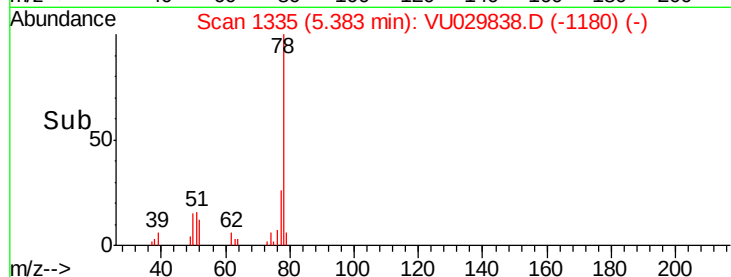
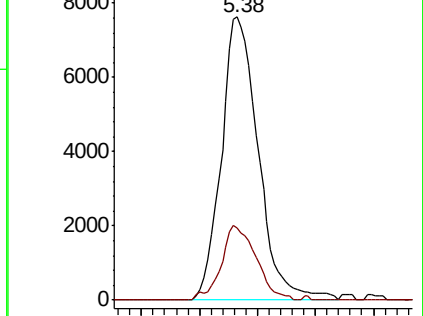
MMDadoda

3/11/2019 4:49:33 PM



Abundance Ion 78.10 (77.80 to 78.80): VU0

Ion 77.00 (76.70 to 77.70): VU0



#36

1,2-Dichloroethane

Concen: 0.229 ug/l

RT: 5.41 min Scan# 1342

Delta R.T. 0.00 min

Lab File: VU029838.D

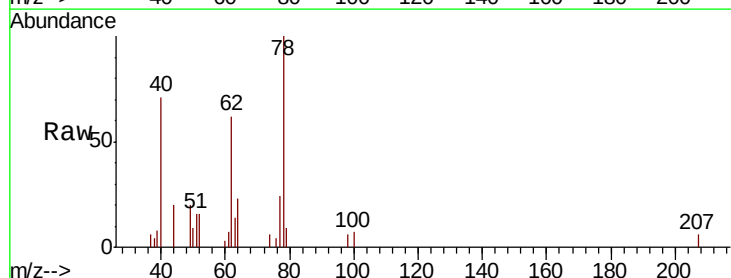
Acq: 06 Mar 2019 14:15

Tgt Ion: 62 Resp: 4299

Ion Ratio Lower Upper

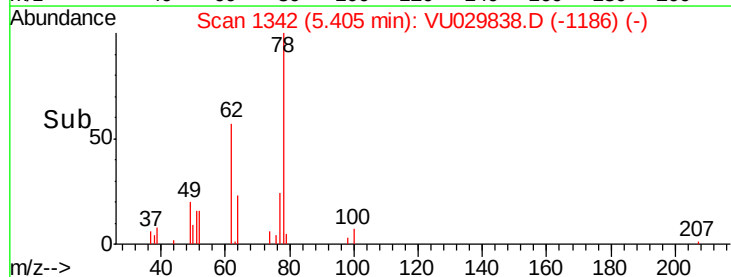
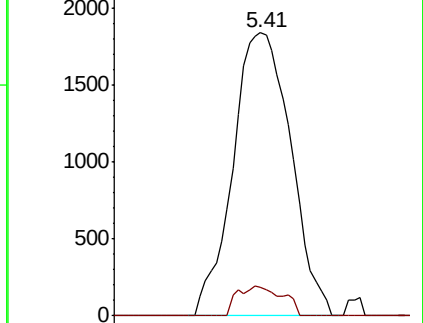
62 100

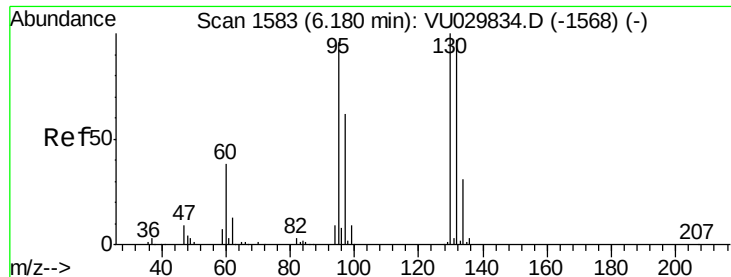
98 8.2 8.2 12.2



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 98.00 (97.70 to 98.70): VU0





#37

Trichloroethene

Concen: 0.263 ug/l

RT: 6.18 min Scan# 1583

Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampled :

MDL01

Tgt Ion:130 Resp: 5280

Ion Ratio Lower Upper

130 100

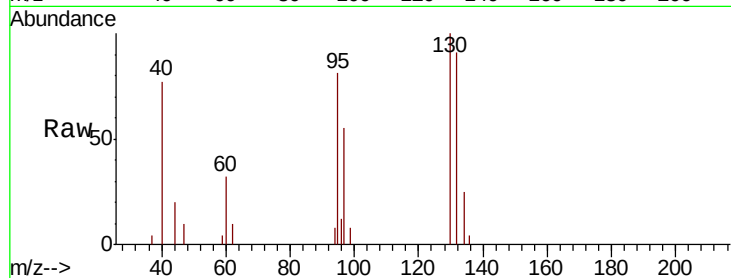
95 81.4 76.6 114.8

Manual Integrations

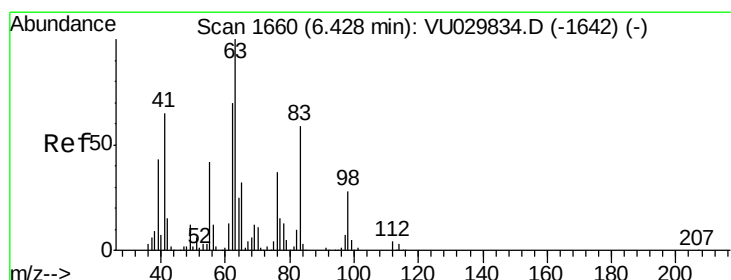
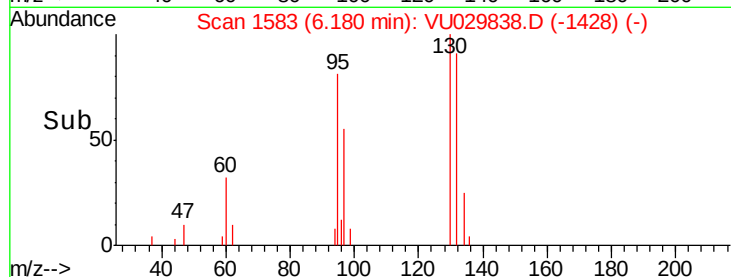
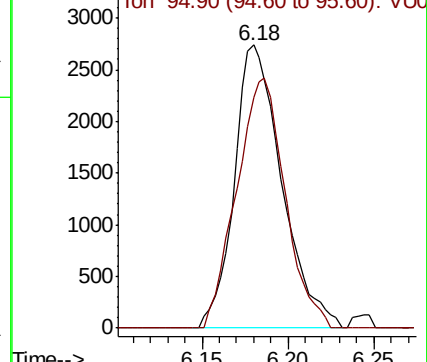
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Abundance Ion 129.90 (129.60 to 130.60): VU029834.D (-1568) (-)



#38

1,2-Dichloropropane

Concen: 0.220 ug/l

RT: 6.43 min Scan# 1660

Delta R.T. -0.00 min

Lab File: VU029838.D

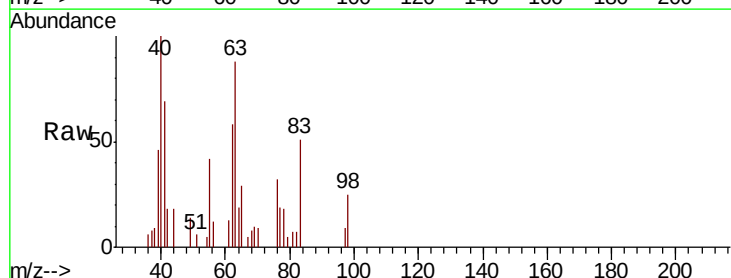
Acq: 06 Mar 2019 14:15

Tgt Ion: 63 Resp: 3831

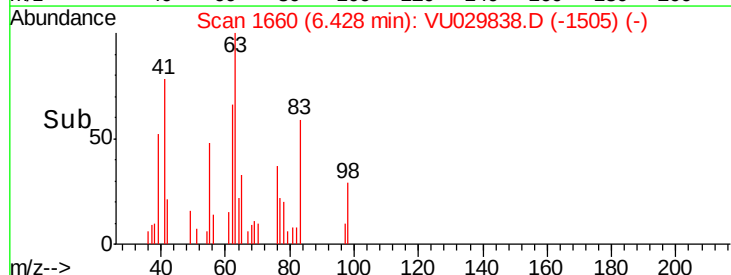
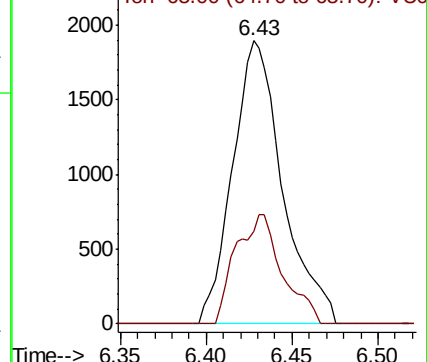
Ion Ratio Lower Upper

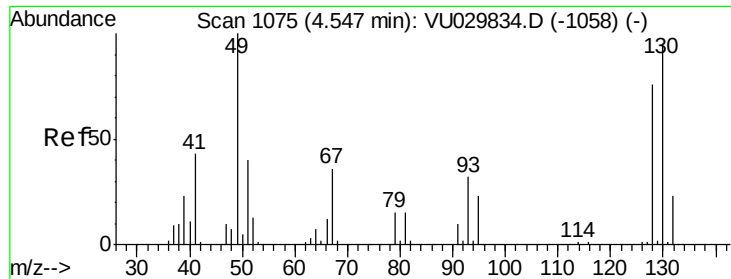
63 100

65 32.8 25.4 38.2



Abundance Ion 63.00 (62.70 to 63.70): VU029834.D (-1642) (-)





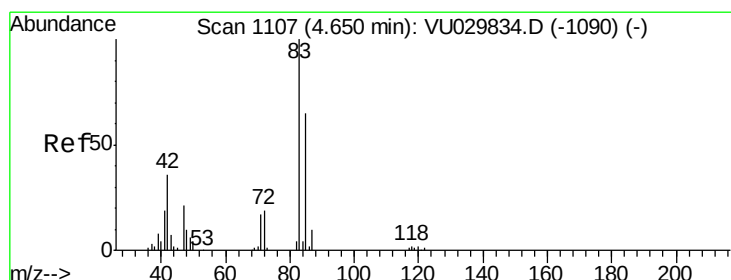
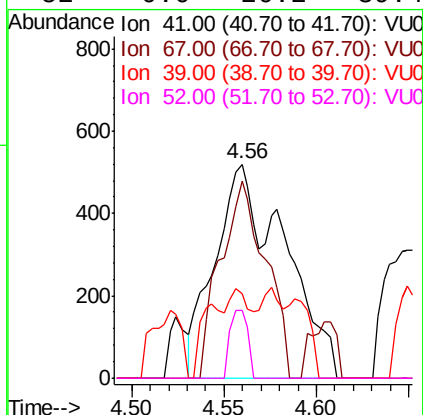
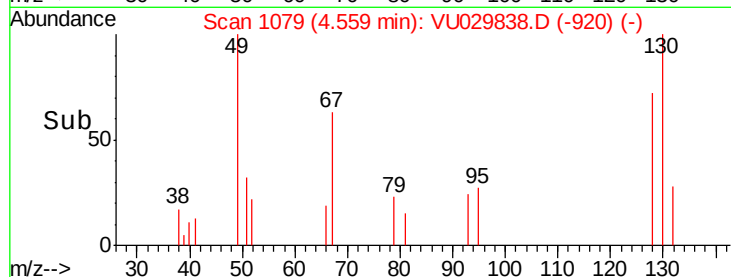
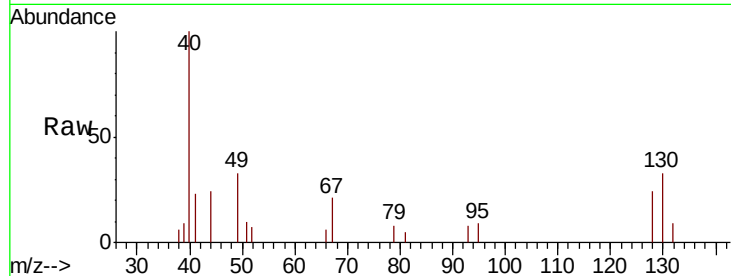
#39  
Methacrylonitrile  
Concen: 0.275 ug/l m  
RT: 4.56 min Scan# 1079  
Delta R.T. 0.01 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

Instrument :  
MSVOA\_U  
ClientSampled :  
MDL01

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 41      | 100   |       |        |
| 67      | 0.0   | 68.4  | 102.6# |
| 39      | 0.0   | 42.6  | 63.8#  |
| 52      | 0.0   | 26.2  | 39.4#  |

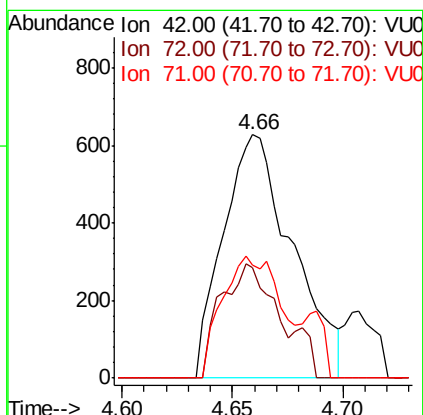
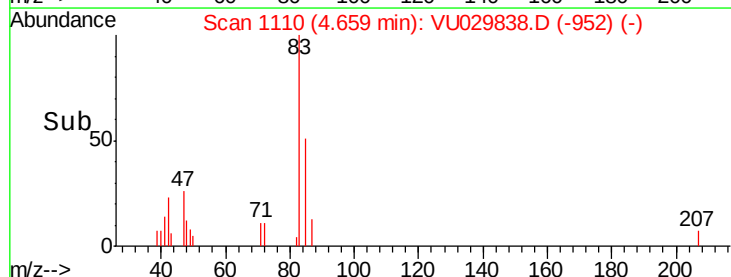
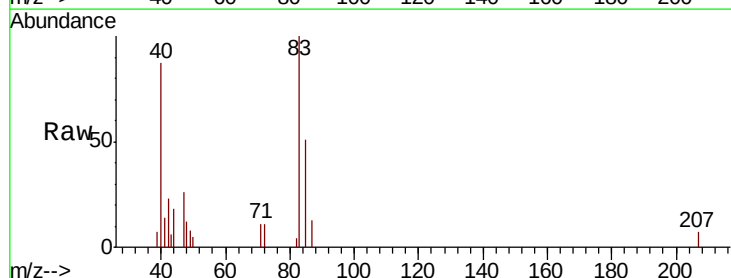
Manual Integrations  
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MMDadoda  
3/11/2019 4:49:33 PM

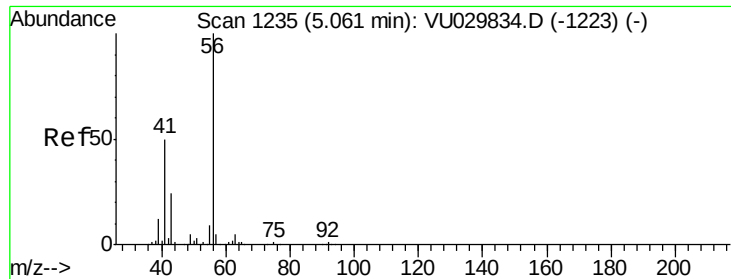


#41  
Tetrahydrofuran  
Concen: 0.528 ug/l  
RT: 4.66 min Scan# 1110  
Delta R.T. 0.01 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 35.2  | 43.6  | 65.4# |
| 71      | 41.6  | 37.5  | 56.3  |







#42

1-Chlorobutane

Concen: 0.255 ug/l

RT: 5.06 min Scan# 1235

Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampleId :

MDL01

Tgt Ion: 56 Resp: 7601

Ion Ratio Lower Upper

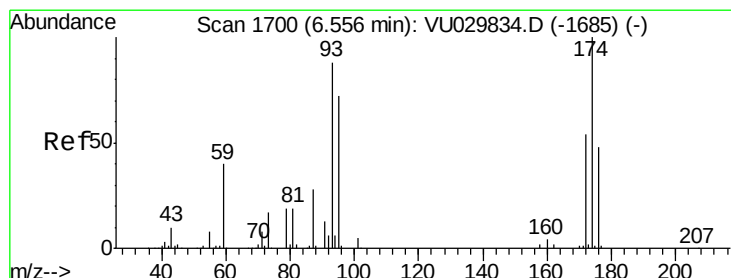
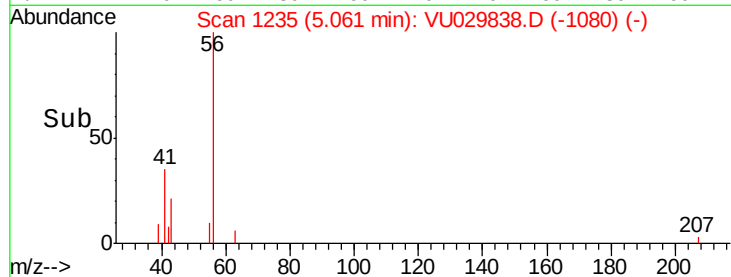
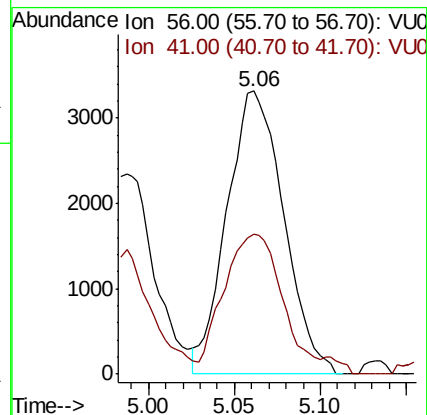
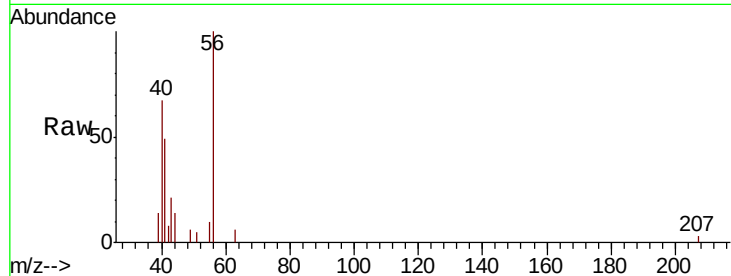
56 100

41 44.3 25.0 75.0

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#43

Dibromomethane

Concen: 0.251 ug/l

RT: 6.56 min Scan# 1702

Delta R.T. 0.01 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

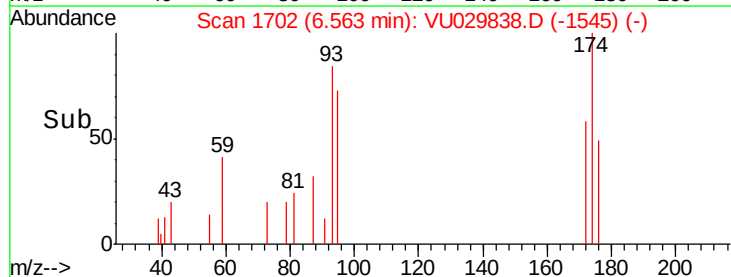
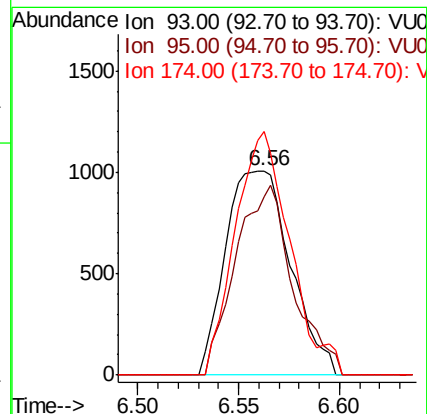
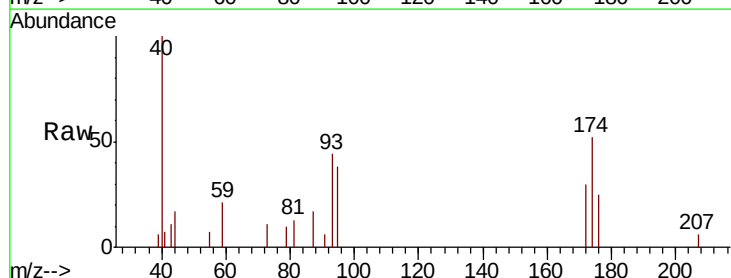
Tgt Ion: 93 Resp: 2263

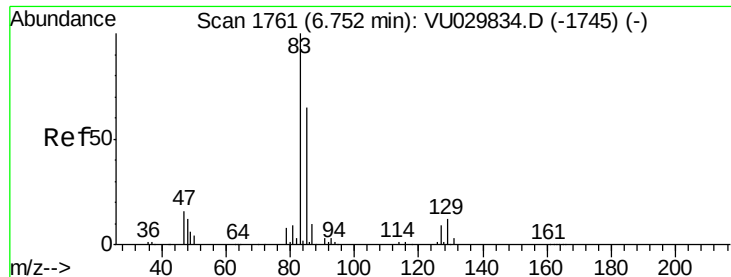
Ion Ratio Lower Upper

93 100

95 81.7 67.0 100.6

174 100.7 91.4 137.2





#44

Bromodichloromethane

Concen: 0.209 ug/l

RT: 6.75 min Scan# 1761

Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

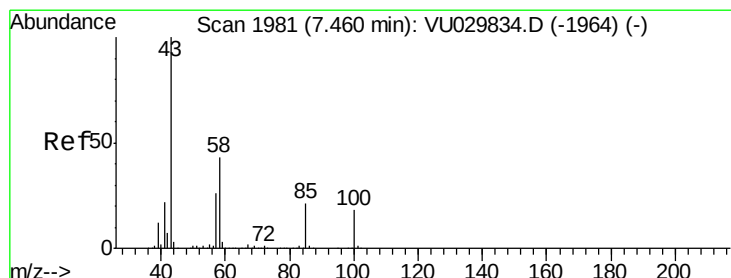
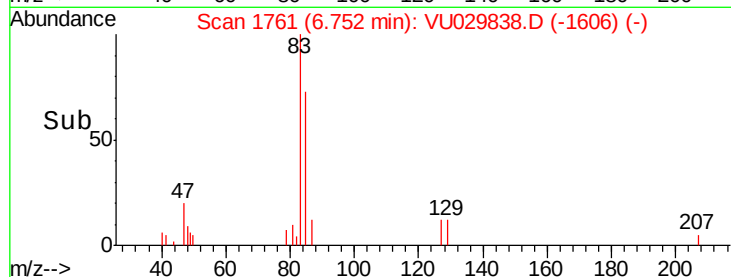
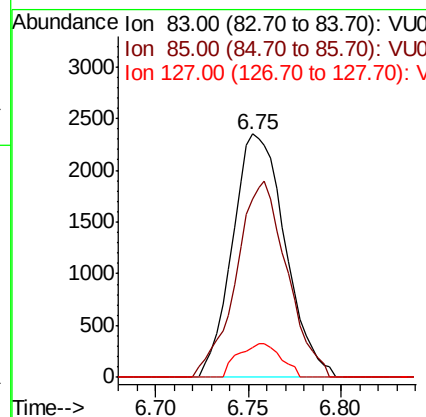
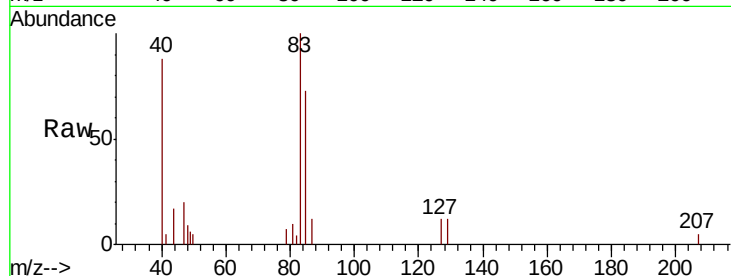
ClientSampleId :

MDL01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 4622  |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 73.1  | 51.7  | 77.5  |
| 127      | 12.3  | 7.4   | 11.2# |

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#45

4-Methyl-2-Pentanone

Concen: 1.165 ug/l

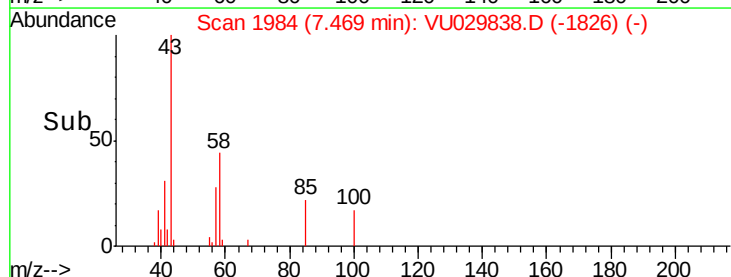
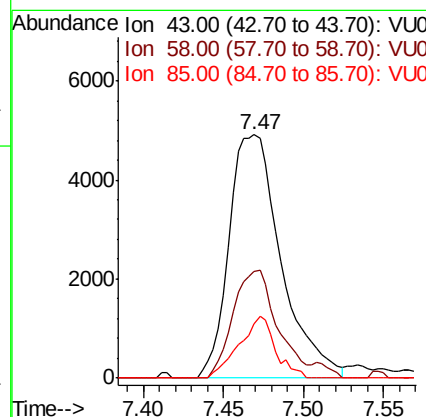
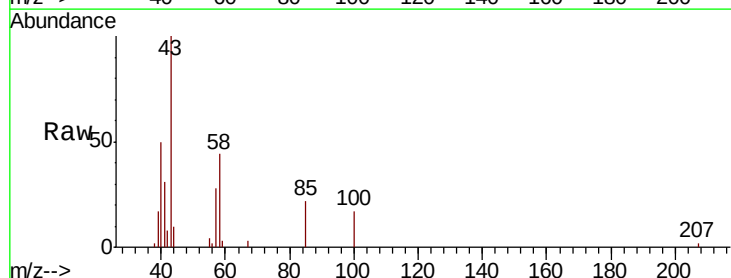
RT: 7.47 min Scan# 1984

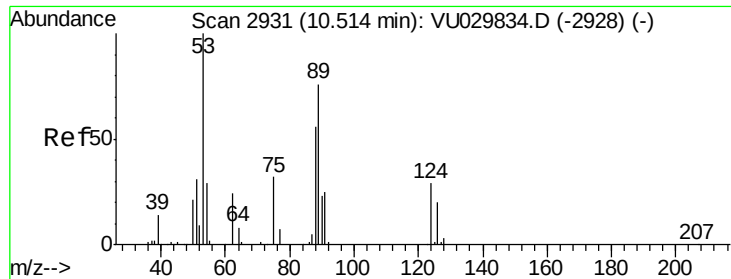
Delta R.T. 0.01 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 10943 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 58       | 37.8  | 21.6  | 65.0  |
| 85       | 17.6  | 16.5  | 24.7  |





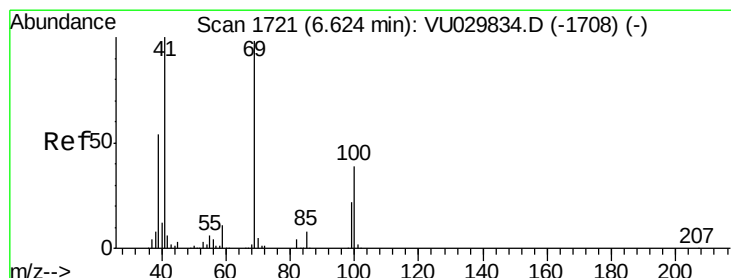
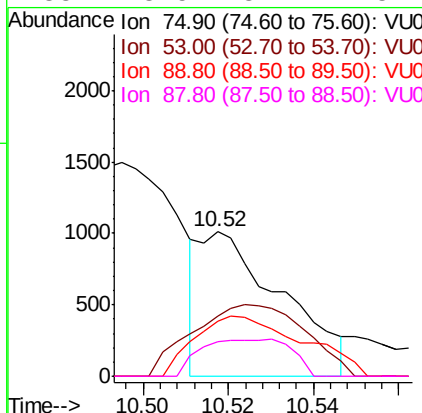
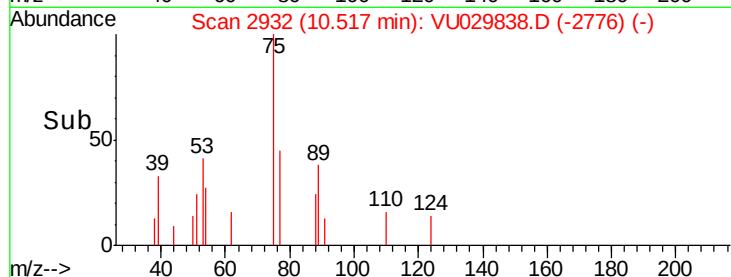
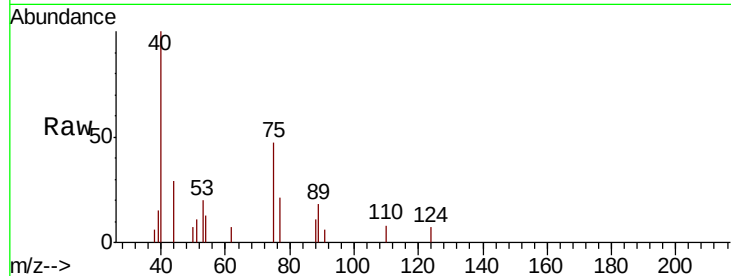
#46  
t-1,4-Dichloro-2-butene  
Concen: 0.343 ug/l m  
RT: 10.52 min Scan# 2932  
Delta R.T. 0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

Instrument :  
MSVOA\_U  
ClientSampled :  
MDL01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 1349  |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 53       | 68.3  | 59.2  | 88.8  |
| 89       | 55.4  | 44.9  | 67.3  |
| 88       | 28.5  | 32.2  | 48.2# |

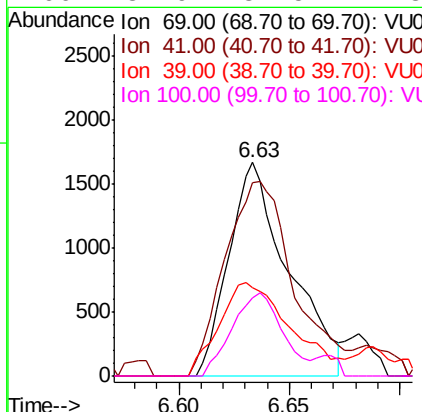
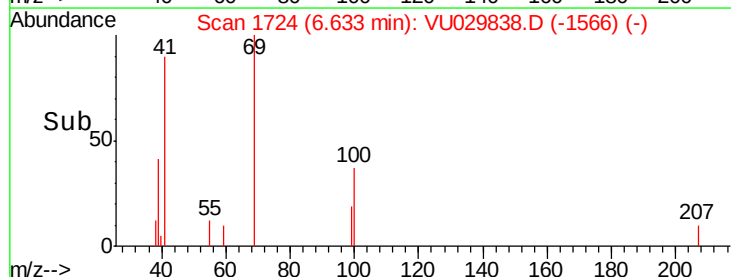
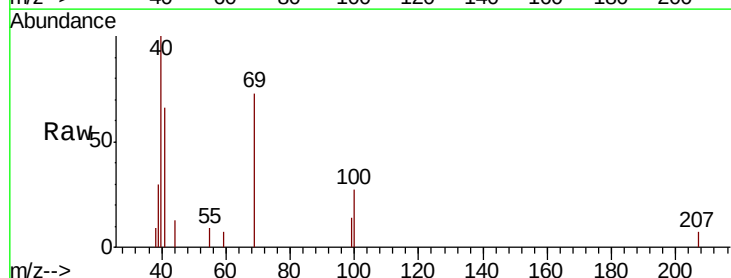
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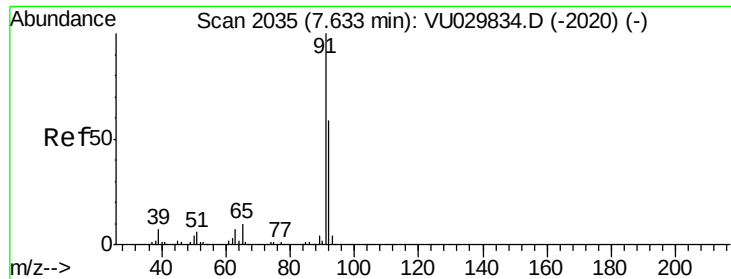
MMDadoda  
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#47  
Methyl methacrylate  
Concen: 0.408 ug/l  
RT: 6.63 min Scan# 1724  
Delta R.T. 0.01 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 69    | Resp: | 3152  |
| Ion      | Ratio | Lower | Upper |
| 69       | 100   |       |       |
| 41       | 105.6 | 0.0   | 201.0 |
| 39       | 52.9  | 43.3  | 64.9  |
| 100      | 32.9  | 31.5  | 47.3  |





#49

Toluene

Concen: 0.227 ug/l

RT: 7.64 min Scan# 2036

Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampled :

MDL01

Tgt Ion: 92 Resp: 9569

Ion Ratio Lower Upper

92 100

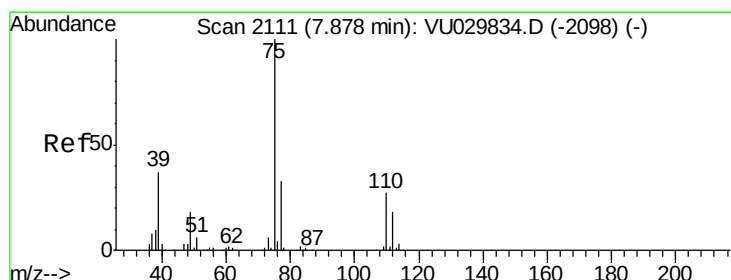
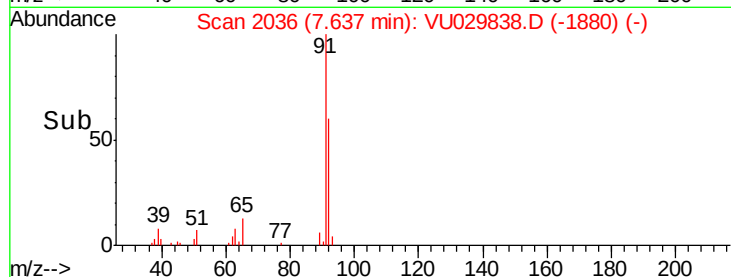
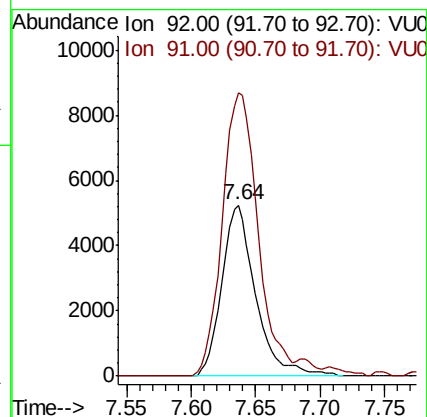
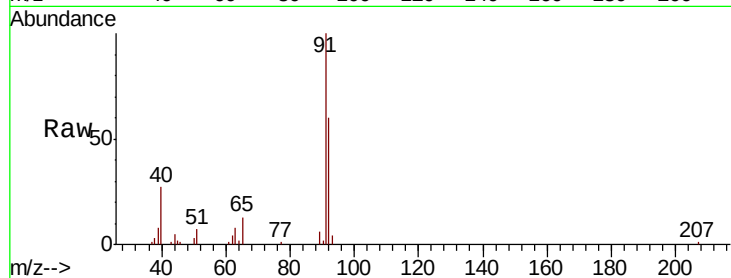
91 173.4 137.8 206.8

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#50

t-1,3-Dichloropropene

Concen: 0.217 ug/l

RT: 7.89 min Scan# 2115

Delta R.T. 0.01 min

Lab File: VU029838.D

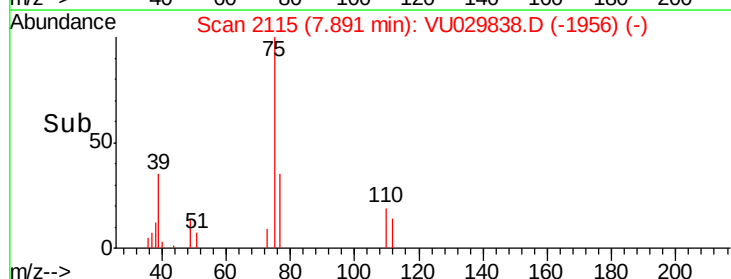
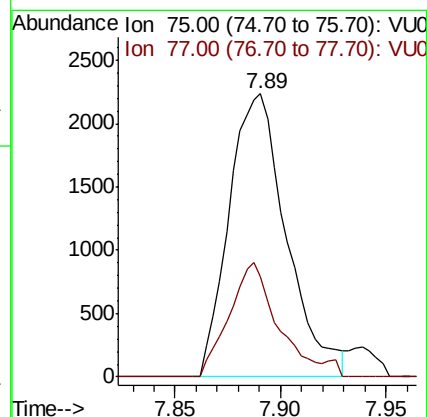
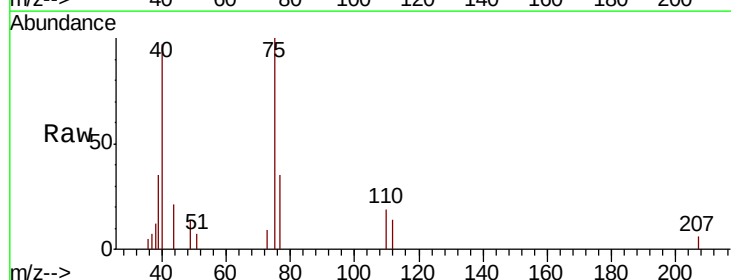
Acq: 06 Mar 2019 14:15

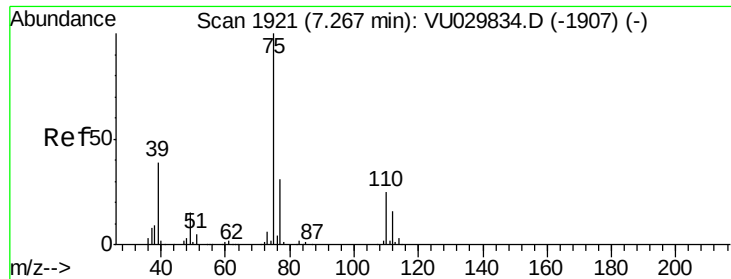
Tgt Ion: 75 Resp: 4215

Ion Ratio Lower Upper

75 100

77 35.5 26.4 39.6





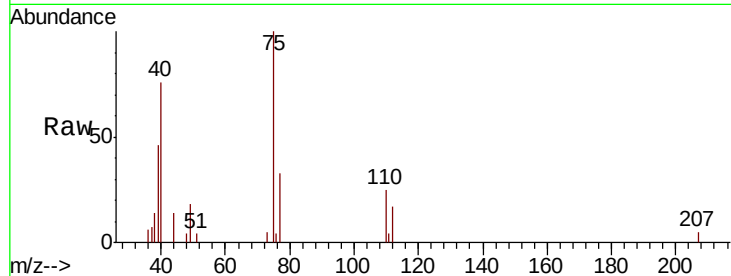
#51  
 cis-1,3-Dichloropropene  
 Concen: 0.218 ug/l  
 RT: 7.27 min Scan# 1923  
 Delta R.T. 0.01 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL01

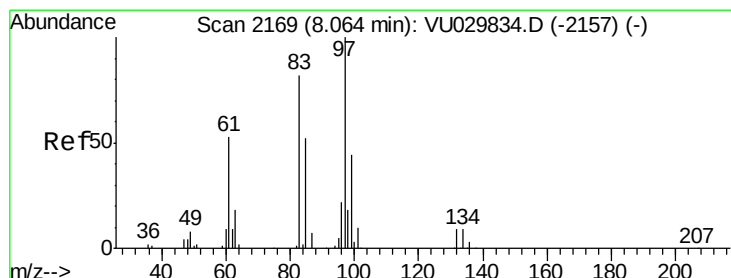
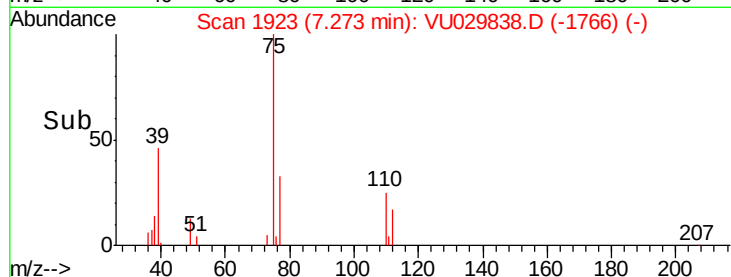
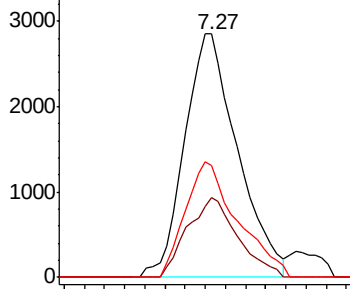
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 32.9  | 24.9  | 37.3  |
| 39      | 45.8  | 30.8  | 46.2  |

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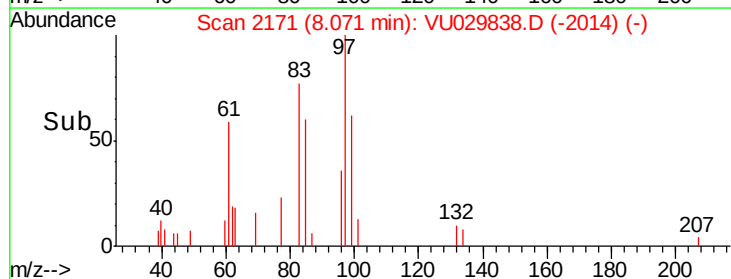
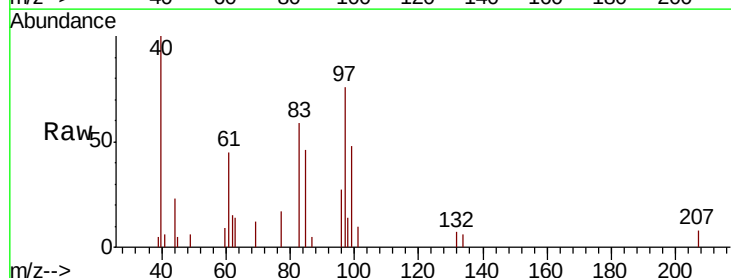
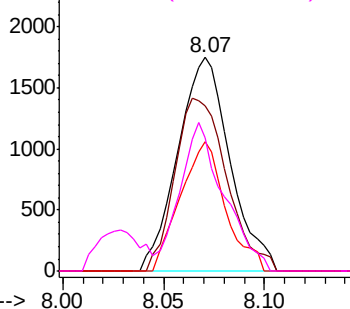
Abundance Ion 75.00 (74.70 to 75.70): VU029838.D (-1766) (-)  
 Ion 77.00 (76.70 to 77.70): VU029838.D (-1766) (-)  
 Ion 39.00 (38.70 to 39.70): VU029838.D (-1766) (-)

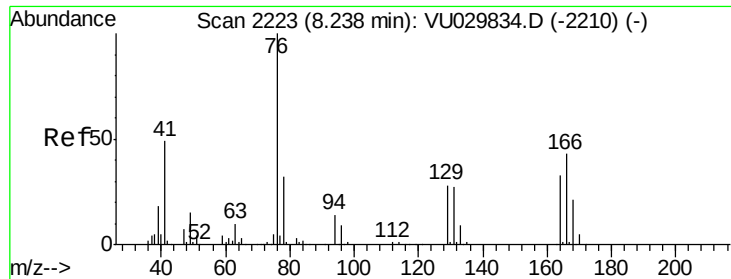


#52  
 1,1,2-Trichloroethane  
 Concen: 0.237 ug/l  
 RT: 8.07 min Scan# 2171  
 Delta R.T. 0.01 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 83      | 77.4  | 65.9  | 98.9  |
| 85      | 60.3  | 43.0  | 64.6  |
| 99      | 62.4  | 49.7  | 74.5  |

Abundance Ion 97.00 (96.70 to 97.70): VU029838.D (-2144) (-)  
 Ion 82.95 (82.65 to 83.65): VU029838.D (-2144) (-)  
 Ion 84.95 (84.65 to 85.65): VU029838.D (-2144) (-)  
 Ion 98.95 (98.65 to 99.65): VU029838.D (-2144) (-)





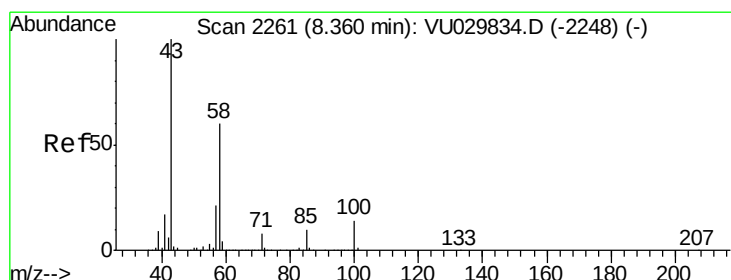
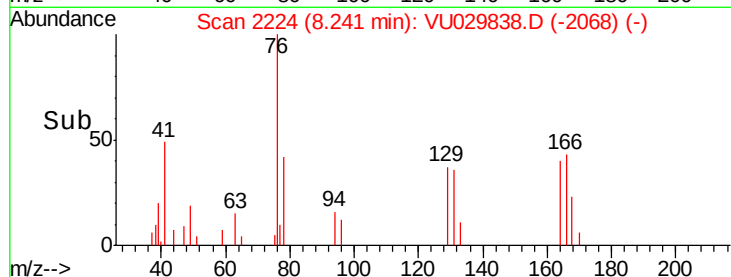
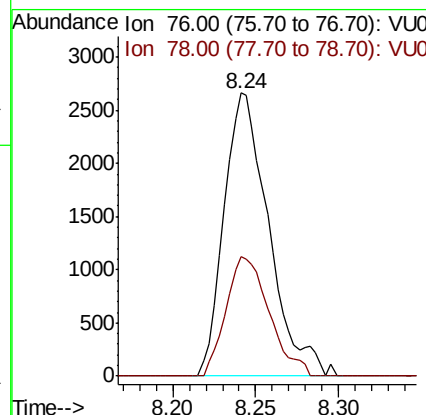
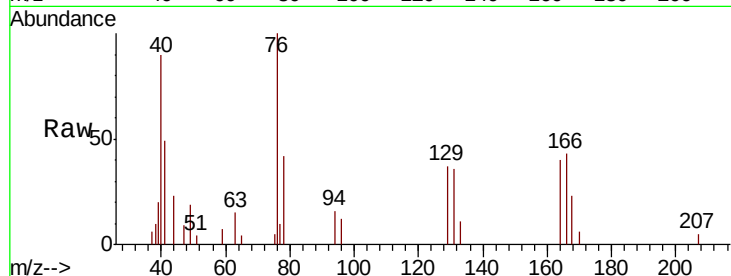
#53  
 1,3-Dichloropropane  
 Concen: 0.228 ug/l  
 RT: 8.24 min Scan# 2224  
 Delta R.T. 0.00 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL01

Tgt Ion: 76 Resp: 4989  
 Ion Ratio Lower Upper  
 76 100  
 78 40.6 25.7 38.5#

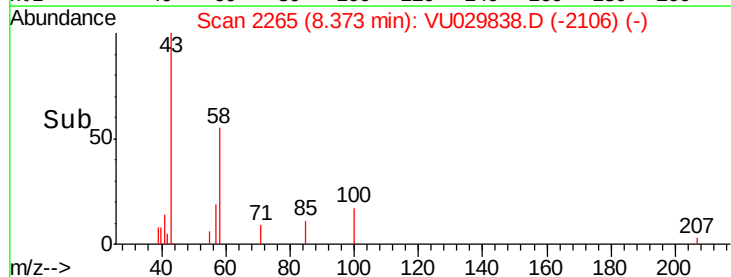
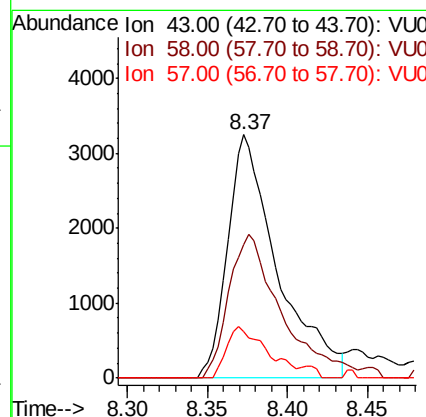
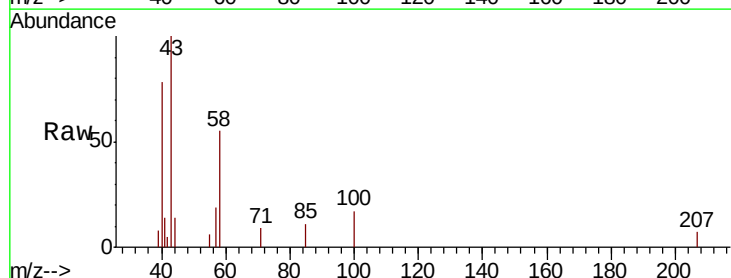
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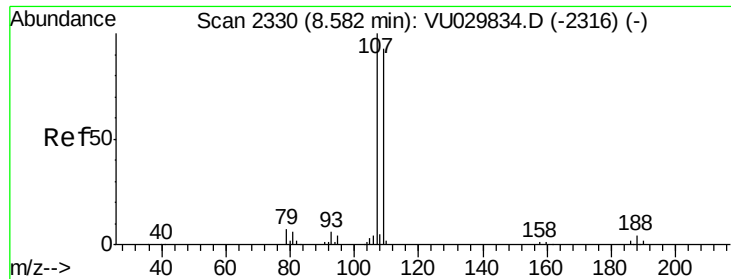
MMDadoda  
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#54  
 2-Hexanone  
 Concen: 1.063 ug/l  
 RT: 8.37 min Scan# 2265  
 Delta R.T. 0.01 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Tgt Ion: 43 Resp: 6936  
 Ion Ratio Lower Upper  
 43 100  
 58 62.4 39.6 79.6  
 57 16.9 0.5 40.5





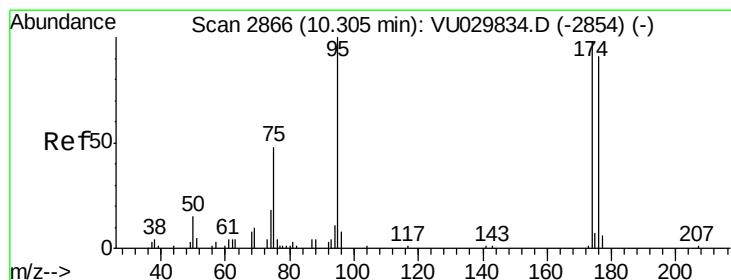
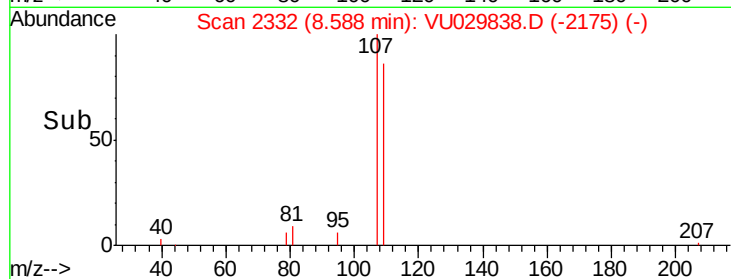
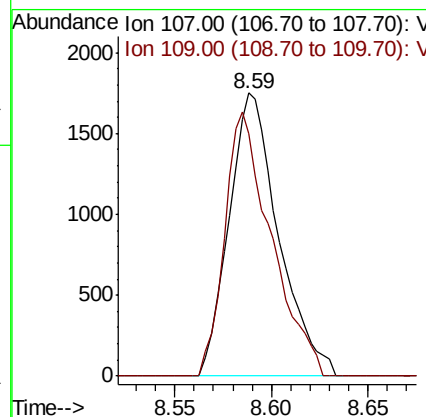
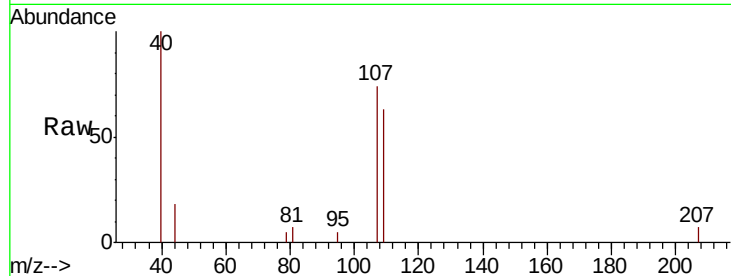
#56  
 1,2-Dibromoethane  
 Concen: 0.246 ug/l  
 RT: 8.59 min Scan# 2332  
 Delta R.T. 0.01 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL01

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 107     | 100   | 3111 |       |       |
| 109     | 87.6  | 0.0  | 188.4 |       |

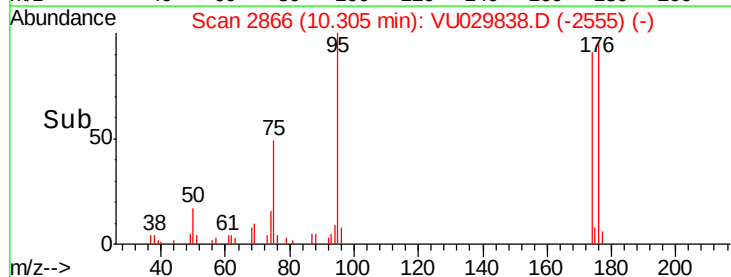
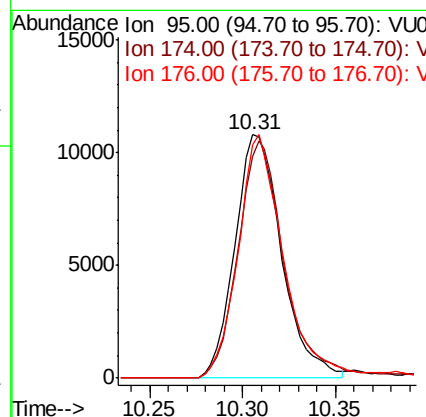
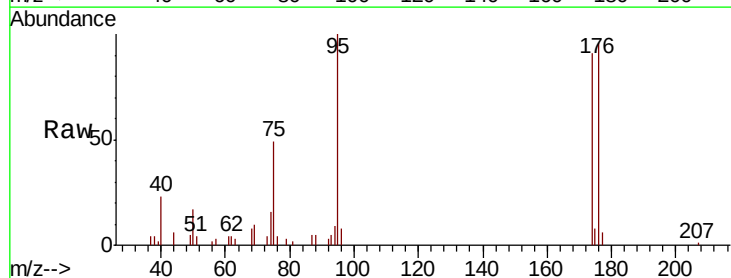
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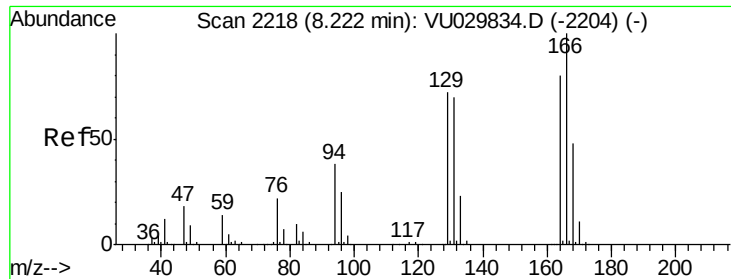
MMDadoda  
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#57  
 4-Bromofluorobenzene  
 Concen: 0.246 ug/l  
 RT: 10.31 min Scan# 2866  
 Delta R.T. -0.00 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 95      | 100   | 18831 |       |       |
| 174     | 98.9  | 76.5  | 114.7 |       |
| 176     | 97.2  | 74.2  | 111.2 |       |





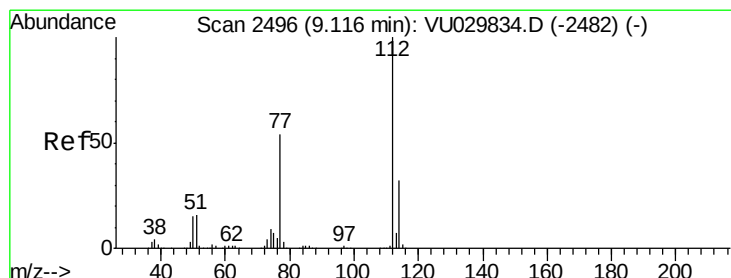
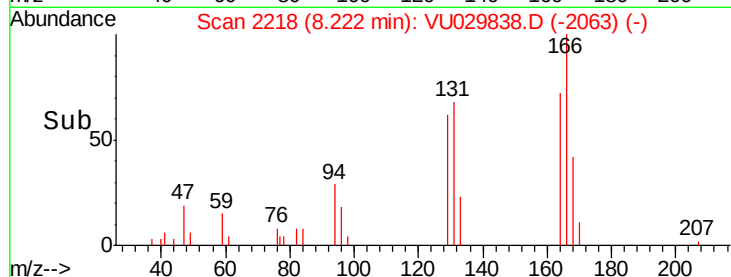
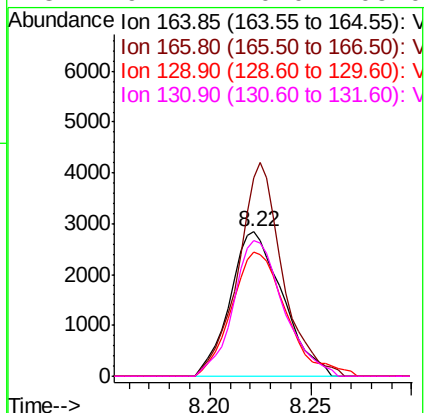
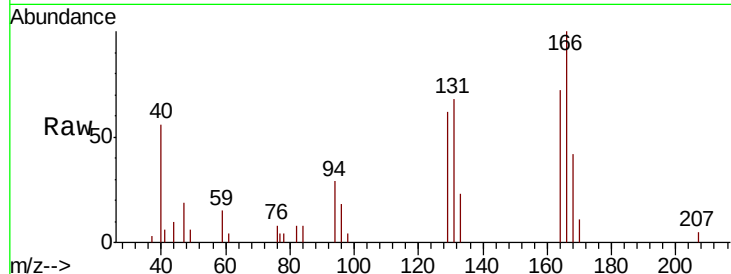
#58  
Tetrachloroethene  
Concen: 0.252 ug/l  
RT: 8.22 min Scan# 2218  
Delta R.T. -0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

Instrument :  
MSVOA\_U  
ClientSampleId :  
MDL01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 166     | 138.1 | 100.5 | 150.7 |
| 129     | 85.8  | 72.3  | 108.5 |
| 131     | 94.4  | 70.0  | 105.0 |

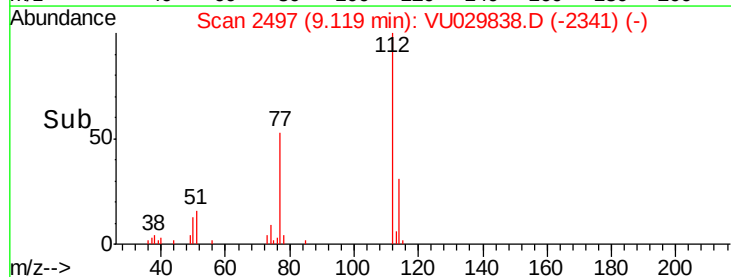
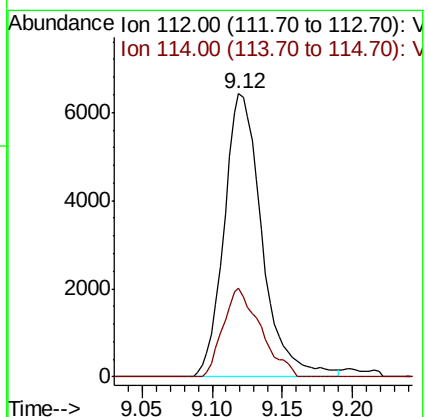
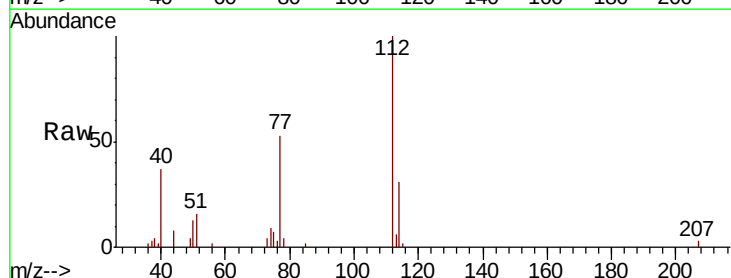
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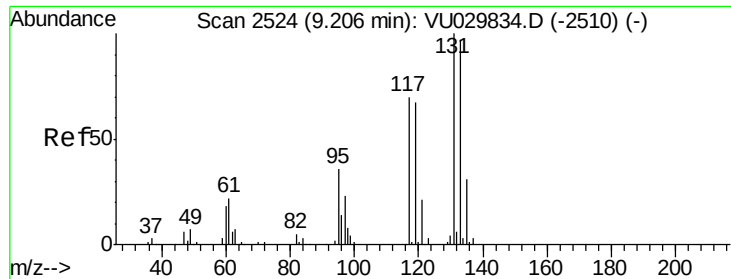


#59  
Chlorobenzene  
Concen: 0.249 ug/l  
RT: 9.12 min Scan# 2497  
Delta R.T. 0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 114     | 31.4  | 25.4  | 38.2  |







#60

1,1,1,2-Tetrachloroethane

Concen: 0.223 ug/l

RT: 9.21 min Scan# 2524

Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

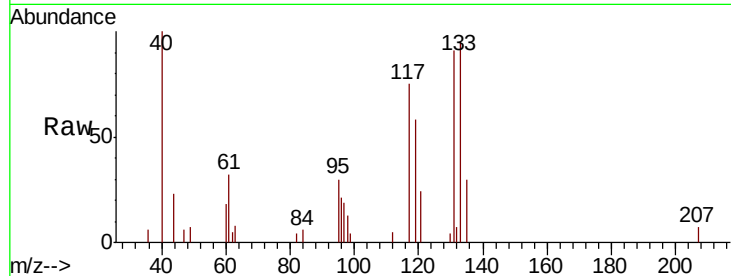
ClientSampleId :

MDL01

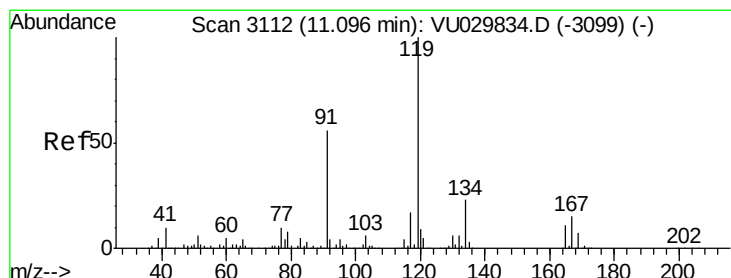
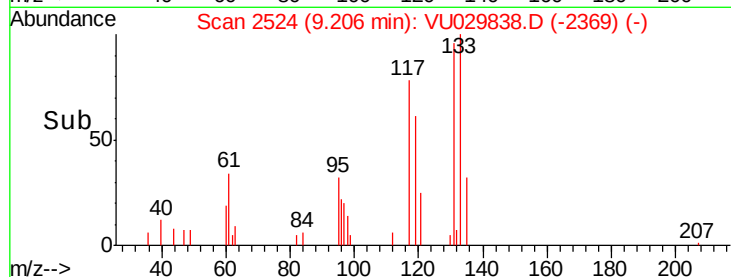
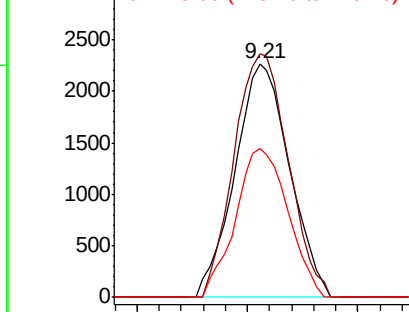
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 131   | Resp: | 3882  |
| Ion Ratio | Lower | Upper |       |
| 131       | 100   |       |       |
| 133       | 103.5 | 76.4  | 114.6 |
| 119       | 61.2  | 54.2  | 81.4  |

Manual Integrations  
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MMDadoda  
3/11/2019 4:49:33 PM



Abundance Ion 131.00 (130.70 to 131.70): V  
Ion 133.00 (132.70 to 133.70): V  
Ion 119.00 (118.70 to 119.70): V



#61

Pentachloroethane

Concen: 0.222 ug/l

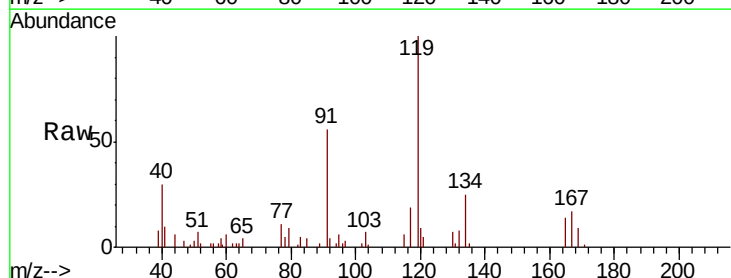
RT: 11.10 min Scan# 3113

Delta R.T. 0.00 min

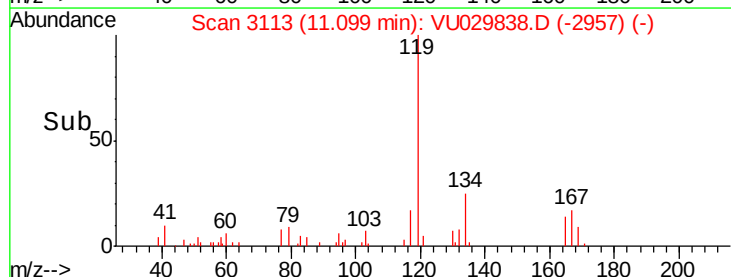
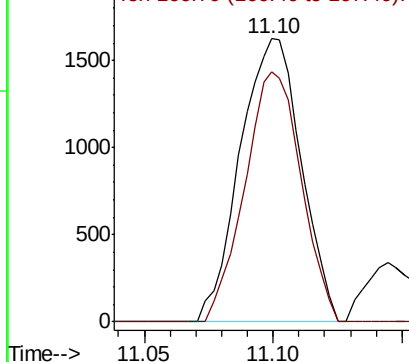
Lab File: VU029838.D

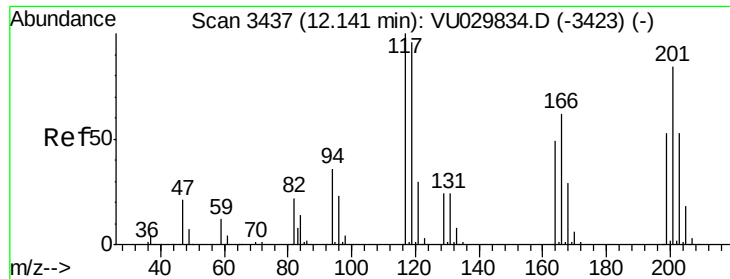
Acq: 06 Mar 2019 14:15

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 117   | Resp: | 2682  |
| Ion Ratio | Lower | Upper |       |
| 117       | 100   |       |       |
| 167       | 81.8  | 71.4  | 107.2 |



Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 166.70 (166.40 to 167.40): V





#62

Hexachloroethane

Concen: 0.217 ug/l

RT: 12.14 min Scan# 3438

Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampleId :

MDL01

Tgt Ion: 117 Resp: 2763

Ion Ratio Lower Upper

117 100

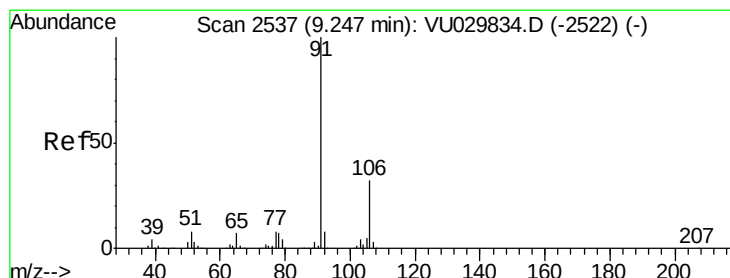
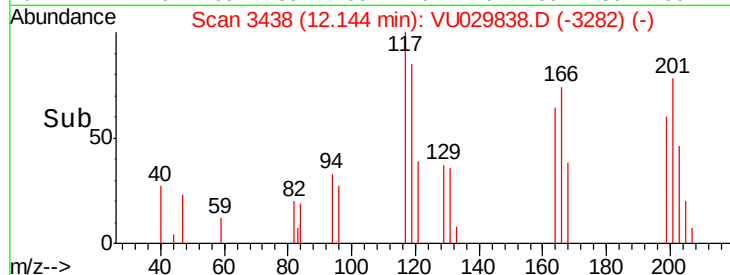
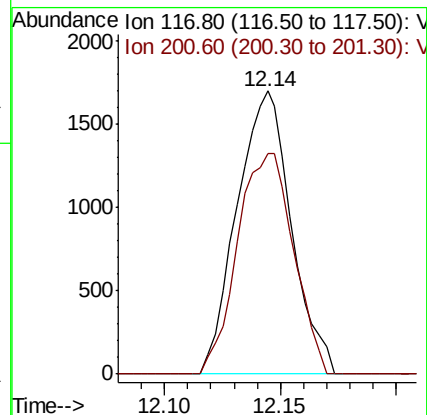
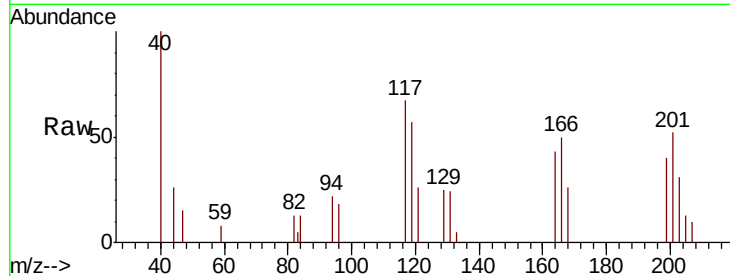
201 80.6 68.2 102.2

Manual Integrations

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MMDadoda

3/11/2019 4:49:33 PM



#63

Ethyl Benzene

Concen: 0.215 ug/l

RT: 9.25 min Scan# 2537

Delta R.T. -0.00 min

Lab File: VU029838.D

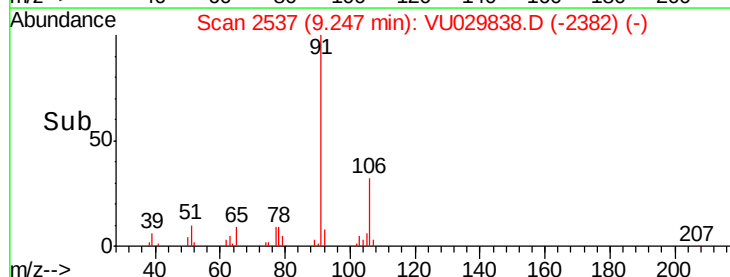
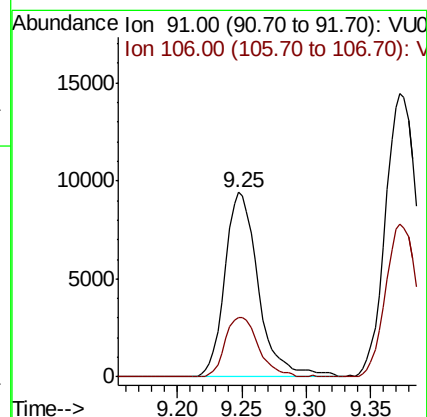
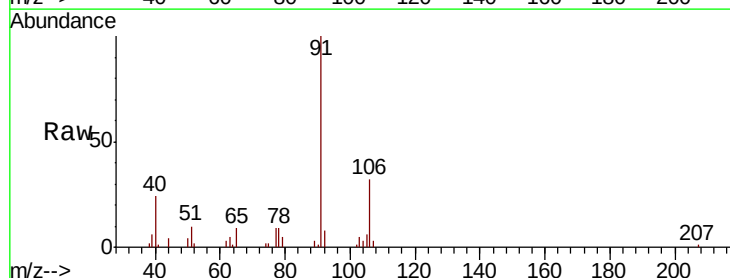
Acq: 06 Mar 2019 14:15

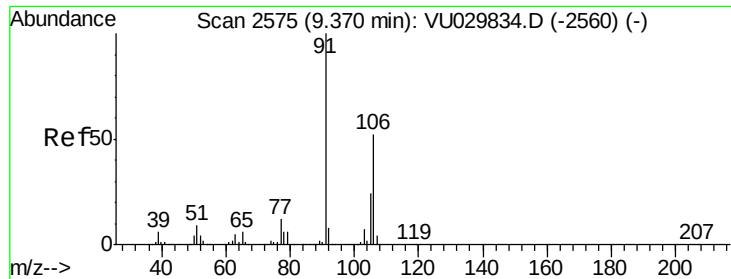
Tgt Ion: 91 Resp: 17050

Ion Ratio Lower Upper

91 100

106 32.0 25.7 38.5





#64

m/p-Xylenes

Concen: 0.446 ug/l

RT: 9.37 min Scan# 2576

Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampled :

MDL01

Tgt Ion:106 Resp: 13981

Ion Ratio Lower Upper

106 100

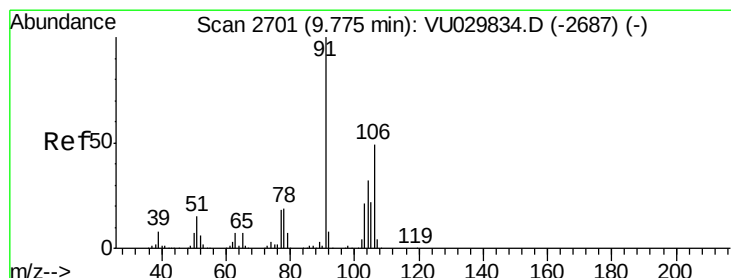
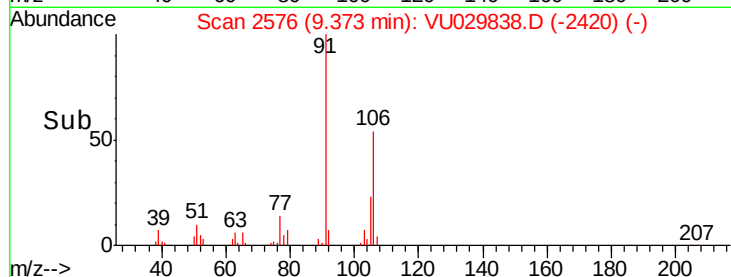
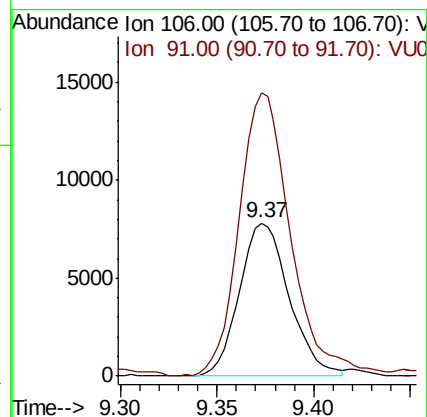
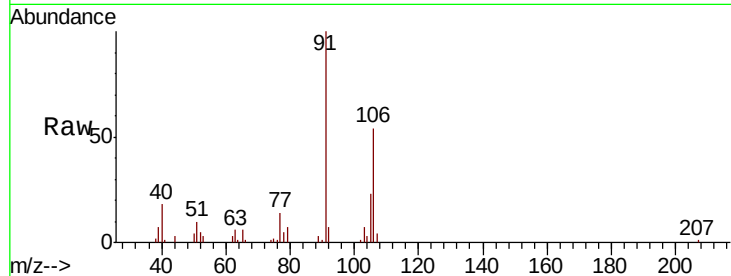
91 192.1 155.3 232.9

Manual Integrations

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MMDadoda

3/11/2019 4:49:33 PM



#65

o-Xylene

Concen: 0.219 ug/l

RT: 9.78 min Scan# 2702

Delta R.T. 0.00 min

Lab File: VU029838.D

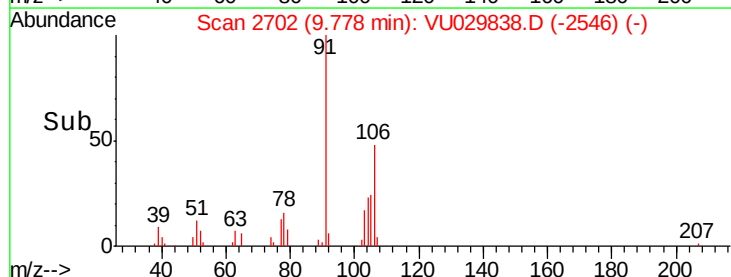
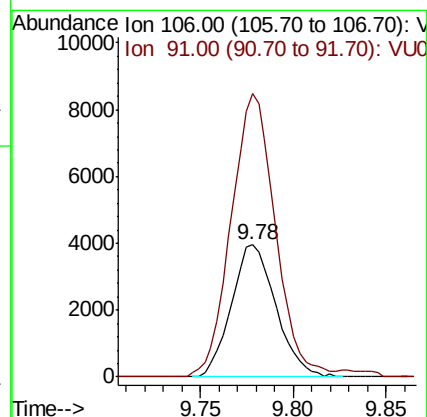
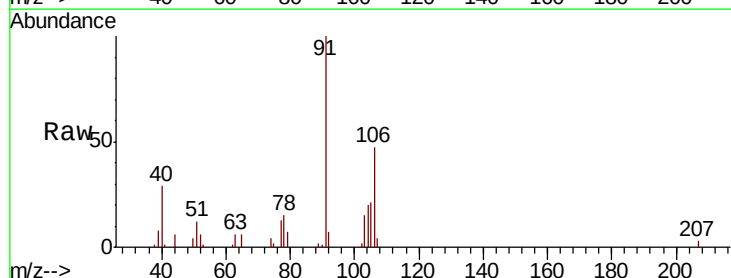
Acq: 06 Mar 2019 14:15

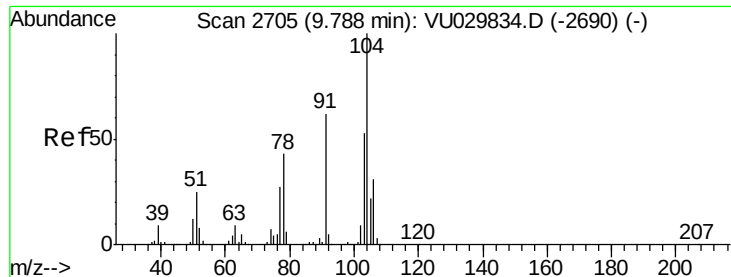
Tgt Ion:106 Resp: 6600

Ion Ratio Lower Upper

106 100

91 212.9 102.8 308.3





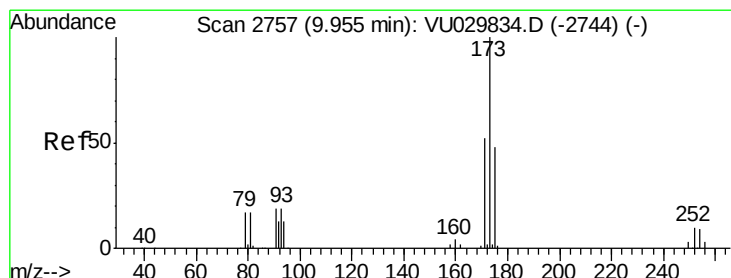
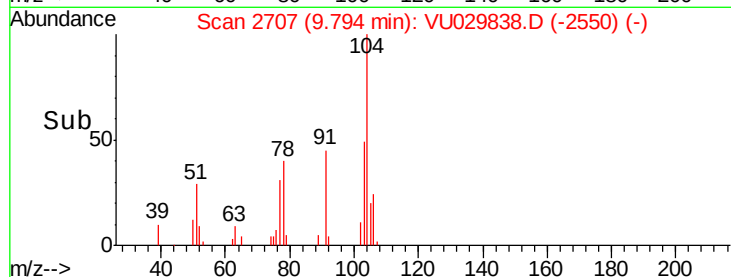
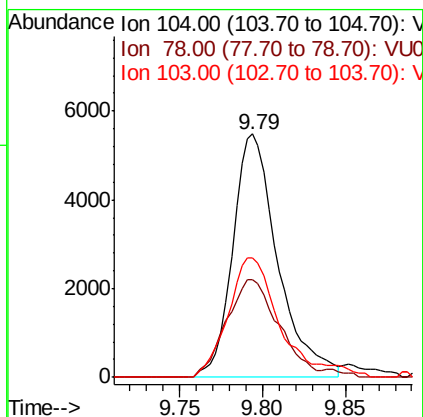
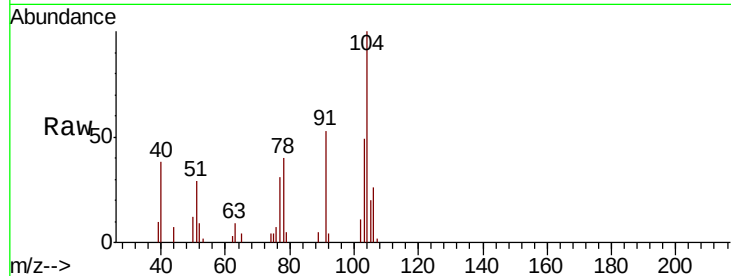
#66  
Styrene  
Concen: 0.207 ug/l  
RT: 9.79 min Scan# 2707  
Delta R.T. 0.01 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

Instrument :  
MSVOA\_U  
ClientSampleId :  
MDL01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 104     | 100   |       |       |
| 78      | 46.6  | 37.2  | 55.8  |
| 103     | 56.9  | 44.7  | 67.1  |

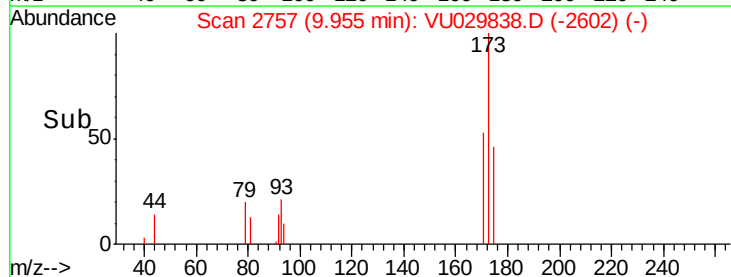
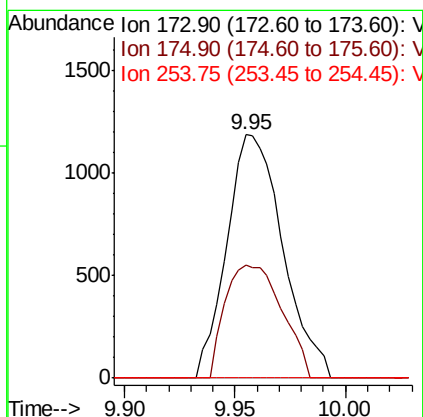
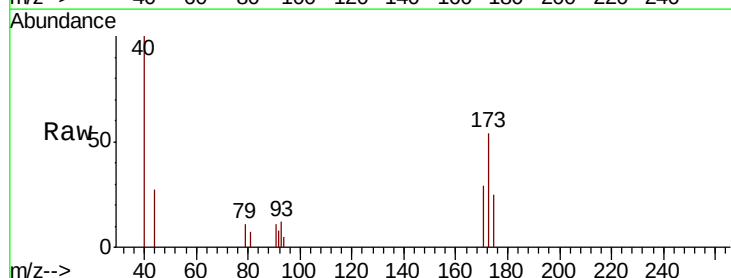
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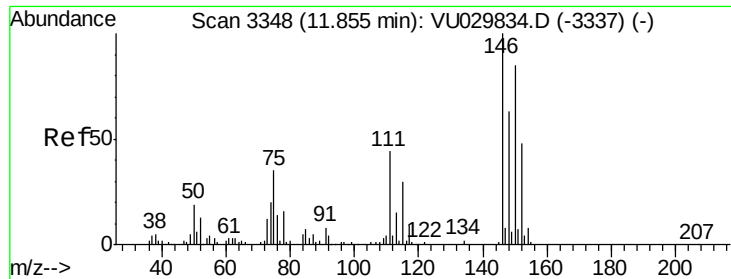
MMDadoda  
3/11/2019 4:49:33 PM



#67  
Bromoform  
Concen: 0.225 ug/l  
RT: 9.95 min Scan# 2757  
Delta R.T. -0.00 min  
Lab File: VU029838.D  
Acq: 06 Mar 2019 14:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 173     | 100   |       |       |
| 175     | 46.9  | 38.6  | 57.8  |
| 254     | 0.0   | 7.4   | 11.2# |





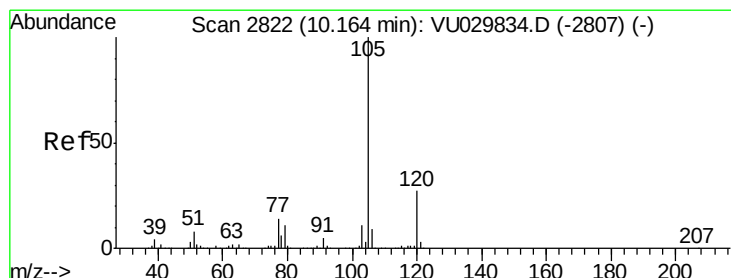
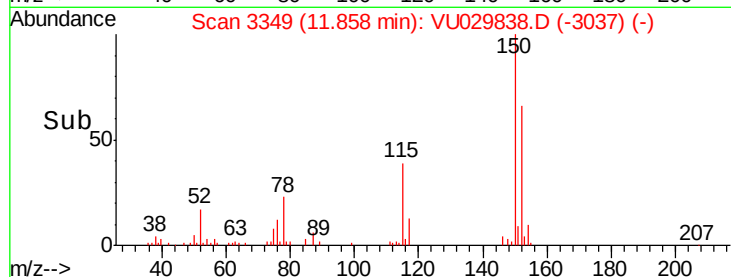
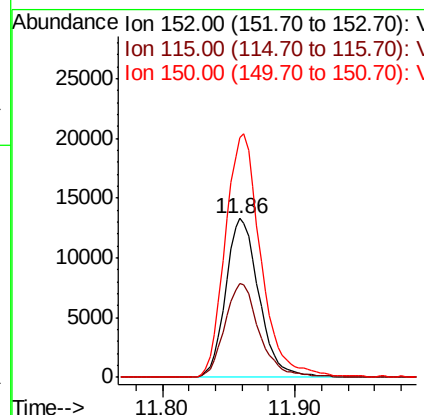
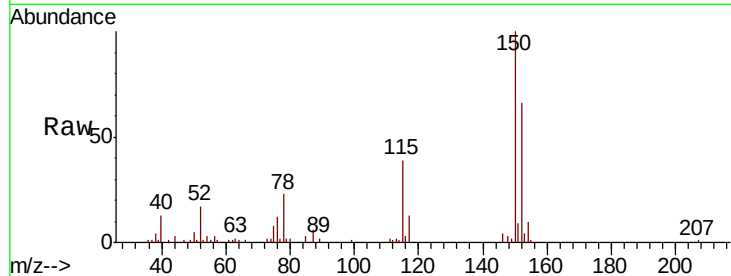
#68  
 1,2-Dichlorobenzene-d4  
 Concen: 0.225 ug/l  
 RT: 11.86 min Scan# 3349  
 Delta R.T. 0.00 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Instrument :  
 MSVOA\_U  
 ClientSampled :  
 MDL01

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 152     | 100   | 23132 |       |       |
| 115     | 61.7  | 0.0   | 124.0 |       |
| 150     | 163.6 | 0.0   | 631.2 |       |

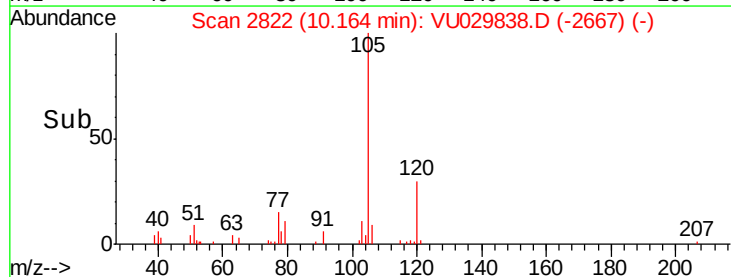
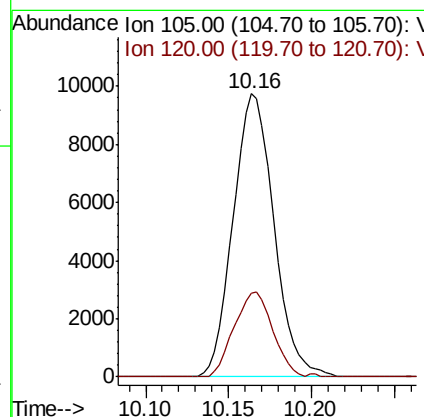
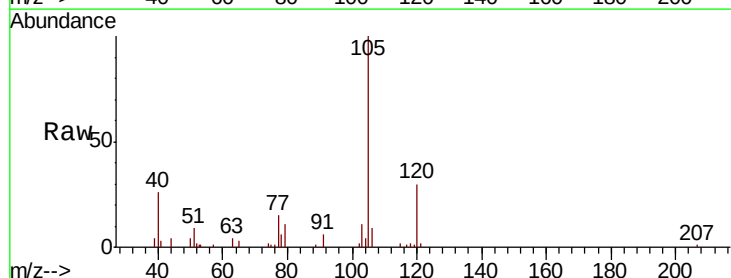
Manual Integrations  
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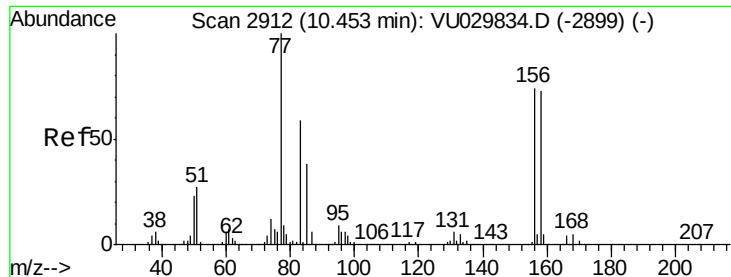
MMDadoda  
 3/11/2019 4:49:33 PM



#69  
 Isopropylbenzene  
 Concen: 0.209 ug/l  
 RT: 10.16 min Scan# 2822  
 Delta R.T. -0.00 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 105     | 100   | 16667 |       |       |
| 120     | 28.2  | 13.5  | 40.5  |       |





#70

1,1,2,2-Tetrachloroethane

Concen: 0.250 ug/l

RT: 10.46 min Scan# 2913

Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

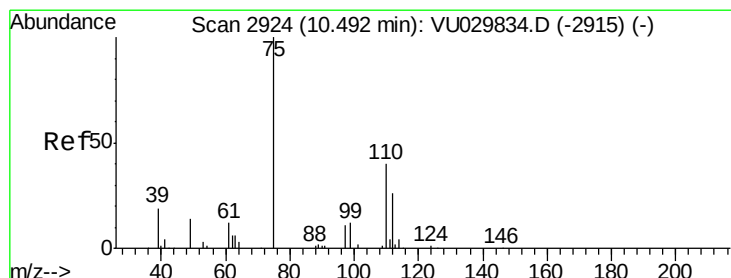
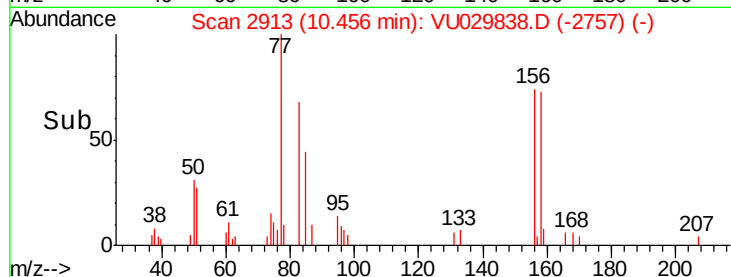
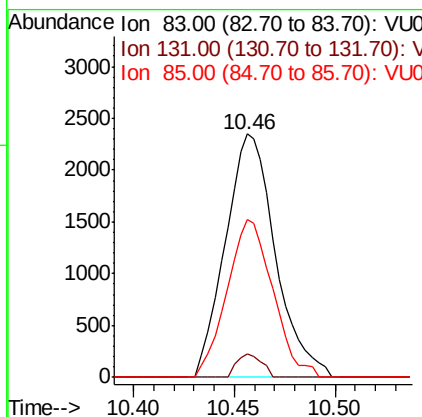
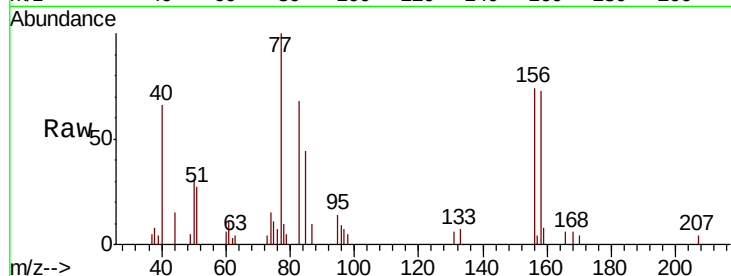
ClientSampled :

MDL01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 131     | 4.7   | 8.3   | 12.5# |
| 85      | 59.5  | 52.5  | 78.7  |

Manual Integrations  
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3/11/2019 4:49:33 PM



#71

1,2,3-Trichloropropane

Concen: 0.220 ug/l m

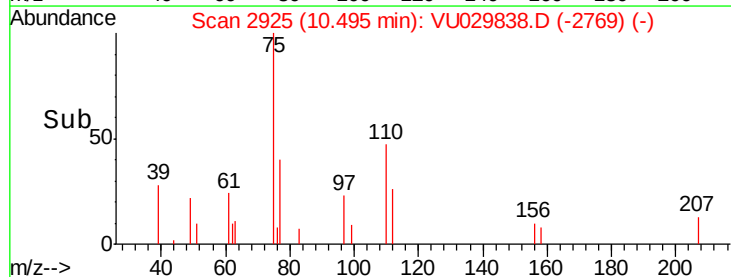
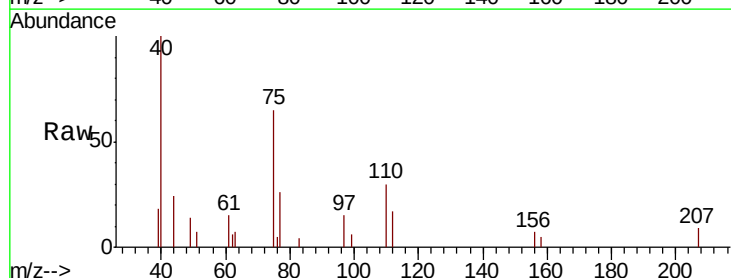
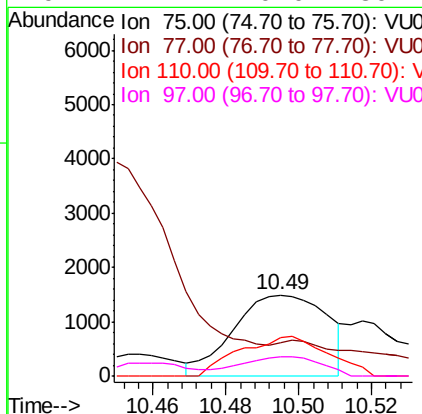
RT: 10.49 min Scan# 2925

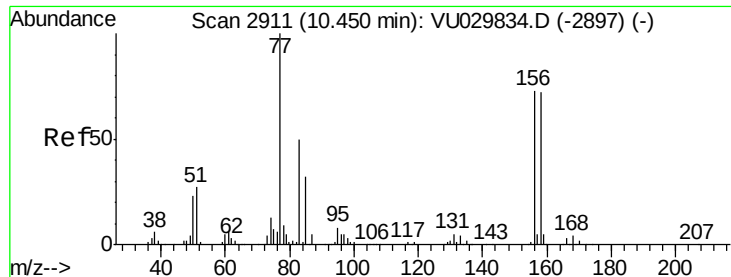
Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 0.0   | 0.0   | 16.4  |
| 110     | 46.2  | 0.0   | 74.8  |
| 97      | 21.1  | 0.0   | 39.4  |





#72

Bromobenzene

Concen: 0.249 ug/l

RT: 10.46 min Scan# 2914

Delta R.T. 0.01 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

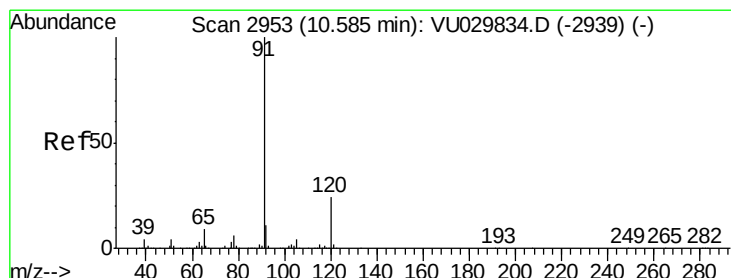
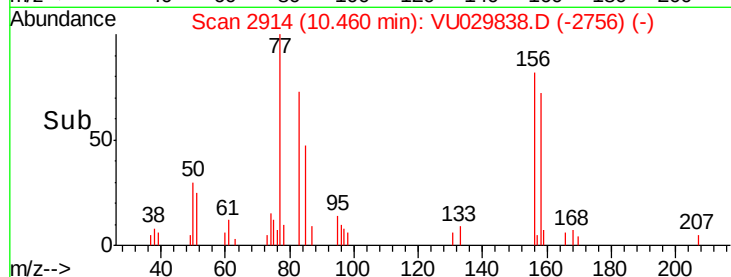
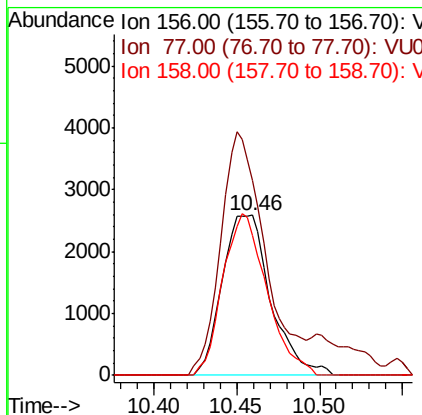
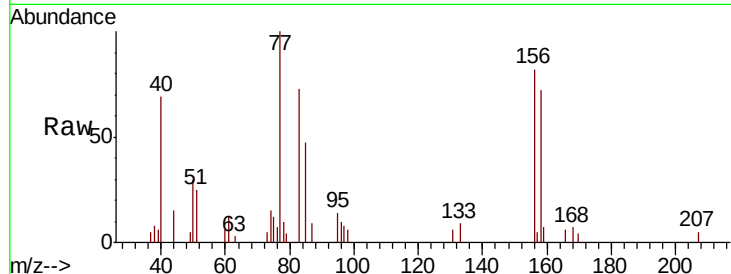
ClientSampled :

MDL01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 156   | Resp: | 5257  |
| Ion Ratio | Lower | Upper |       |
| 156       | 100   |       |       |
| 77        | 139.3 | 0.0   | 282.2 |
| 158       | 91.6  | 0.0   | 196.2 |

Manual Integrations  
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3/11/2019 4:49:33 PM



#73

n-propylbenzene

Concen: 0.203 ug/l

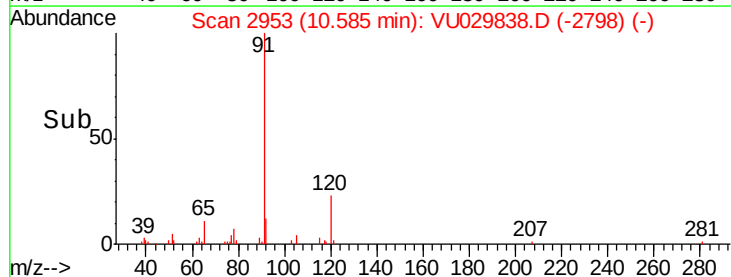
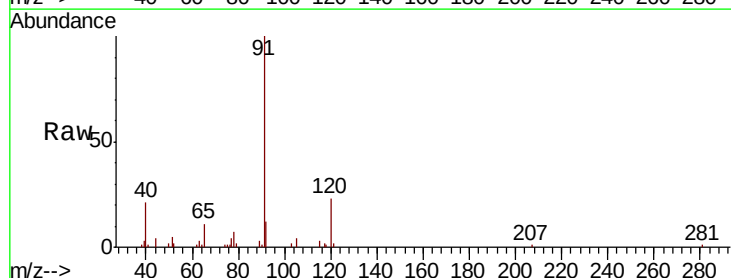
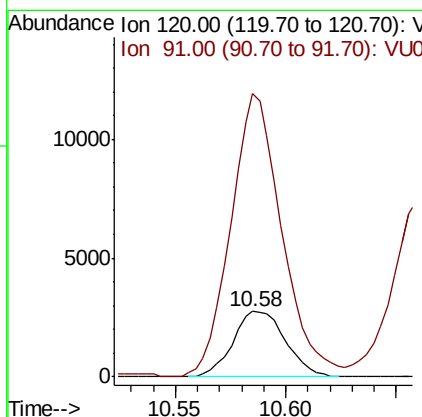
RT: 10.58 min Scan# 2953

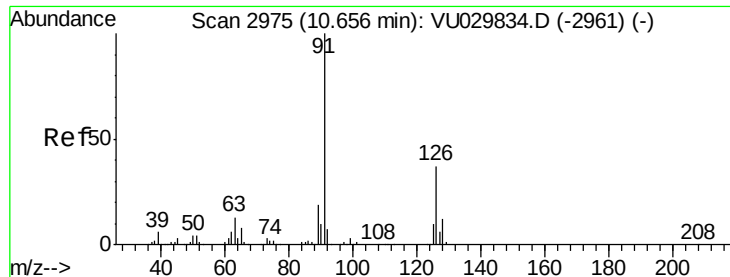
Delta R.T. -0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 120   | Resp: | 4572  |
| Ion Ratio | Lower | Upper |       |
| 120       | 100   |       |       |
| 91        | 419.6 | 333.4 | 500.2 |





#74

2-Chlorotoluene

Concen: 0.241 ug/l

RT: 10.66 min Scan# 2976

Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampleId :

MDL01

Tgt Ion:126 Resp: 4806

Ion Ratio Lower Upper

126 100

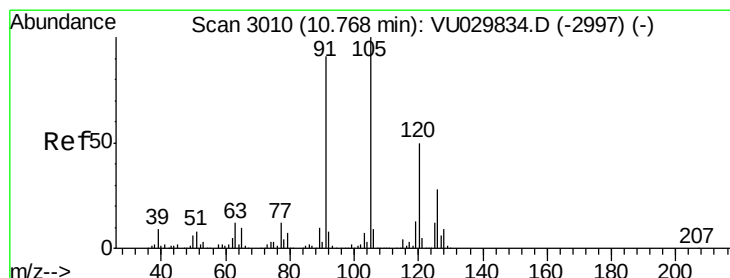
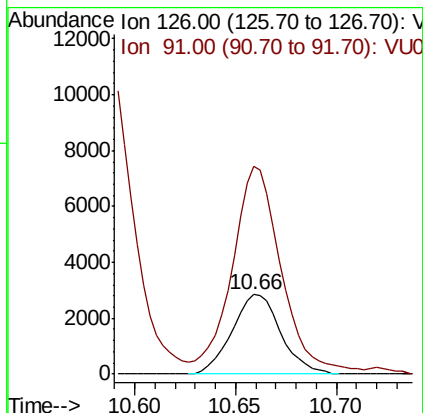
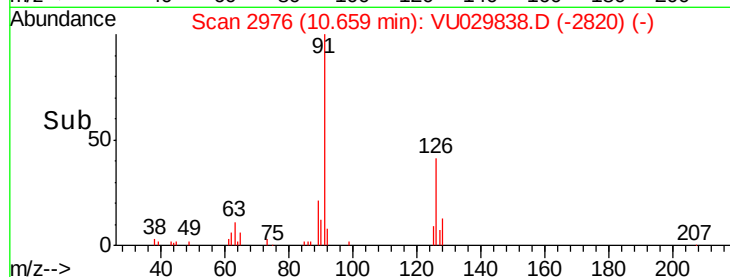
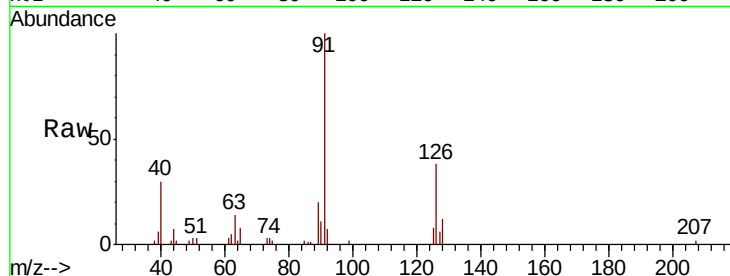
91 252.2 0.0 569.0

Manual Integrations

APPROVED

MMDadoda

3/11/2019 4:49:33 PM



#75

1,3,5-Trimethylbenzene

Concen: 0.206 ug/l

RT: 10.77 min Scan# 3011

Delta R.T. 0.00 min

Lab File: VU029838.D

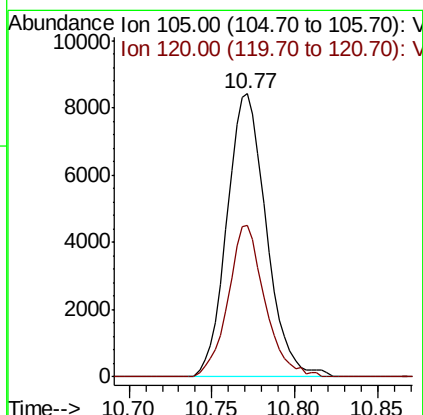
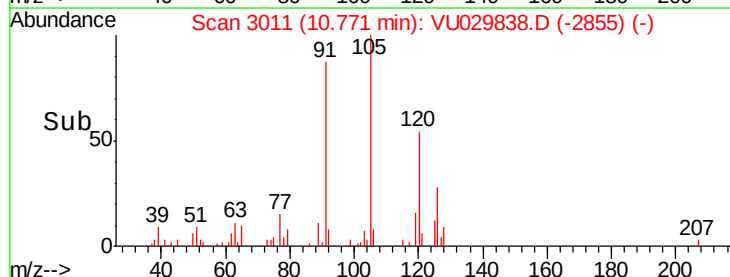
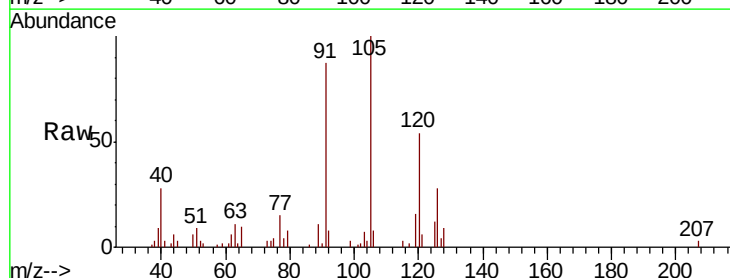
Acq: 06 Mar 2019 14:15

Tgt Ion:105 Resp: 13878

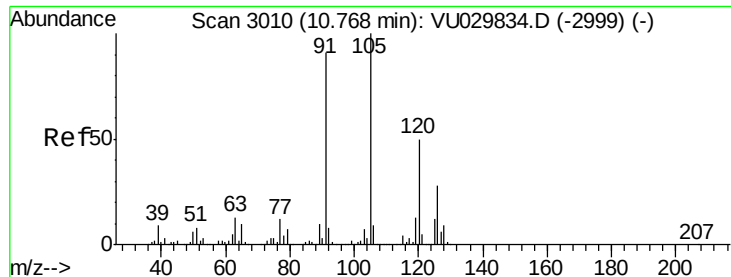
Ion Ratio Lower Upper

105 100

120 50.3 40.0 60.0







#76

4-Chlorotoluene

Concen: 0.205 ug/l

RT: 10.77 min Scan# 3011

Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampled :

MDL01

Tgt Ion:126 Resp: 4168

Ion Ratio Lower Upper

126 100

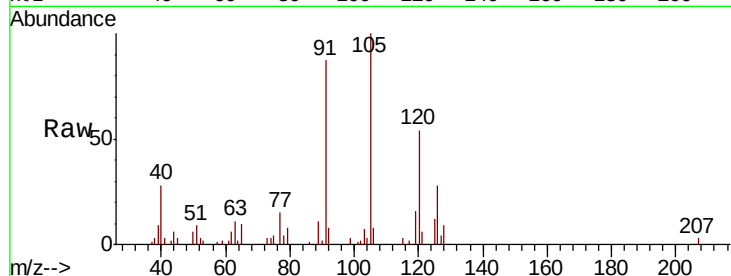
91 325.2 0.0 634.8

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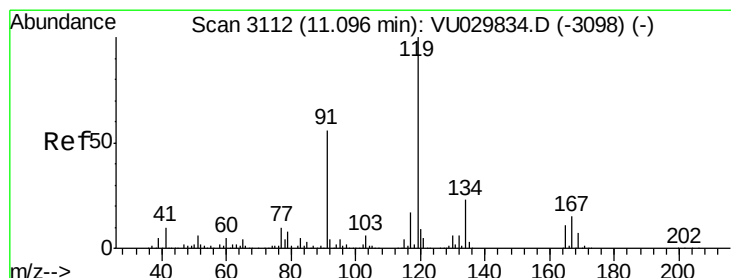
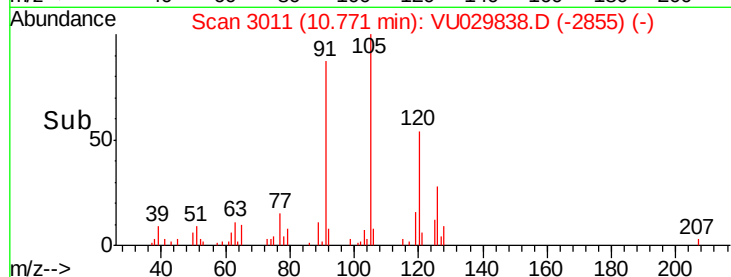
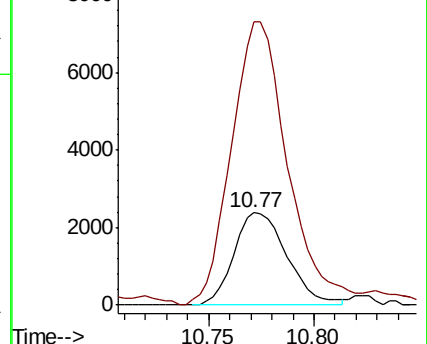
MMDadoda

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Abundance Ion 126.00 (125.70 to 126.70): V

Ion 91.00 (90.70 to 91.70): VU0



#77

tert-Butylbenzene

Concen: 0.209 ug/l

RT: 11.10 min Scan# 3113

Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

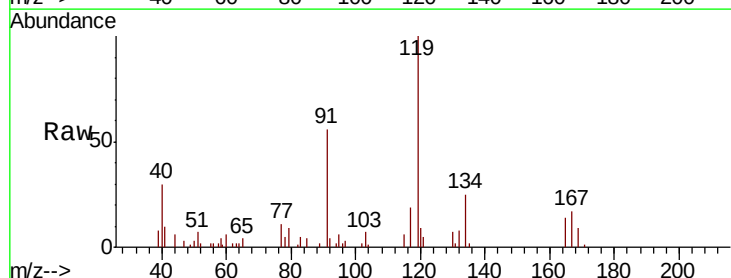
Tgt Ion:119 Resp: 13930

Ion Ratio Lower Upper

119 100

91 53.4 27.7 83.1

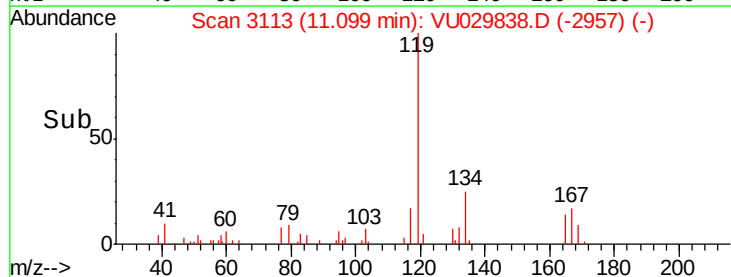
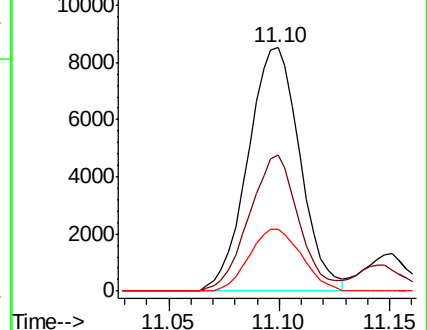
134 25.5 18.7 28.1

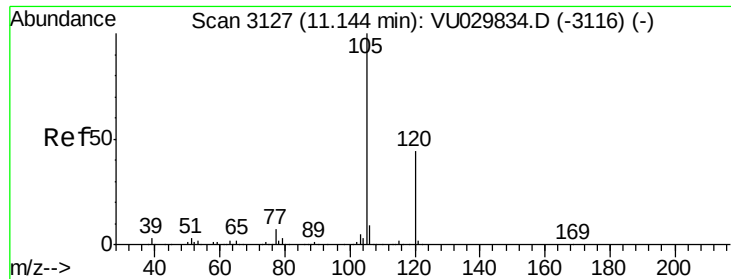


Abundance Ion 119.00 (118.70 to 119.70): V

Ion 91.00 (90.70 to 91.70): VU0

Ion 134.00 (133.70 to 134.70): V





#78

1,2,4-Trimethylbenzene

Concen: 0.203 ug/l

RT: 11.15 min Scan# 3128

Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

ClientSampled :

MDL01

Tgt Ion:105 Resp: 13789

Ion Ratio Lower Upper

105 100

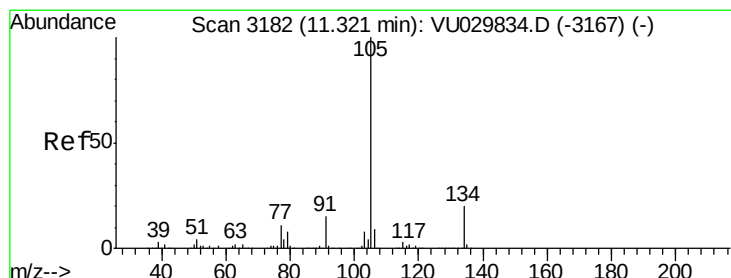
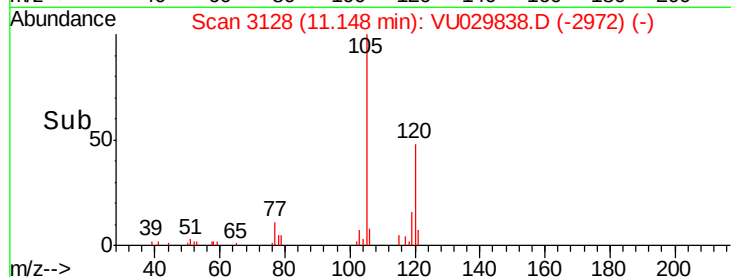
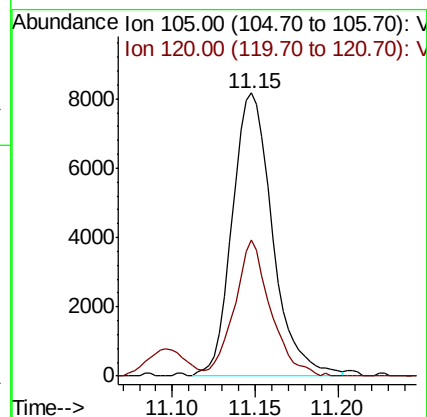
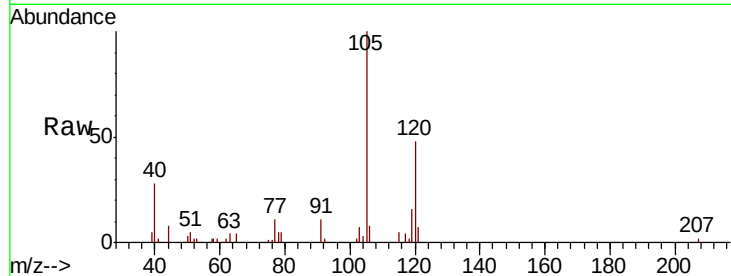
120 43.3 23.5 70.5

Manual Integrations

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#79

sec-Butylbenzene

Concen: 0.203 ug/l

RT: 11.32 min Scan# 3182

Delta R.T. -0.00 min

Lab File: VU029838.D

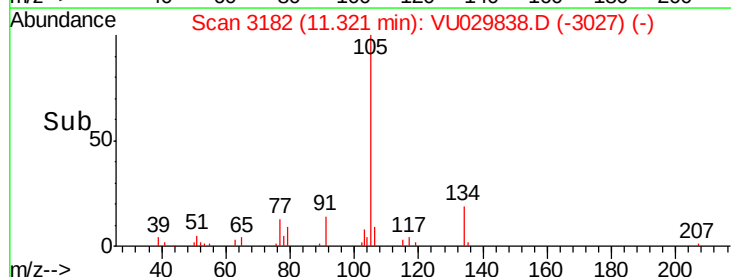
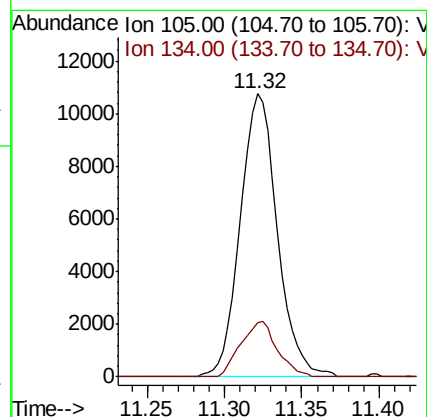
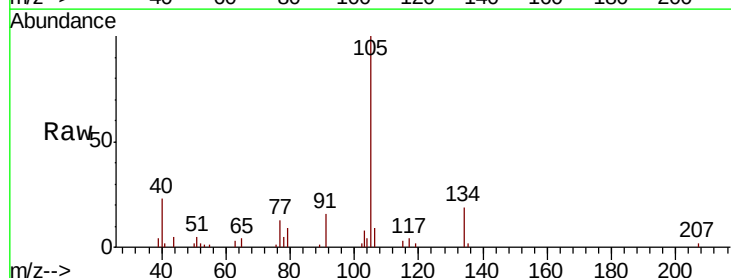
Acq: 06 Mar 2019 14:15

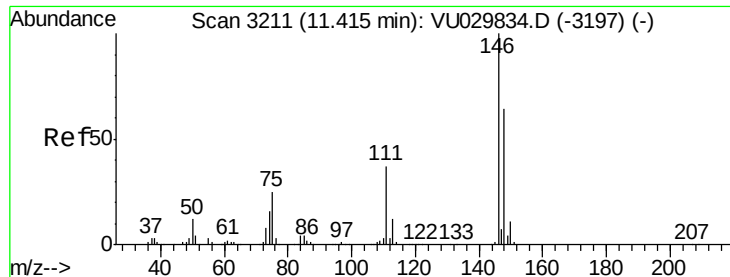
Tgt Ion:105 Resp: 17890

Ion Ratio Lower Upper

105 100

134 19.2 16.3 24.5





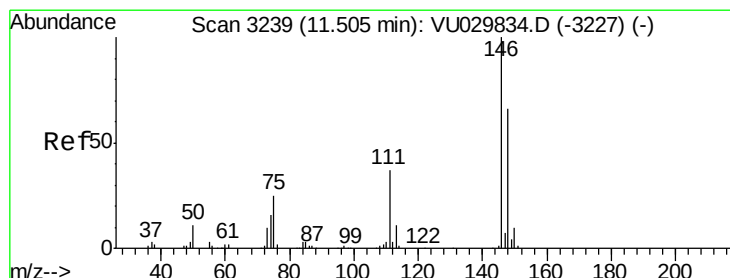
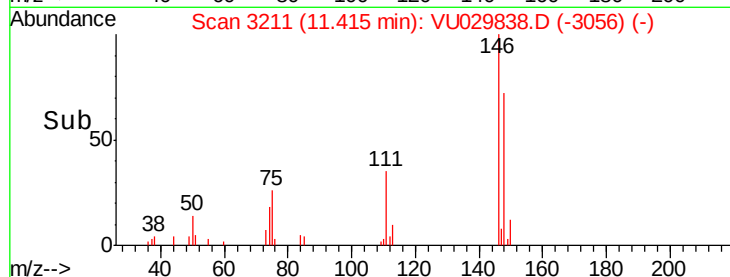
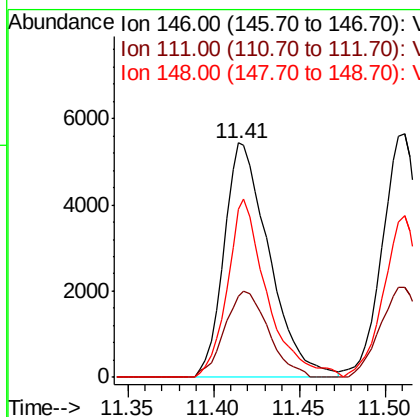
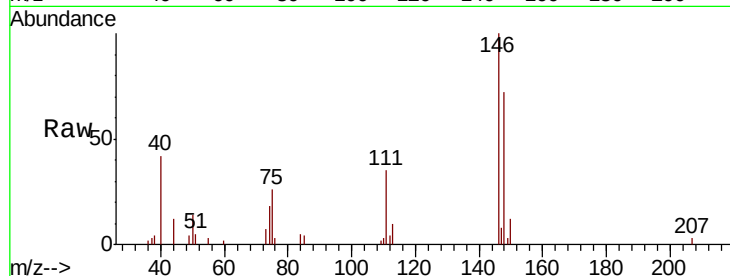
#82  
 1,3-Dichlorobenzene  
 Concen: 0.236 ug/l  
 RT: 11.41 min Scan# 3211  
 Delta R.T. -0.00 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 35.7  | 30.2  | 45.4  |
| 148     | 66.8  | 51.2  | 76.8  |

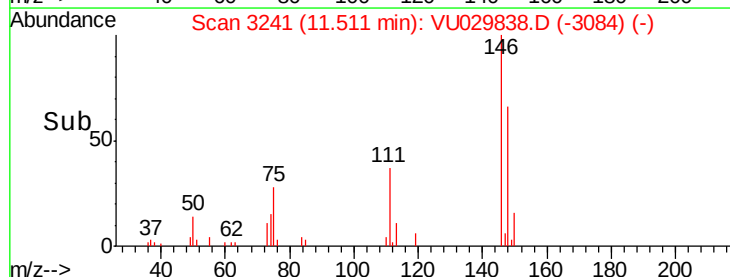
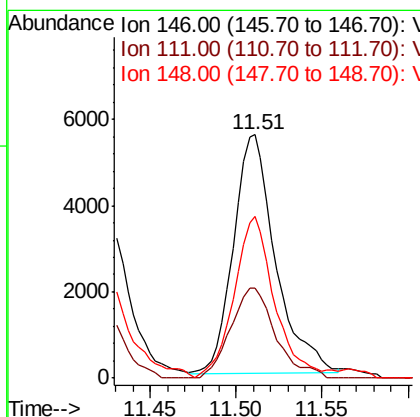
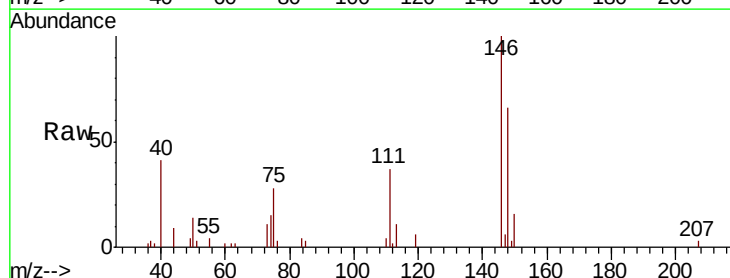
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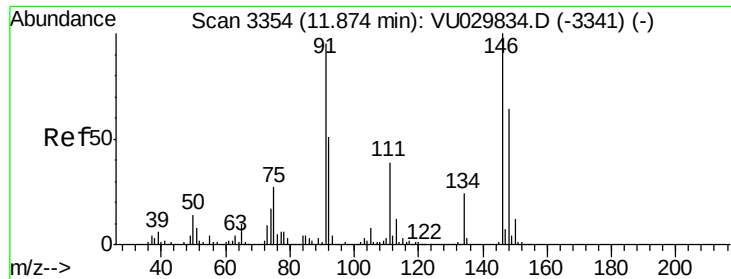
MMDadoda  
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#83  
 1,4-Dichlorobenzene  
 Concen: 0.229 ug/l  
 RT: 11.51 min Scan# 3241  
 Delta R.T. 0.01 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 40.5  | 29.4  | 44.2  |
| 148     | 65.8  | 51.7  | 77.5  |





#85

1,2-Dichlorobenzene

Concen: 0.242 ug/l

RT: 11.88 min Scan# 3355

Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

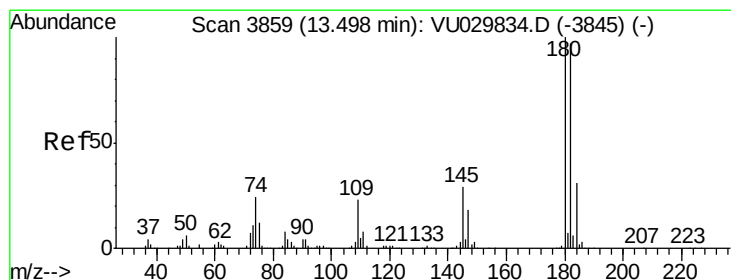
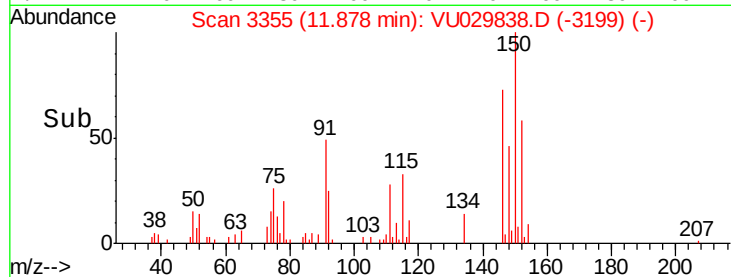
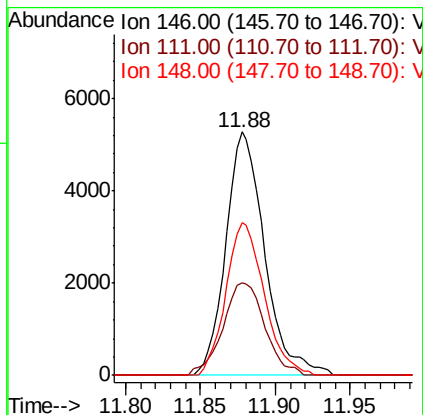
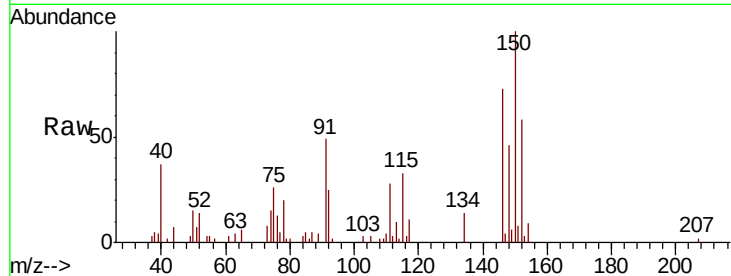
ClientSampled :

MDL01

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 146   | Resp: | 9547 |
| Ion Ratio | Lower | Upper |      |
| 146       | 100   |       |      |
| 111       | 41.0  | 19.9  | 59.6 |
| 148       | 62.0  | 32.1  | 96.3 |

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#87

1,2,4-Trichlorobenzene

Concen: 0.213 ug/l

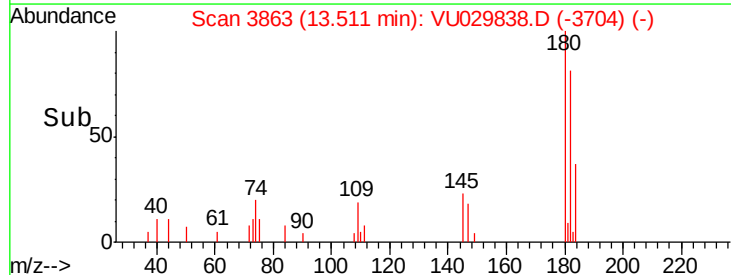
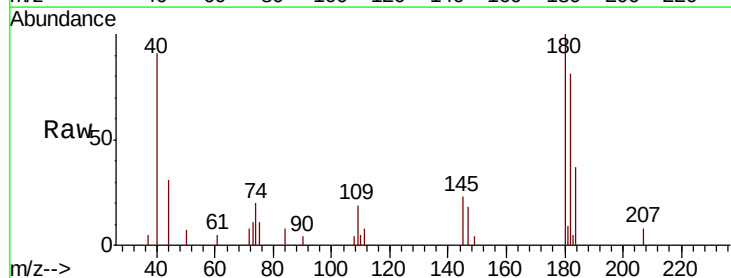
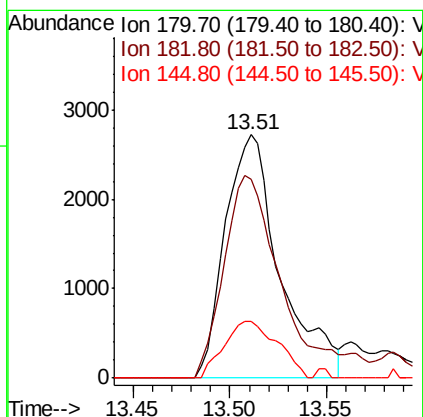
RT: 13.51 min Scan# 3863

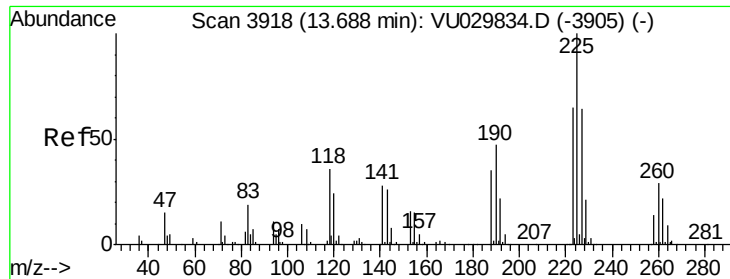
Delta R.T. 0.01 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 180   | Resp: | 5381  |
| Ion Ratio | Lower | Upper |       |
| 180       | 100   |       |       |
| 182       | 85.0  | 77.5  | 116.3 |
| 145       | 22.4  | 23.6  | 35.4# |





#88

Hexachlorobutadiene

Concen: 0.213 ug/l

RT: 13.69 min Scan# 3919

Delta R.T. 0.00 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

Instrument :

MSVOA\_U

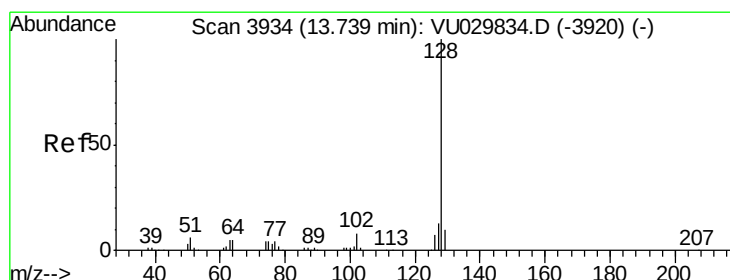
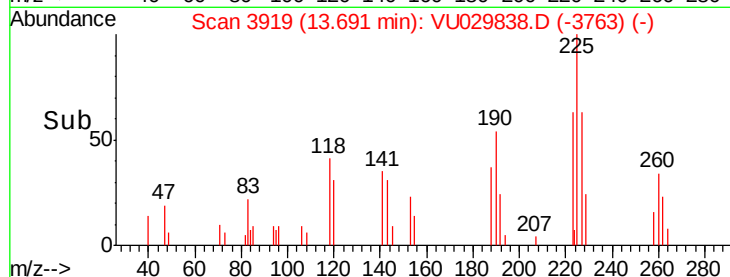
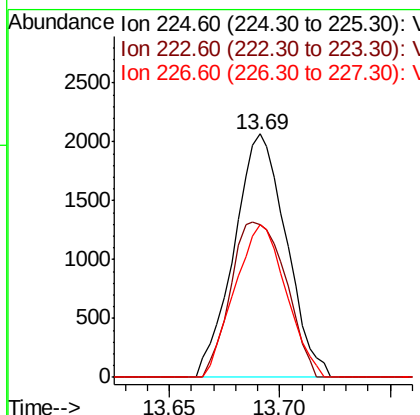
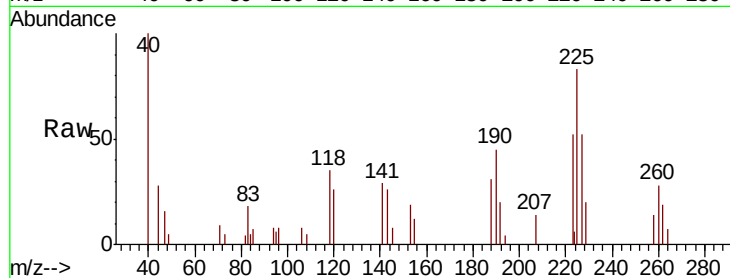
ClientSampled :

MDL01

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 225   | Resp: | 3388 |
| Ion Ratio | Lower | Upper |      |
| 225       | 100   |       |      |
| 223       | 67.4  | 51.2  | 76.8 |
| 227       | 61.9  | 50.9  | 76.3 |

Manual Integrations  
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#89

Naphthalene

Concen: 0.609 ug/l

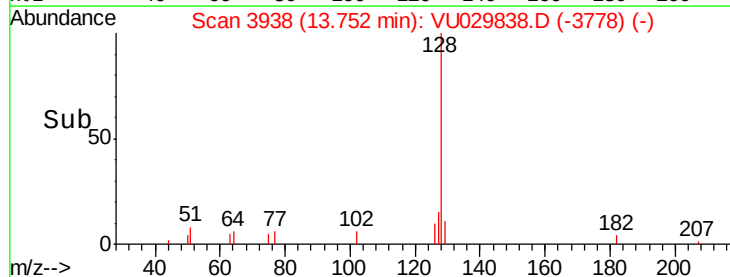
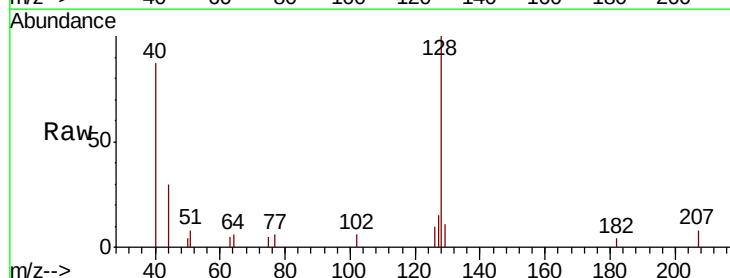
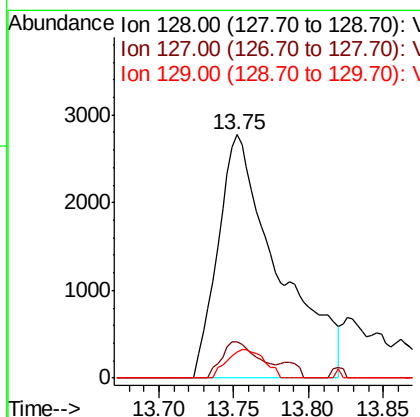
RT: 13.75 min Scan# 3938

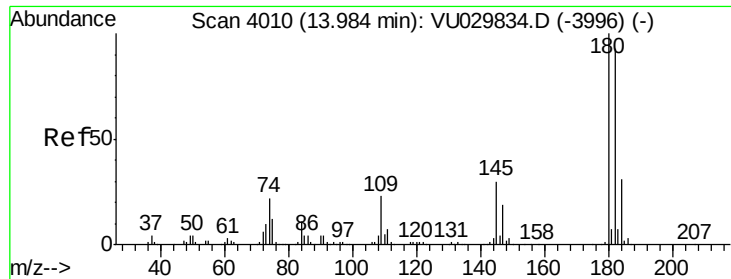
Delta R.T. 0.01 min

Lab File: VU029838.D

Acq: 06 Mar 2019 14:15

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 128   | Resp: | 7724  |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 127       | 9.2   | 10.2  | 15.4# |
| 129       | 7.3   | 8.2   | 12.4# |





#90  
 1,2,3-Trichlorobenzene  
 Concen: 0.233 ug/l  
 RT: 13.99 min Scan# 4012  
 Delta R.T. 0.01 min  
 Lab File: VU029838.D  
 Acq: 06 Mar 2019 14:15

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.3  | 74.8  | 112.2 |
| 145     | 28.2  | 24.6  | 36.8  |

Manual Integrations  
 APPROVED

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 3/11/2019 4:49:33 PM

