

Data File : VU033846.D  
Acq On : 20 Aug 2019 11:40  
Operator : JC/SP  
Sample : VSTD02003  
Misc : 25.0mL/MSVOA\_U/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD02003

Quant Time: Aug 21 05:11:46 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR082019WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Aug 21 05:04:59 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.86  | 114  | 190267   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.07  | 117  | 200670   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.47 | 152  | 117367   | 5.00 | ug/L  | 0.00     |

System Monitoring Compounds

|                                |       |     |         |        |      |      |
|--------------------------------|-------|-----|---------|--------|------|------|
| 4) Vinyl Chloride-d3           | 1.39  | 65  | 317822  | 19.61  | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.66  | 69  | 277059  | 19.15  | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.26  | 63  | 640945  | 19.70  | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 4.16  | 46  | 703398  | 218.83 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.62  | 84  | 535782  | 19.83  | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.29  | 65  | 275953  | 18.91  | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.32  | 84  | 1064555 | 21.19  | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.31  | 67  | 333126  | 20.35  | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.55  | 98  | 1039784 | 22.21  | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.83  | 79  | 141477  | 22.47  | ug/L | 0.00 |
| 46) 2-Hexanone-d5              | 8.30  | 63  | 614931  | 273.95 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.41 | 84  | 289383  | 20.50  | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.84 | 152 | 418762  | 20.56  | ug/L | 0.00 |

Target Compounds

|                                |      |     |         |              | Qvalue |
|--------------------------------|------|-----|---------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 340103  | 19.726 ug/L  | 100    |
| 3) Chloromethane               | 1.32 | 50  | 315019  | 18.817 ug/L  | 99     |
| 5) Vinyl chloride              | 1.39 | 62  | 360983  | 19.167 ug/L  | 100    |
| 6) Bromomethane                | 1.60 | 94  | 229531  | 18.609 ug/L  | 99     |
| 8) Chloroethane                | 1.68 | 64  | 214133  | 19.370 ug/L  | 97     |
| 9) Trichlorofluoromethane      | 1.87 | 101 | 464061  | 19.383 ug/L  | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27 | 101 | 265880  | 19.182 ug/L  | 100    |
| 12) 1,1-Dichloroethene         | 2.27 | 96  | 255409  | 19.409 ug/L  | 98     |
| 13) Acetone                    | 2.31 | 43  | 452849  | 184.274 ug/L | 98     |
| 14) Carbon disulfide           | 2.46 | 76  | 874872  | 19.344 ug/L  | 99     |
| 15) Methyl Acetate             | 2.60 | 43  | 119552  | 19.417 ug/L  | 99     |
| 16) Methylene chloride         | 2.68 | 84  | 277297  | 17.956 ug/L  | 99     |
| 17) Methyl tert-butyl Ether    | 2.98 | 73  | 646431  | 19.579 ug/L  | 100    |
| 18) trans-1,2-Dichloroethene   | 2.96 | 96  | 272290  | 18.778 ug/L  | 99     |
| 19) 1,1-Dichloroethane         | 3.42 | 63  | 409853  | 19.492 ug/L  | 99     |
| 21) 2-Butanone                 | 4.25 | 43  | 575631  | 218.442 ug/L | 97     |
| 22) cis-1,2-Dichloroethene     | 4.20 | 96  | 239096  | 20.966 ug/L  | 92     |
| 23) Bromochloromethane         | 4.52 | 128 | 107076  | 19.420 ug/L  | 94     |
| 25) Chloroform                 | 4.65 | 83  | 417654  | 17.569 ug/L  | 98     |
| 27) 1,2-Dichloroethane         | 5.38 | 62  | 269302  | 19.952 ug/L  | 96     |
| 29) 1,1,1-Trichloroethane      | 4.89 | 97  | 355807  | 19.562 ug/L  | 97     |
| 30) Cyclohexane                | 4.96 | 56  | 351262  | 22.868 ug/L  | 99     |
| 31) Carbon tetrachloride       | 5.11 | 117 | 321335  | 19.594 ug/L  | 99     |
| 33) Benzene                    | 5.36 | 78  | 916352  | 20.810 ug/L  | 100    |
| 34) Trichloroethene            | 6.16 | 95  | 231066  | 19.559 ug/L  | 93     |
| 35) Methylcyclohexane          | 6.39 | 83  | 388209  | 23.515 ug/L  | 96     |
| 37) 1,2-Dichloropropane        | 6.41 | 63  | 237302  | 20.365 ug/L  | 99     |
| 38) Bromodichloromethane       | 6.74 | 83  | 295951  | 19.722 ug/L  | 99     |
| 39) cis-1,3-Dichloropropene    | 7.25 | 75  | 353156  | 22.937 ug/L  | 98     |
| 40) 4-Methyl-2-pentanone       | 7.45 | 43  | 1427219 | 231.285 ug/L | 98     |

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR082019WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Aug 21 05:04:59 2019  
Response via : Initial Calibration

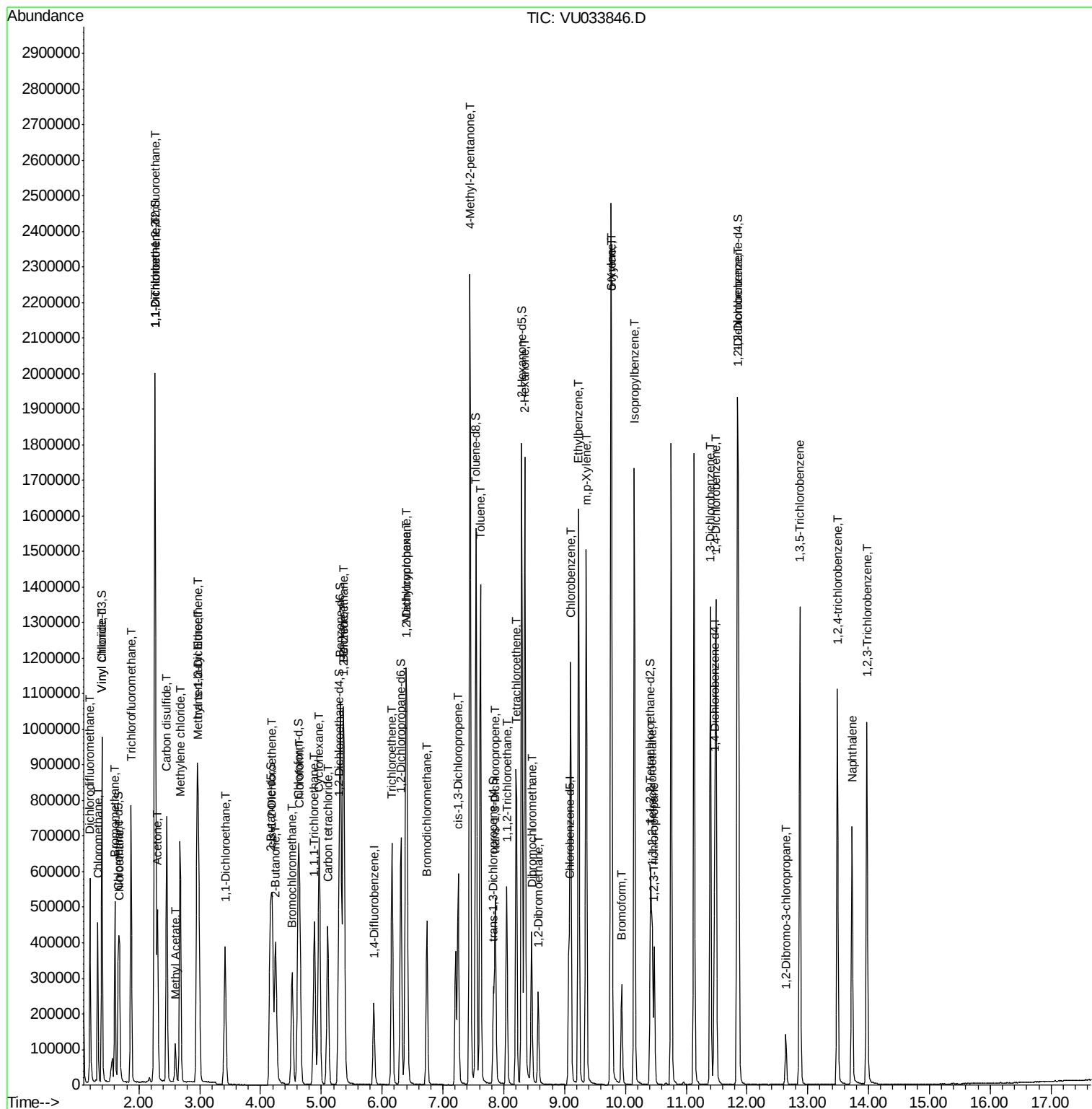
| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 42) Toluene                    | 7.62  | 91   | 1014753  | 22.497  | ug/L   | 97       |
| 44) trans-1,3-Dichloropropene  | 7.86  | 75   | 290233   | 22.541  | ug/L   | 99       |
| 45) 1,1,2-Trichloroethane      | 8.05  | 97   | 167548   | 20.092  | ug/L   | 99       |
| 47) Tetrachloroethene          | 8.21  | 164  | 196956   | 20.323  | ug/L   | 97       |
| 48) 2-Hexanone                 | 8.35  | 43   | 1041625  | 231.012 | ug/L   | 98       |
| 49) Dibromochloromethane       | 8.46  | 129  | 212702   | 20.430  | ug/L   | 98       |
| 50) 1,2-Dibromoethane          | 8.57  | 107  | 164689   | 20.662  | ug/L # | 99       |
| 51) Chlorobenzene              | 9.10  | 112  | 619146   | 20.754  | ug/L   | 99       |
| 52) Ethylbenzene               | 9.23  | 91   | 1080642  | 23.935  | ug/L   | 100      |
| 53) m,p-Xylene                 | 9.36  | 106  | 422838   | 24.950  | ug/L   | 97       |
| 54) o-Xylene                   | 9.76  | 106  | 405720   | 24.964  | ug/L   | 100      |
| 55) Styrene                    | 9.77  | 104  | 715512   | 25.402  | ug/L   | 99       |
| 56) Isopropylbenzene           | 10.15 | 105  | 1074832  | 25.560  | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.44 | 83   | 220258   | 21.040  | ug/L # | 97       |
| 59) 1,2,3-Trichloropropane     | 10.48 | 75   | 156068   | 20.440  | ug/L   | 100      |
| 61) Bromoform                  | 9.94  | 173  | 124302   | 19.174  | ug/L   | 99       |
| 62) 1,3-Dichlorobenzene        | 11.40 | 146  | 538273   | 20.644  | ug/L   | 98       |
| 63) 1,4-Dichlorobenzene        | 11.49 | 146  | 544141   | 20.296  | ug/L   | 99       |
| 65) 1,2-Dichlorobenzene        | 11.86 | 146  | 514916   | 20.407  | ug/L   | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.64 | 75   | 35608    | 19.949  | ug/L   | 91       |
| 67) 1,3,5-Trichlorobenzene     | 12.87 | 180  | 422124   | 21.330  | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.49 | 180  | 346846   | 24.080  | ug/L   | 98       |
| 69) Naphthalene                | 13.73 | 128  | 586795   | 29.772  | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.97 | 180  | 327871   | 24.230  | ug/L   | 99       |

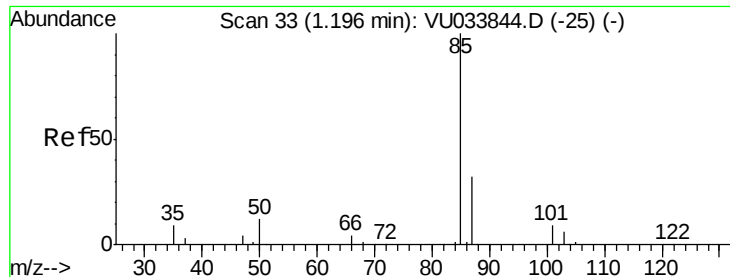
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#2

Dichlorodifluoromethane

Concen: 19.726 ug/L

RT: 1.20 min Scan# 33

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

Instrument :

MSVOA\_U

ClientSampleId :

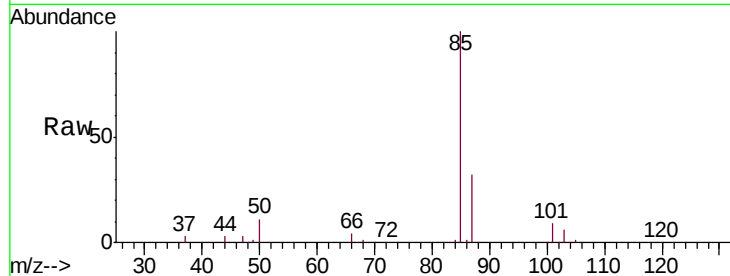
VSTD02003

Tgt Ion: 85 Resp: 340103

Ion Ratio Lower Upper

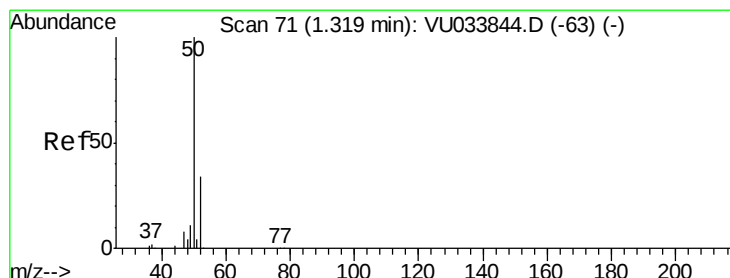
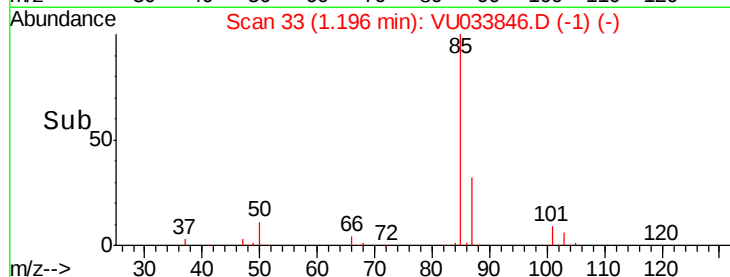
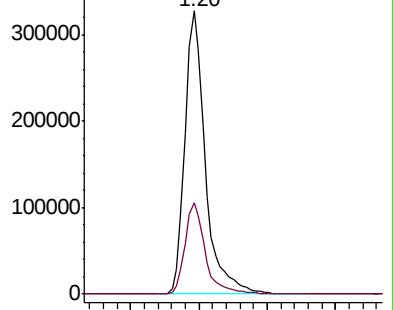
85 100

87 32.0 25.5 38.3



Abundance Ion 85.00 (84.70 to 85.70): VU033844.D (-25) (-)

Ion 87.00 (86.70 to 87.70): VU033844.D (-25) (-)



#3

Chloromethane

Concen: 18.817 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VU033846.D

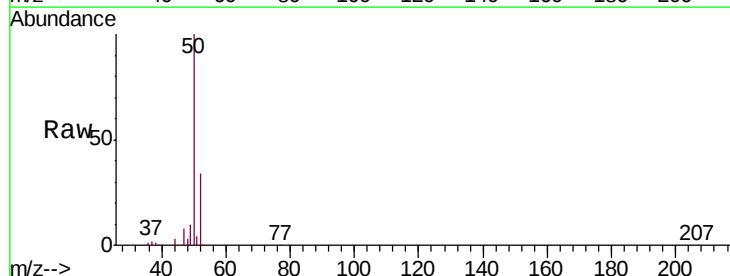
Acq: 20 Aug 2019 11:40

Tgt Ion: 50 Resp: 315019

Ion Ratio Lower Upper

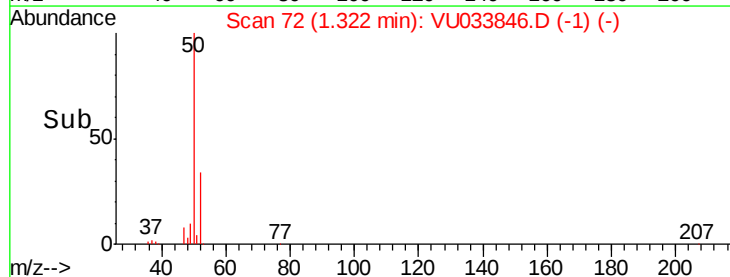
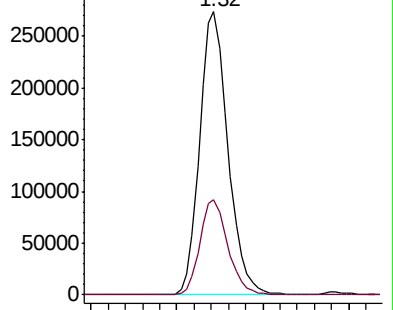
50 100

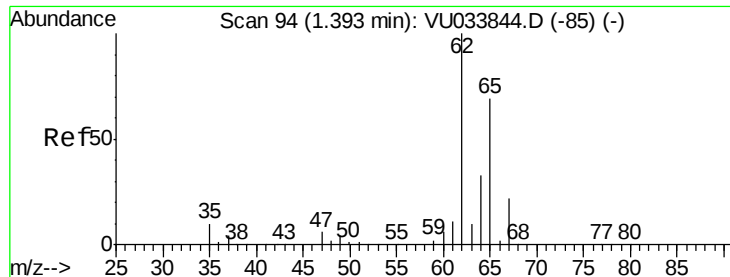
52 33.7 23.8 44.2



Abundance Ion 50.05 (49.75 to 50.75): VU033844.D (-63) (-)

Ion 52.05 (51.75 to 52.75): VU033844.D (-63) (-)





#5

Vinyl chloride

Concen: 19.167 ug/L

RT: 1.39 min Scan# 94

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

Instrument :

MSVOA\_U

ClientSampleId :

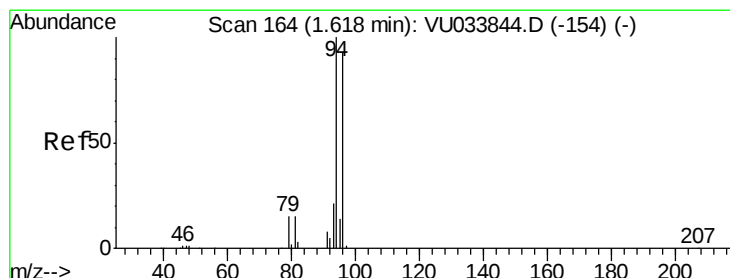
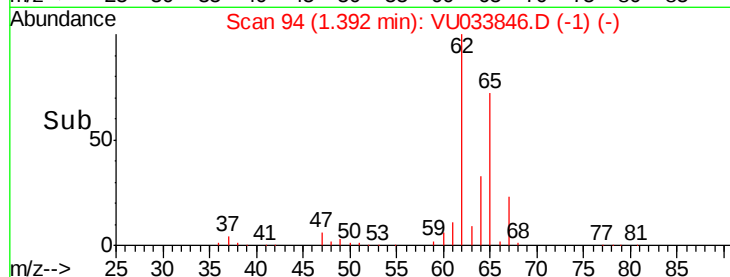
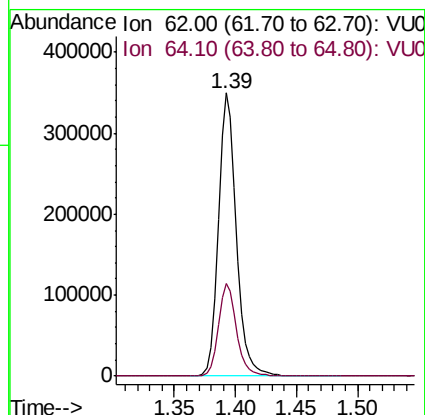
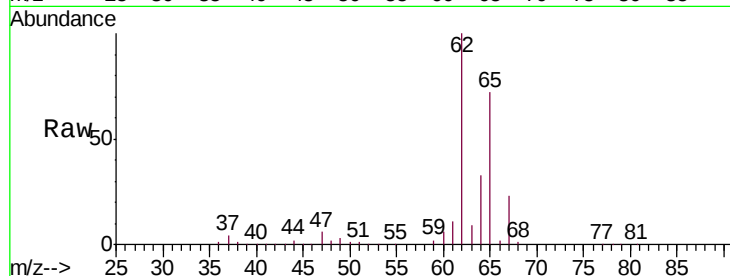
VSTD02003

Tgt Ion: 62 Resp: 360983

Ion Ratio Lower Upper

62 100

64 32.8 23.1 42.9



#6

Bromomethane

Concen: 18.609 ug/L

RT: 1.60 min Scan# 160

Delta R.T. -0.01 min

Lab File: VU033846.D

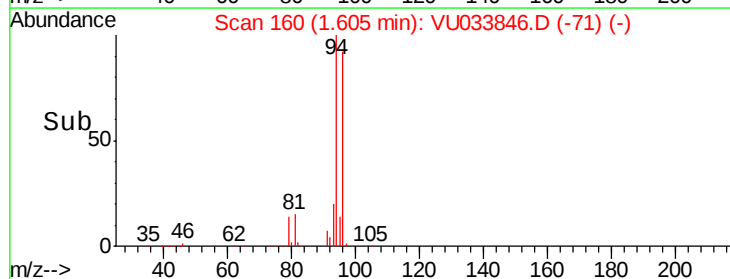
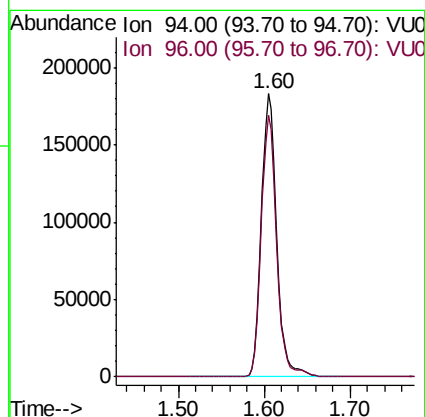
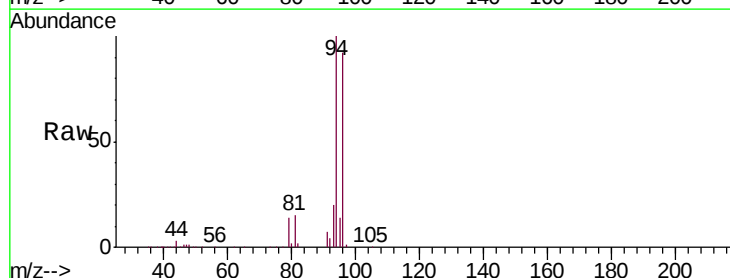
Acq: 20 Aug 2019 11:40

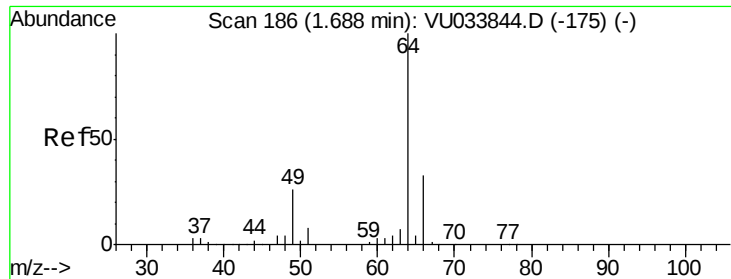
Tgt Ion: 94 Resp: 229531

Ion Ratio Lower Upper

94 100

96 92.3 65.2 121.0





#8

Chloroethane

Concen: 19.370 ug/L

RT: 1.68 min Scan# 184

Delta R.T. -0.01 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

Instrument :

MSVOA\_U

ClientSampleId :

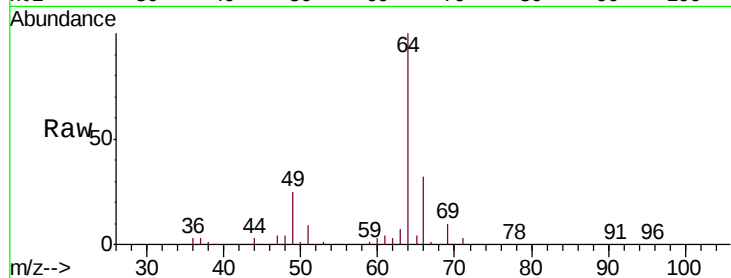
VSTD02003

Tgt Ion: 64 Resp: 214133

Ion Ratio Lower Upper

64 100

66 31.8 23.3 43.3



Abundance Ion 64.10 (63.80 to 64.80): VU033846.D (-175) (-)

Ion 66.05 (65.75 to 66.75): VU033846.D (-175) (-)

1.68

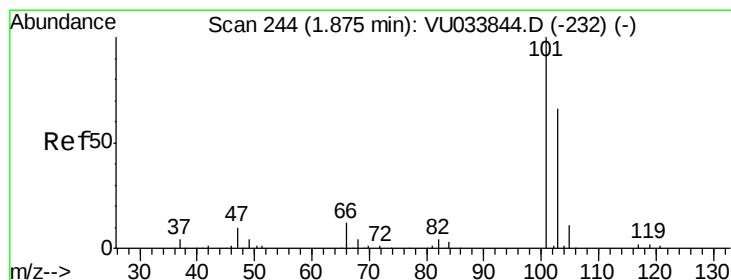
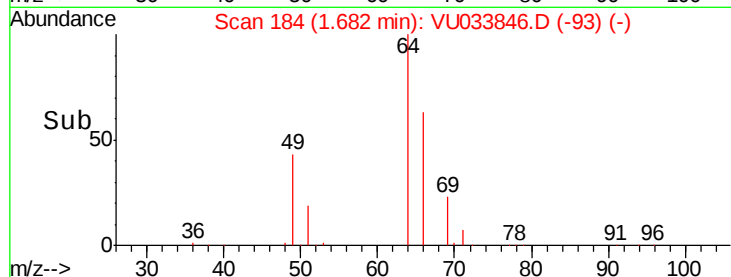
150000

100000

50000

0

Time-->



#9

Trichlorofluoromethane

Concen: 19.383 ug/L

RT: 1.87 min Scan# 243

Delta R.T. -0.00 min

Lab File: VU033846.D

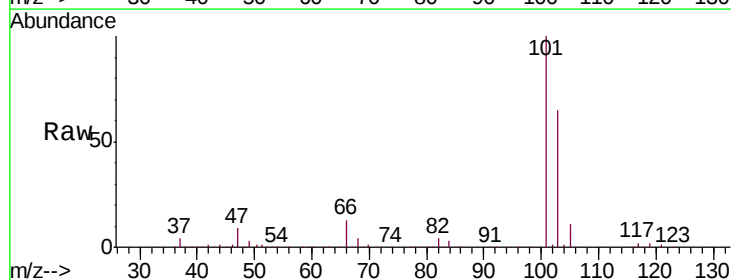
Acq: 20 Aug 2019 11:40

Tgt Ion: 101 Resp: 464061

Ion Ratio Lower Upper

101 100

103 64.6 52.2 78.2



Abundance Ion 101.00 (100.70 to 101.70): VU033846.D (-232) (-)

Ion 103.00 (102.70 to 103.70): VU033846.D (-232) (-)

1.87

400000

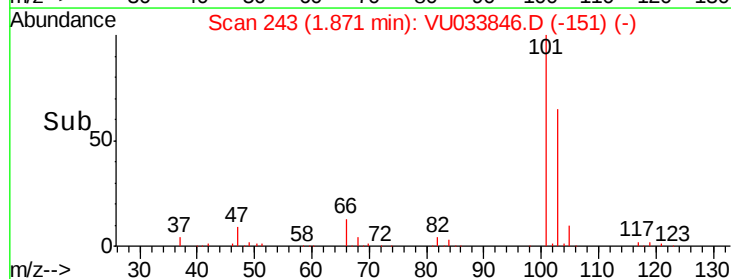
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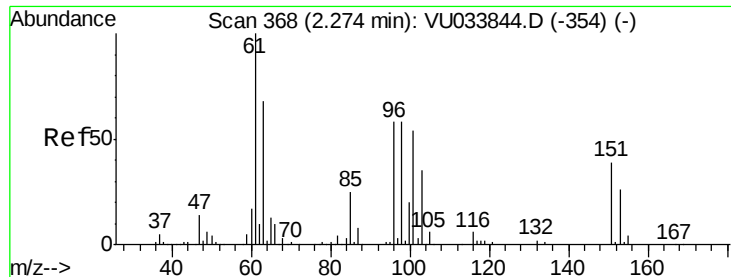
200000

100000

0

Time-->





#10

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

Concen: 19.182 ug/L

RT: 2.27 min Scan# 367

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

Instrument :

MSVOA\_U

ClientSampleId :

VSTD02003

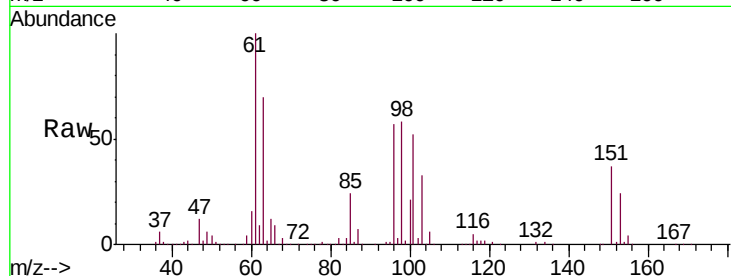
Tgt Ion: 101 Resp: 265880

Ion Ratio Lower Upper

101 100

85 45.1 35.7 53.5

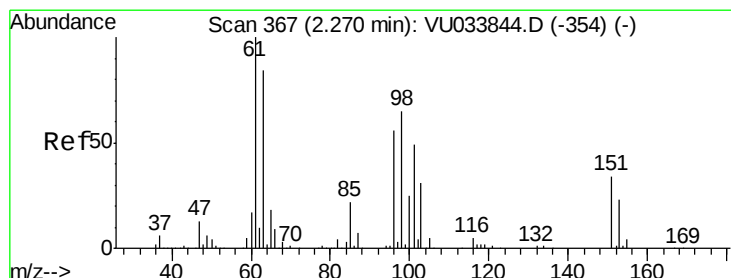
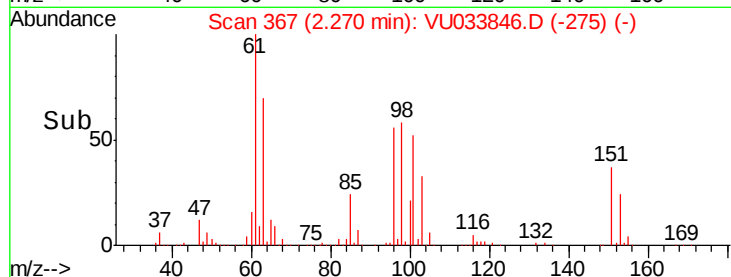
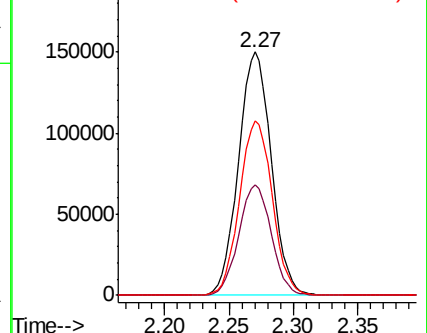
151 71.6 57.2 85.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VU0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 19.409 ug/L

RT: 2.27 min Scan# 366

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

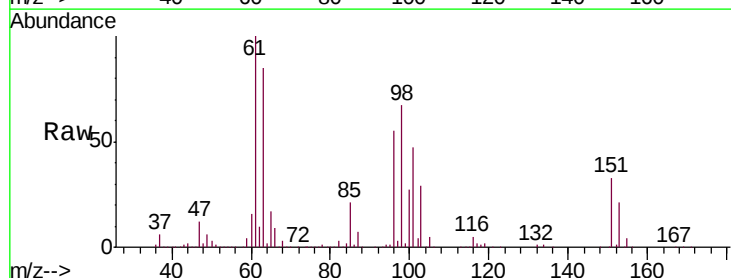
Tgt Ion: 96 Resp: 255409

Ion Ratio Lower Upper

96 100

61 180.7 124.3 230.9

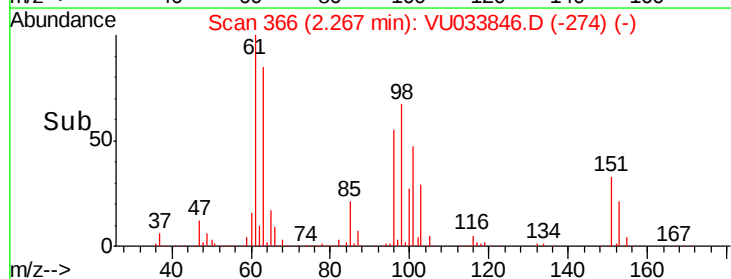
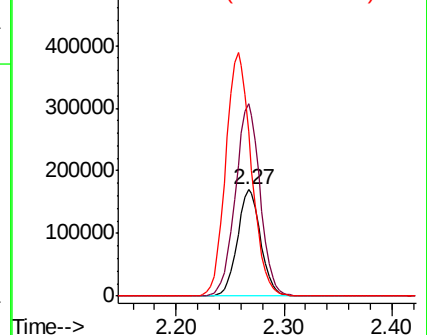
63 153.8 106.3 197.3

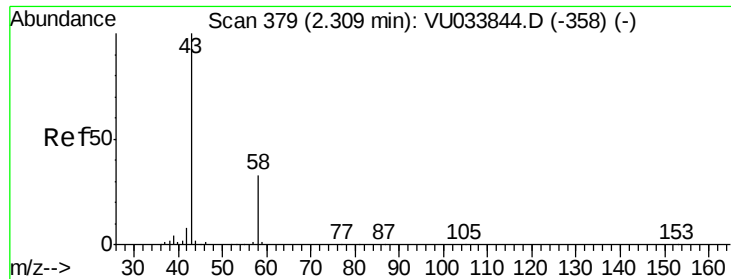


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 184.274 ug/L

RT: 2.31 min Scan# 378

Delta R.T. -0.00 min

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MSVOA\_U

ClientSampleId :

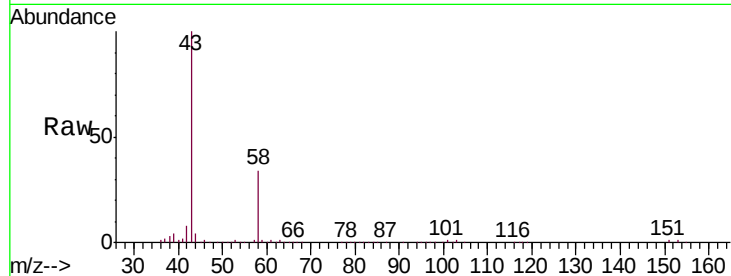
VSTD02003

Tgt Ion: 43 Resp: 452849

Ion Ratio Lower Upper

43 100

58 33.7 0.0 65.4



Abundance Ion 43.05 (42.75 to 43.75): VU033844.D (-358) (-)

Ion 58.05 (57.75 to 58.75): VU033844.D (-358) (-)

2.31

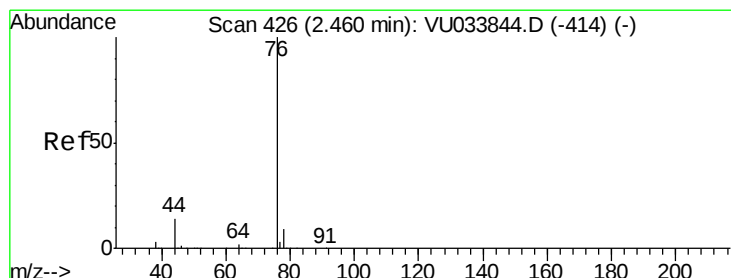
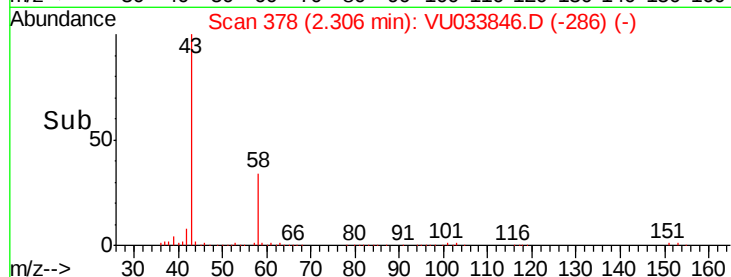
300000

200000

100000

0

Time-->



#14

Carbon disulfide

Concen: 19.344 ug/L

RT: 2.46 min Scan# 425

Delta R.T. -0.00 min

Lab File: VU033846.D

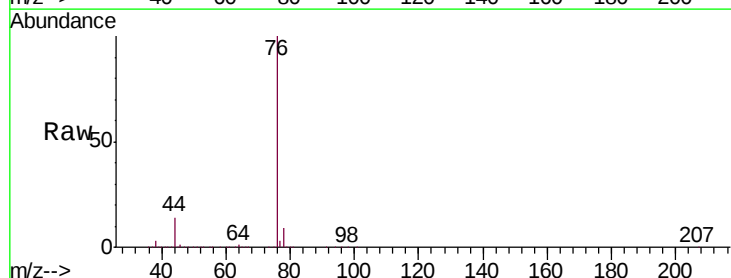
Acq: 20 Aug 2019 11:40

Tgt Ion: 76 Resp: 874872

Ion Ratio Lower Upper

76 100

78 9.2 7.7 11.5



Abundance Ion 76.05 (75.75 to 76.75): VU033844.D (-414) (-)

Ion 78.00 (77.70 to 78.70): VU033844.D (-414) (-)

2.46

600000

500000

400000

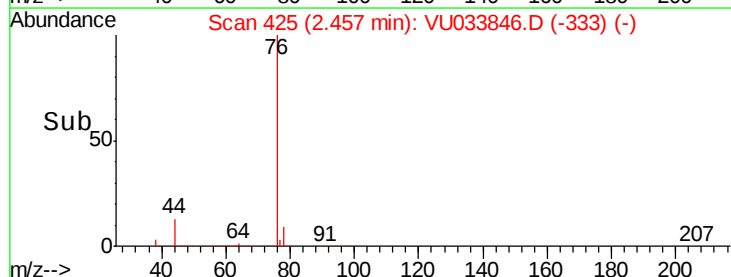
300000

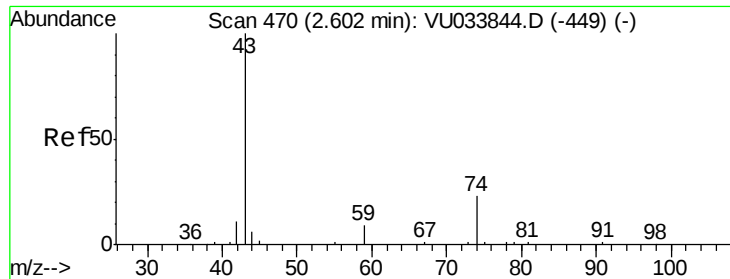
200000

100000

0

Time-->

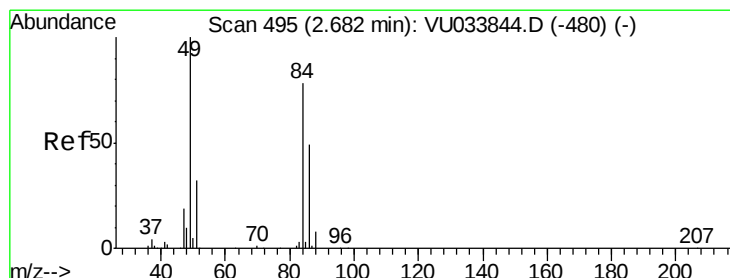
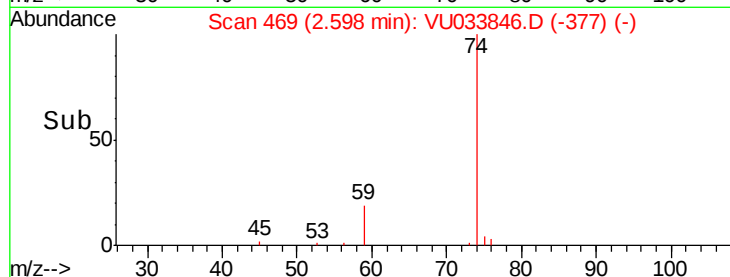
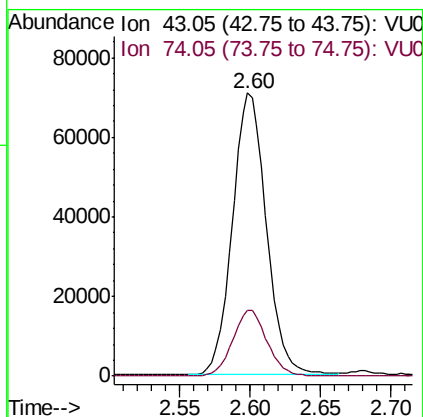
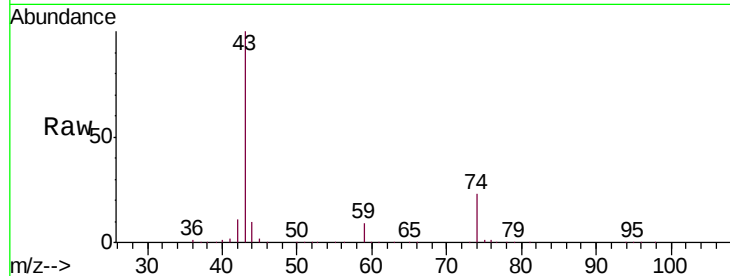




#15  
Methyl Acetate  
Concen: 19.417 ug/L  
RT: 2.60 min Scan# 469  
Delta R.T. -0.00 min  
Lab File: VU033846.D  
Acq: 20 Aug 2019 11:40

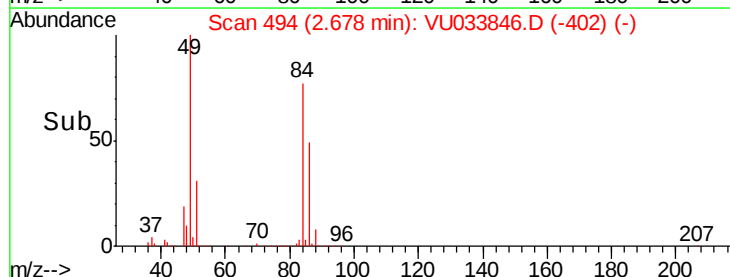
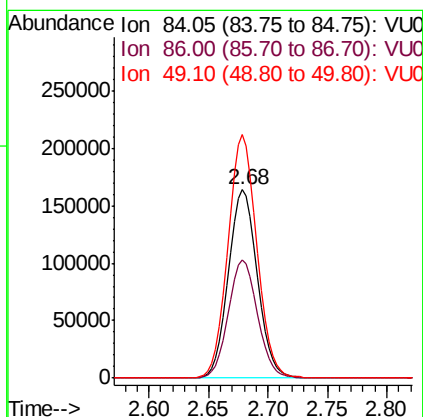
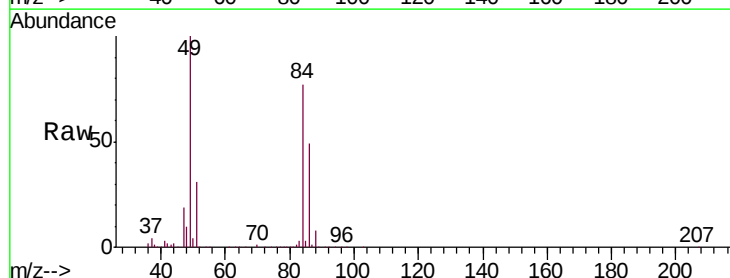
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD02003

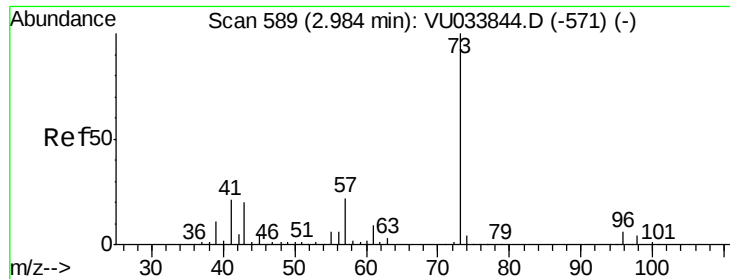
Tgt Ion: 43 Resp: 119552  
Ion Ratio Lower Upper  
43 100  
74 23.6 18.6 28.0



#16  
Methylene chloride  
Concen: 17.956 ug/L  
RT: 2.68 min Scan# 494  
Delta R.T. -0.00 min  
Lab File: VU033846.D  
Acq: 20 Aug 2019 11:40

Tgt Ion: 84 Resp: 277297  
Ion Ratio Lower Upper  
84 100  
86 63.1 43.8 81.3  
49 129.4 89.5 166.3

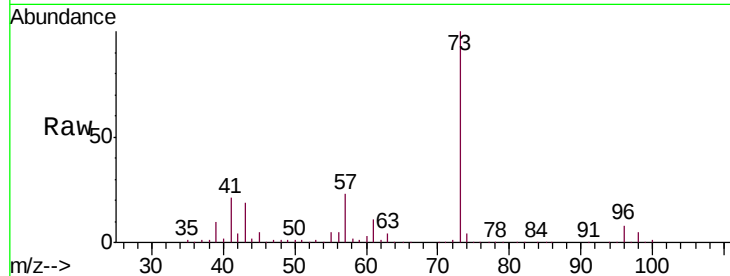




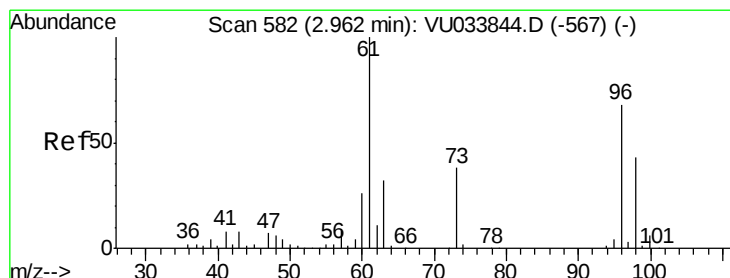
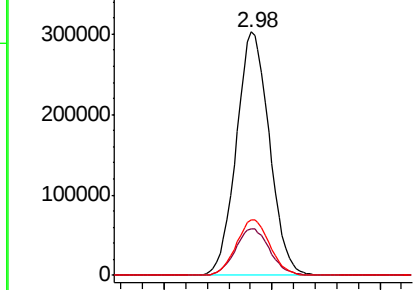
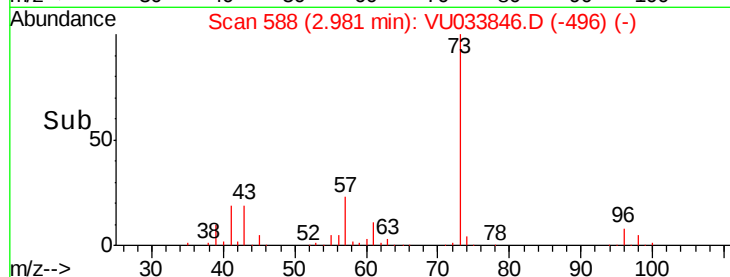
#17  
Methyl tert-butyl Ether  
Concen: 19.579 ug/L  
RT: 2.98 min Scan# 588  
Delta R.T. -0.00 min  
Lab File: VU033846.D  
Acq: 20 Aug 2019 11:40

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD02003

Tgt Ion: 73 Resp: 646431  
Ion Ratio Lower Upper  
73 100  
43 19.8 15.9 23.9  
57 23.2 18.3 27.5

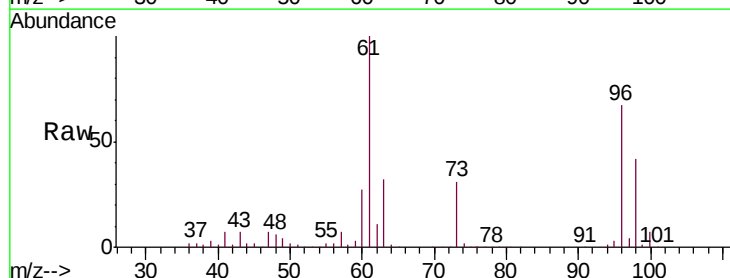


Abundance Ion 73.10 (72.80 to 73.80): VU0  
Ion 43.05 (42.75 to 43.75): VU0  
Ion 57.10 (56.80 to 57.80): VU0

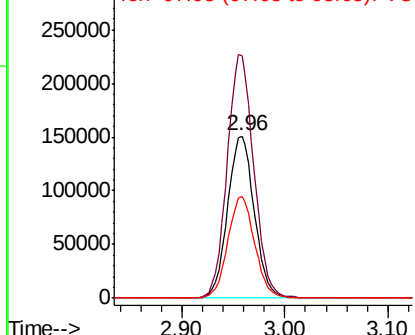
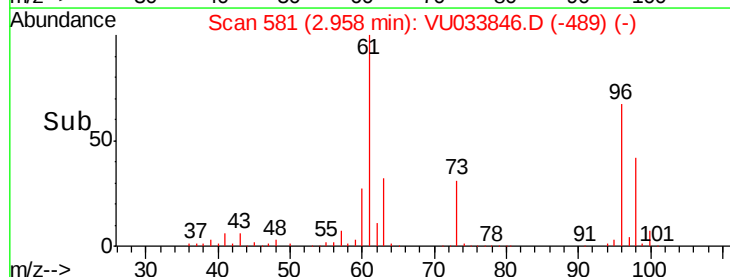


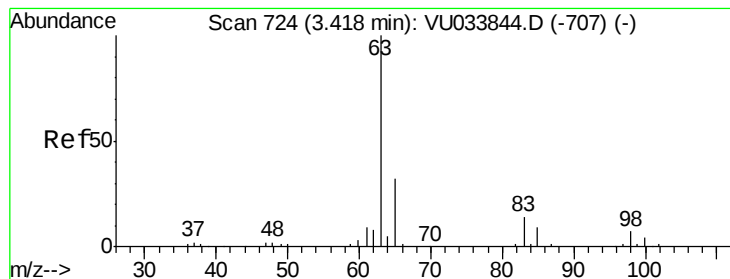
#18  
trans-1,2-Dichloroethene  
Concen: 18.778 ug/L  
RT: 2.96 min Scan# 581  
Delta R.T. -0.00 min  
Lab File: VU033846.D  
Acq: 20 Aug 2019 11:40

Tgt Ion: 96 Resp: 272290  
Ion Ratio Lower Upper  
96 100  
61 149.2 102.9 191.1  
98 63.0 43.8 81.4



Abundance Ion 96.00 (95.70 to 96.70): VU0  
Ion 61.05 (60.75 to 61.75): VU0  
Ion 97.95 (97.65 to 98.65): VU0





#19

1,1-Dichloroethane

Concen: 19.492 ug/L

RT: 3.42 min Scan# 724

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

Instrument :

MSVOA\_U

ClientSampleId :

VSTD02003

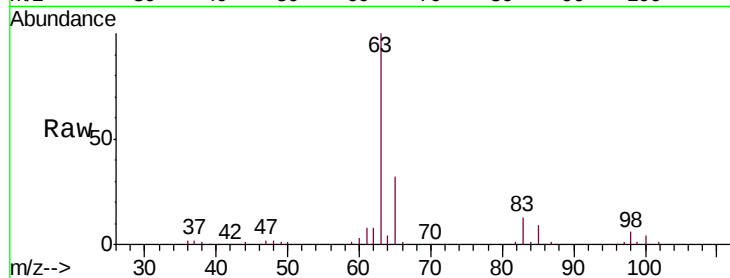
Tgt Ion: 63 Resp: 409853

Ion Ratio Lower Upper

63 100

65 32.1 22.2 41.2

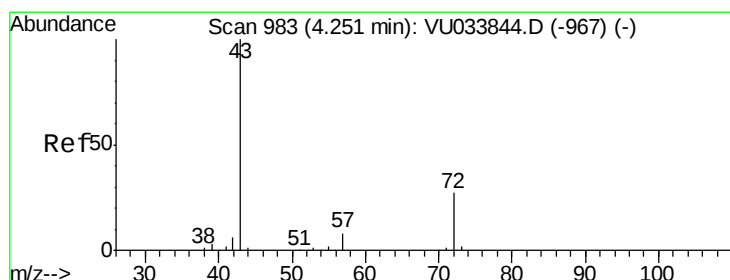
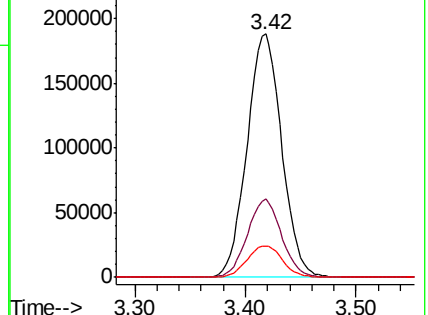
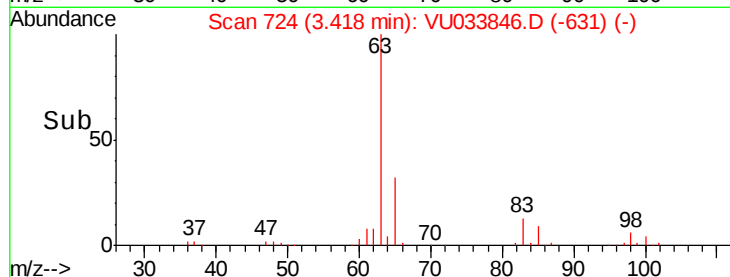
83 13.0 9.8 18.2



Abundance Ion 63.10 (62.80 to 63.80): VU033846.D (-631) (-)

Ion 65.10 (64.80 to 65.80): VU033846.D (-631) (-)

Ion 83.05 (82.75 to 83.75): VU033846.D (-631) (-)



#21

2-Butanone

Concen: 218.442 ug/L

RT: 4.25 min Scan# 982

Delta R.T. -0.00 min

Lab File: VU033846.D

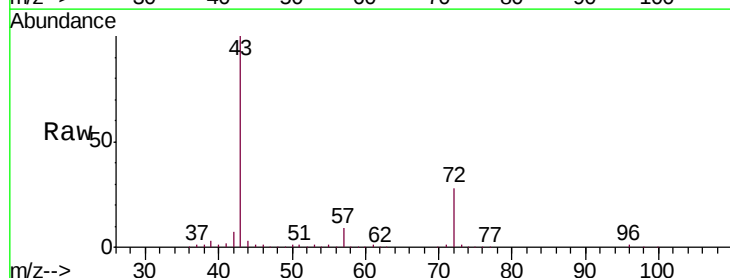
Acq: 20 Aug 2019 11:40

Tgt Ion: 43 Resp: 575631

Ion Ratio Lower Upper

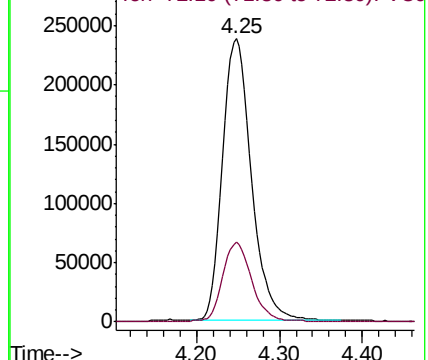
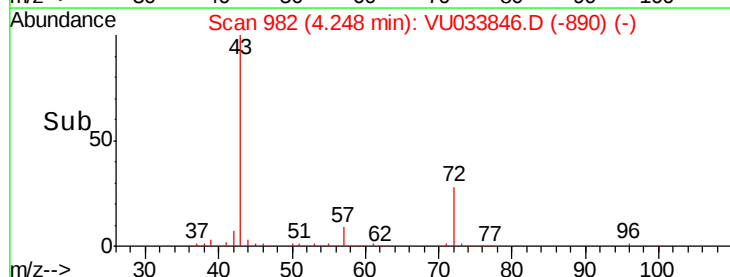
43 100

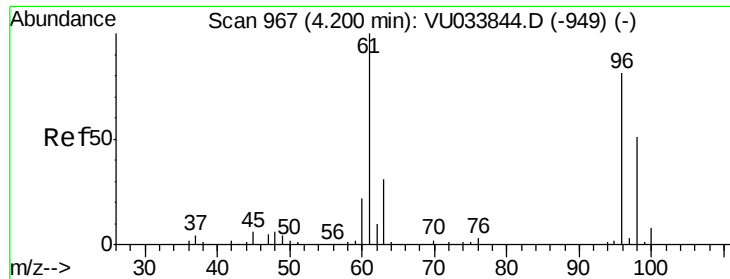
72 29.1 13.7 41.0



Abundance Ion 43.05 (42.75 to 43.75): VU033846.D (-890) (-)

Ion 72.10 (71.80 to 72.80): VU033846.D (-890) (-)



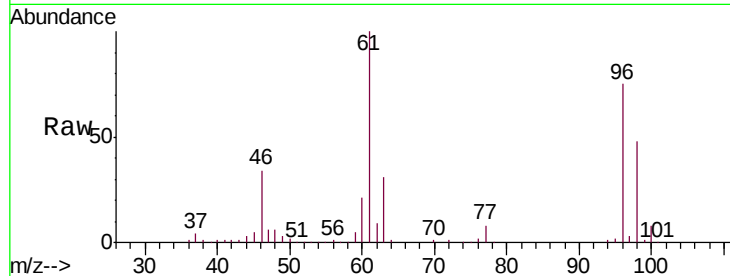


#22

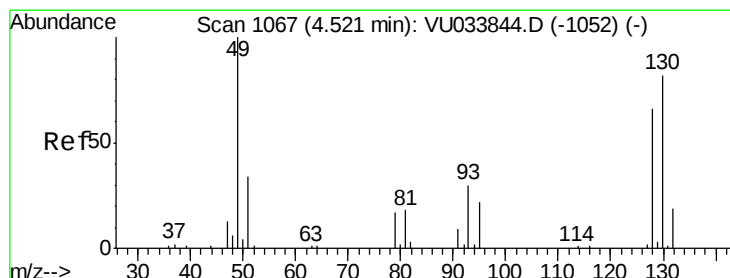
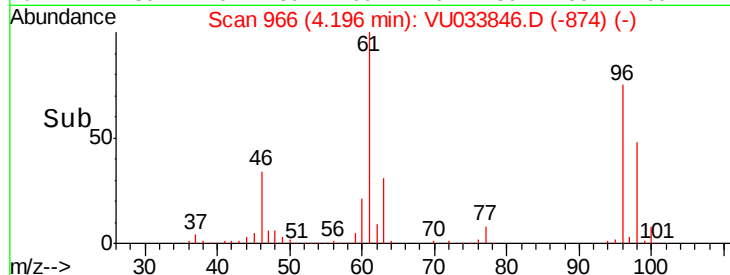
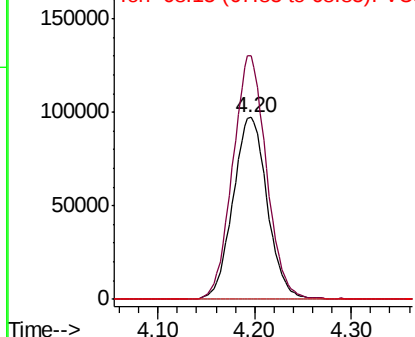
cis-1,2-Dichloroethene  
 Concen: 20.966 ug/L  
 RT: 4.20 min Scan# 966  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD02003

Tgt Ion: 96 Resp: 239096  
 Ion Ratio Lower Upper  
 96 100  
 61 134.1 87.2 161.9  
 68 0.0 0.0 0.0



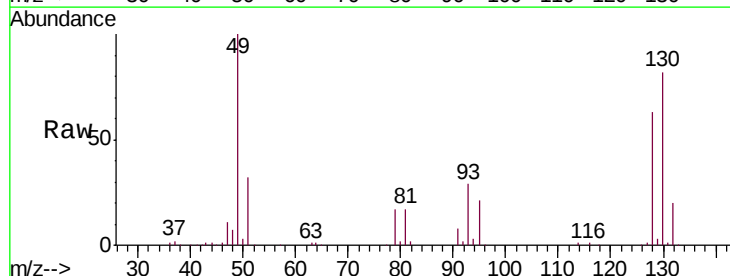
Abundance Ion 96.00 (95.70 to 96.70): VU0  
 Ion 61.05 (60.75 to 61.75): VU0  
 Ion 68.15 (67.85 to 68.85): VU0



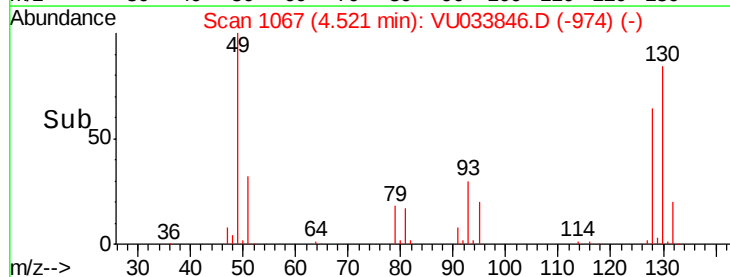
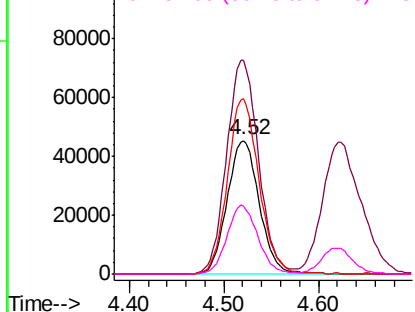
#23

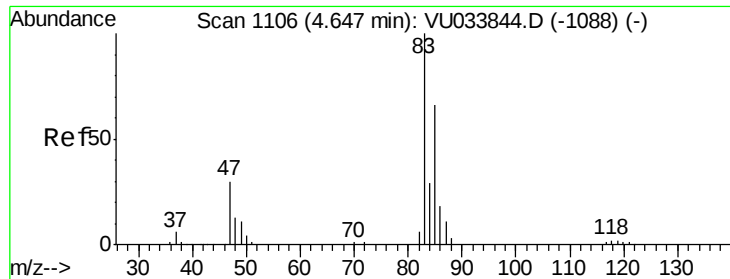
Bromochloromethane  
 Concen: 19.420 ug/L  
 RT: 4.52 min Scan# 1067  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

Tgt Ion: 128 Resp: 107076  
 Ion Ratio Lower Upper  
 128 100  
 49 159.6 105.6 196.0  
 130 131.6 86.5 160.6  
 51 50.6 41.0 61.4



Abundance Ion 127.90 (127.60 to 128.60): V  
 Ion 49.10 (48.80 to 49.80): VU0  
 Ion 129.95 (129.65 to 130.65): V  
 Ion 51.05 (50.75 to 51.75): VU0

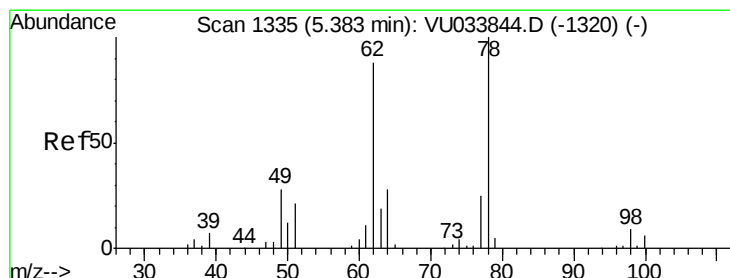
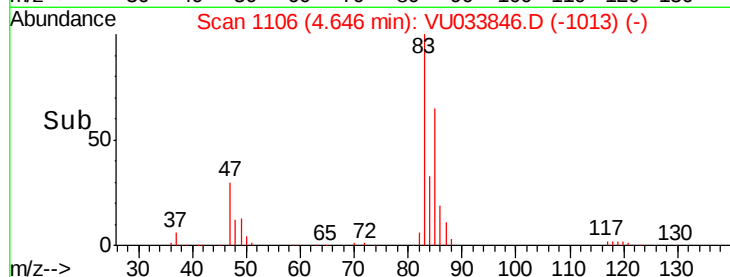
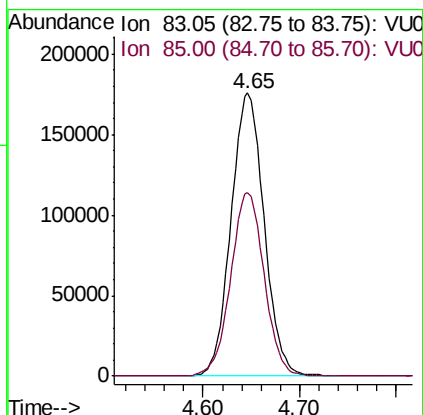
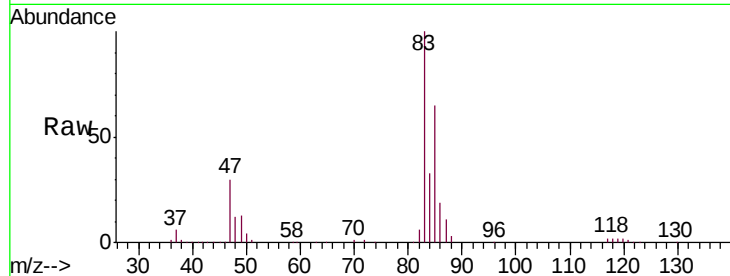




#25  
Chloroform  
Concen: 17.569 ug/L  
RT: 4.65 min Scan# 1106  
Delta R.T. -0.00 min  
Lab File: VU033846.D  
Acq: 20 Aug 2019 11:40

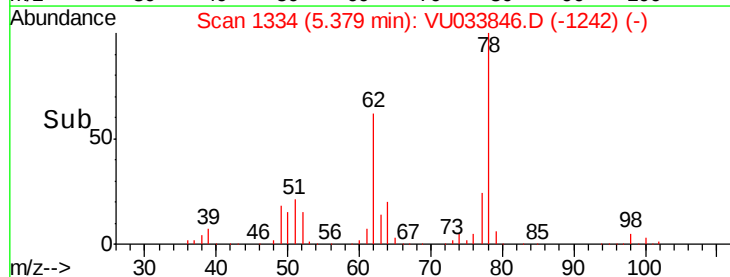
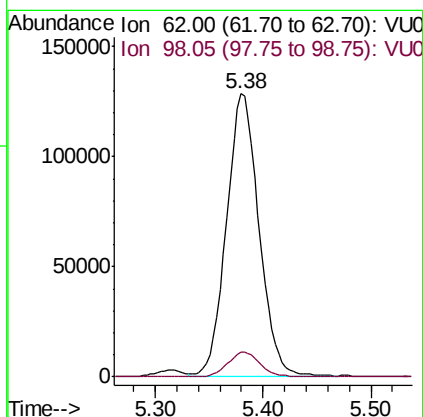
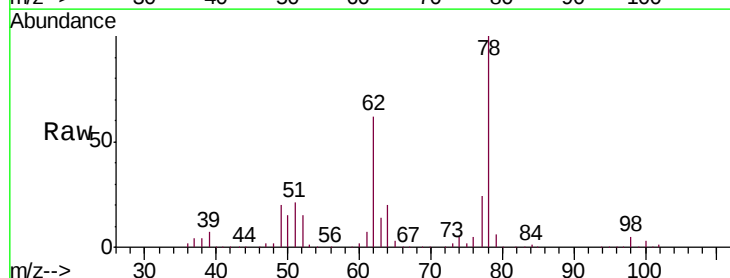
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD02003

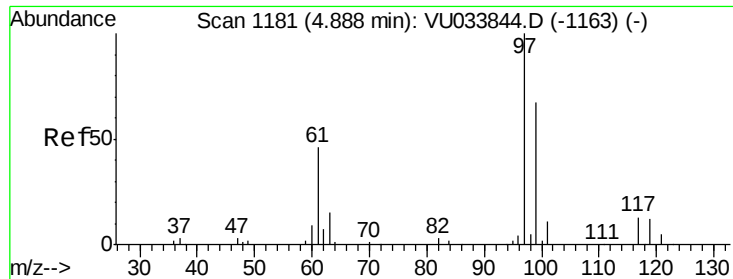
Tgt Ion: 83 Resp: 417654  
Ion Ratio Lower Upper  
83 100  
85 64.9 46.3 85.9



#27  
1,2-Dichloroethane  
Concen: 19.952 ug/L  
RT: 5.38 min Scan# 1334  
Delta R.T. -0.00 min  
Lab File: VU033846.D  
Acq: 20 Aug 2019 11:40

Tgt Ion: 62 Resp: 269302  
Ion Ratio Lower Upper  
62 100  
98 8.6 7.9 11.9

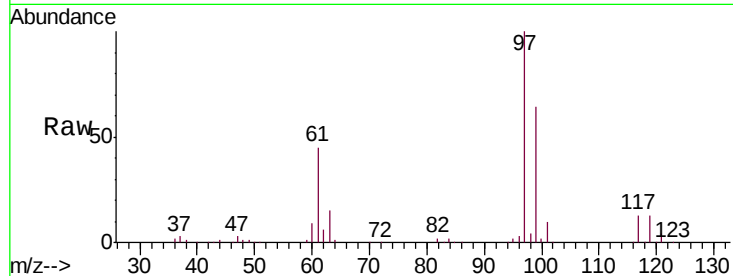




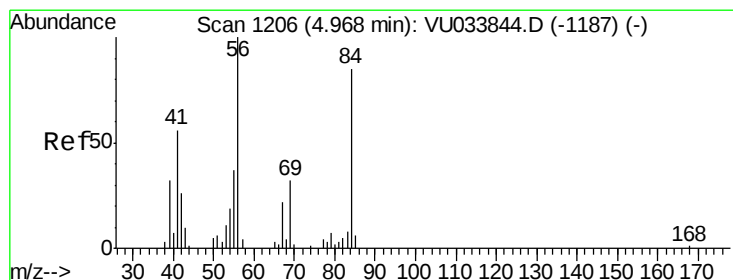
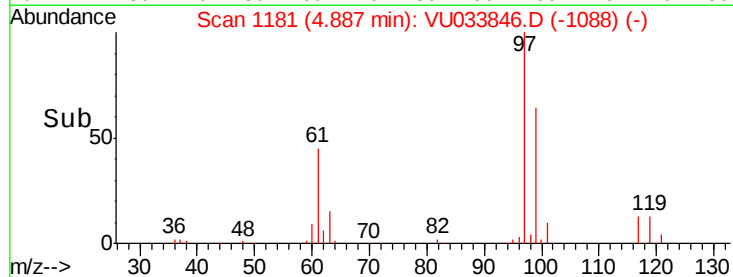
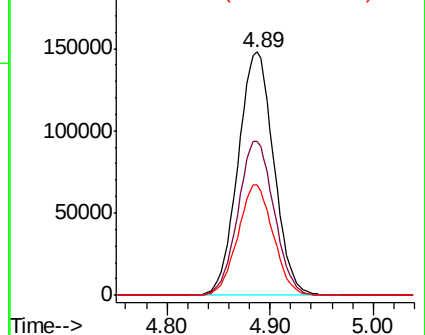
#29  
 1,1,1-Trichloroethane  
 Concen: 19.562 ug/L  
 RT: 4.89 min Scan# 1181  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD02003

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 63.9  | 53.4  | 80.0  |
| 61      | 45.1  | 36.6  | 55.0  |

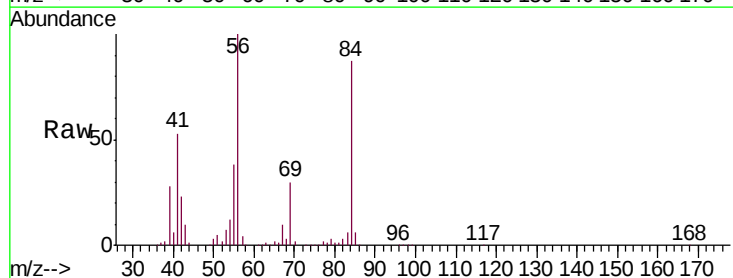


Abundance Ion 96.95 (96.65 to 97.65): VU0  
 Ion 99.05 (98.75 to 99.75): VU0  
 Ion 61.05 (60.75 to 61.75): VU0

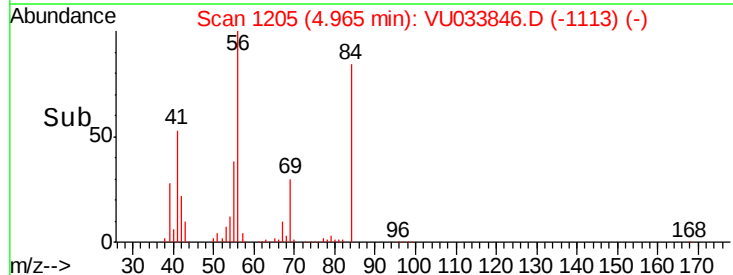
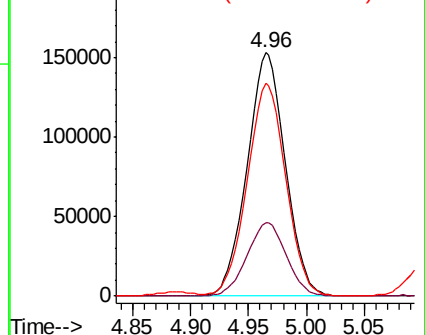


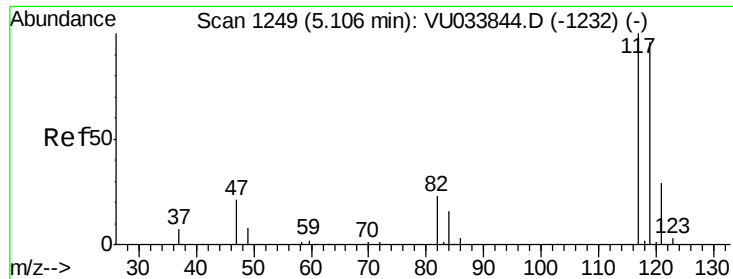
#30  
 Cyclohexane  
 Concen: 22.868 ug/L  
 RT: 4.96 min Scan# 1205  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 31.0  | 25.1  | 37.7  |
| 84      | 88.4  | 69.5  | 104.3 |



Abundance Ion 56.10 (55.80 to 56.80): VU0  
 Ion 69.15 (68.85 to 69.85): VU0  
 Ion 84.15 (83.85 to 84.85): VU0

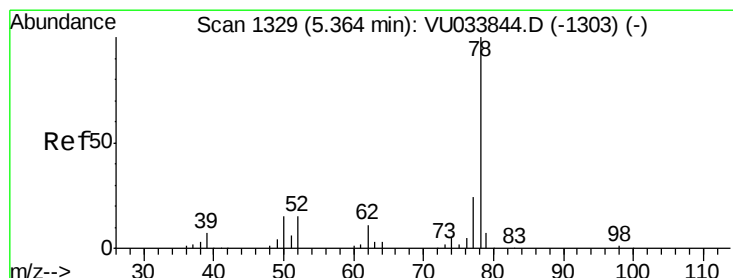
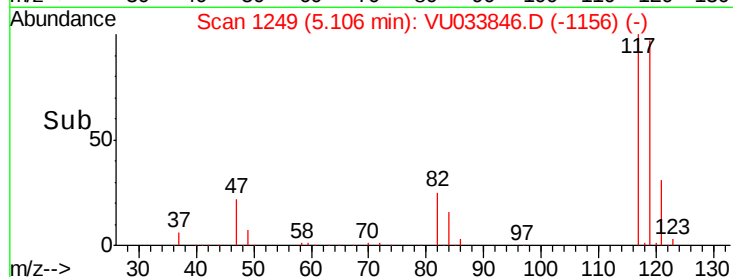
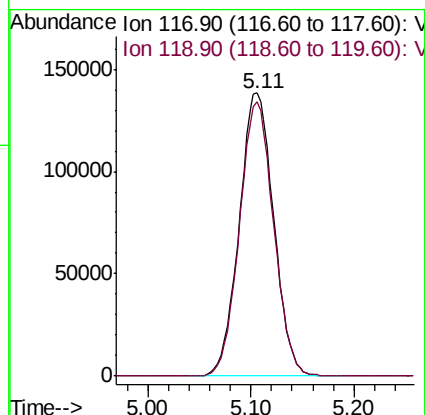
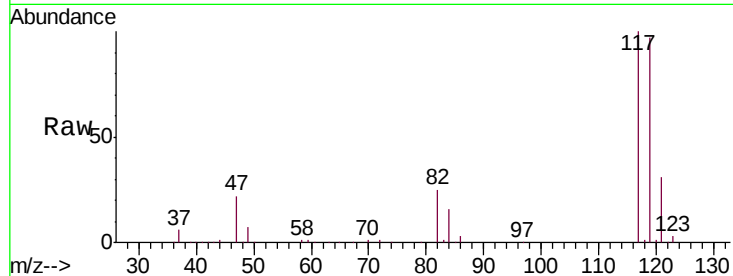




#31  
Carbon tetrachloride  
Concen: 19.594 ug/L  
RT: 5.11 min Scan# 1249  
Delta R.T. -0.00 min  
Lab File: VU033846.D  
Acq: 20 Aug 2019 11:40

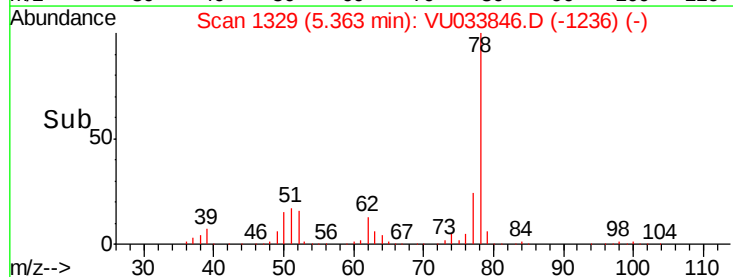
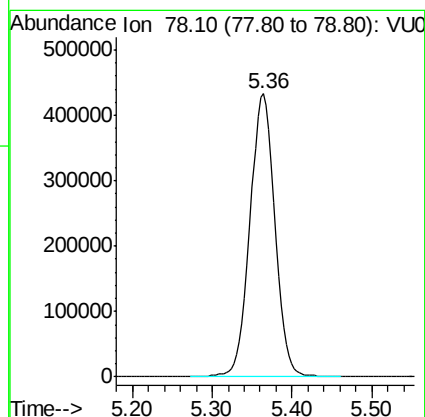
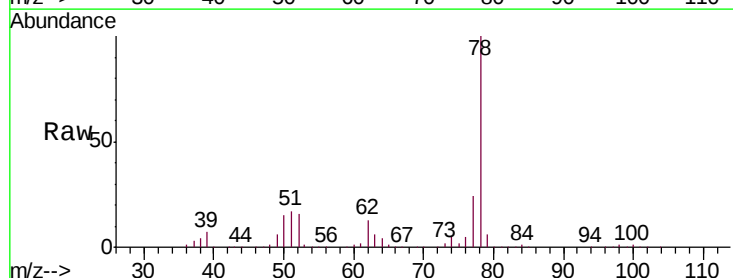
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD02003

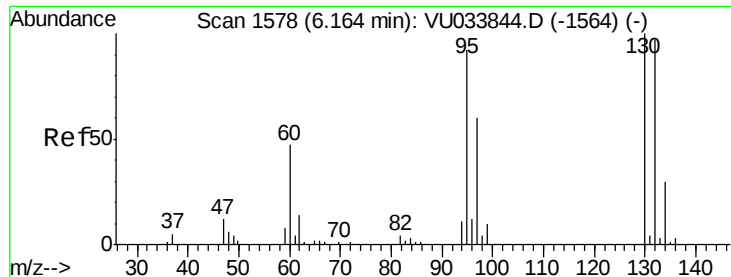
Tgt Ion:117 Resp: 321335  
Ion Ratio Lower Upper  
117 100  
119 96.3 77.6 116.4



#33  
Benzene  
Concen: 20.810 ug/L  
RT: 5.36 min Scan# 1329  
Delta R.T. -0.00 min  
Lab File: VU033846.D  
Acq: 20 Aug 2019 11:40

Tgt Ion: 78 Resp: 916352





#34

Trichloroethene

Concen: 19.559 ug/L

RT: 6.16 min Scan# 1577

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

Instrument :

MSVOA\_U

ClientSampleId :

VSTD02003

Tgt Ion: 95 Resp: 231066

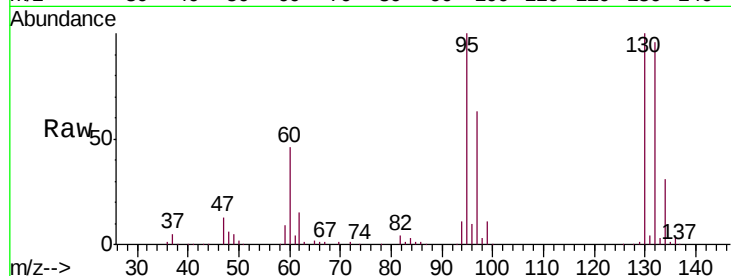
Ion Ratio Lower Upper

95 100

97 63.4 45.6 84.8

132 96.5 73.5 136.5

130 100.1 75.9 141.1

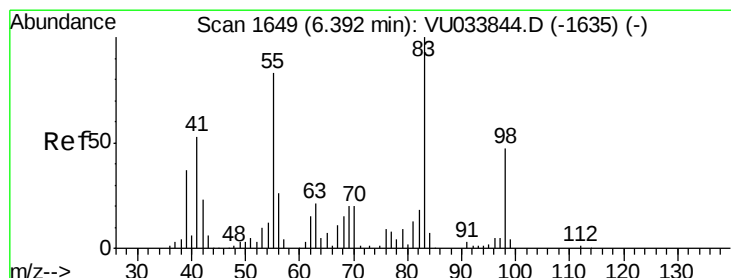
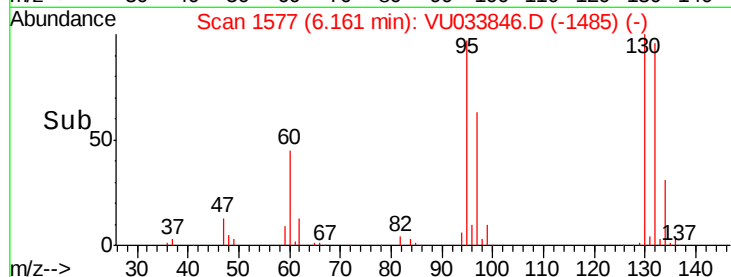
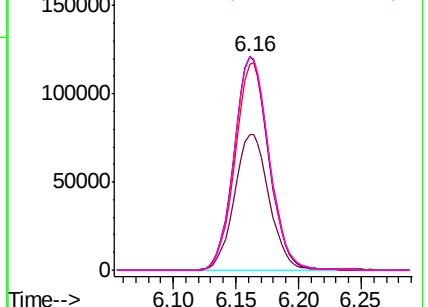


Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 96.95 (96.65 to 97.65): VU0

Ion 131.95 (131.65 to 132.65): V

Ion 129.95 (129.65 to 130.65): V



#35

Methylcyclohexane

Concen: 23.515 ug/L

RT: 6.39 min Scan# 1649

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

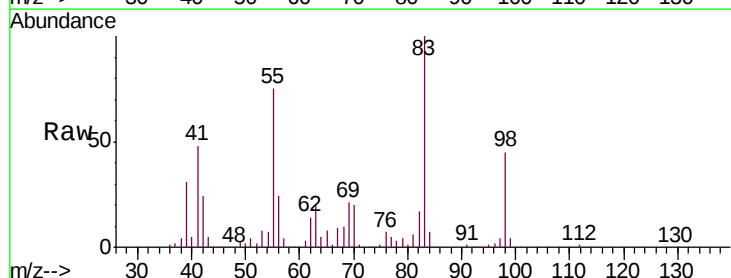
Tgt Ion: 83 Resp: 388209

Ion Ratio Lower Upper

83 100

55 76.2 64.3 96.5

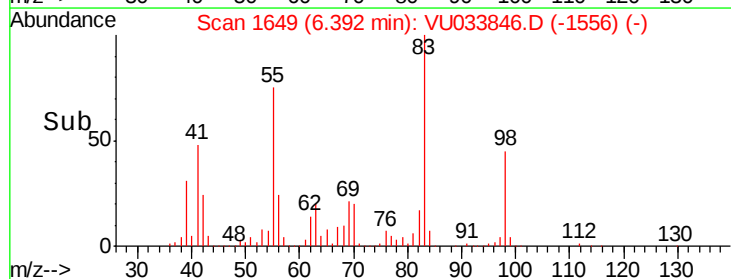
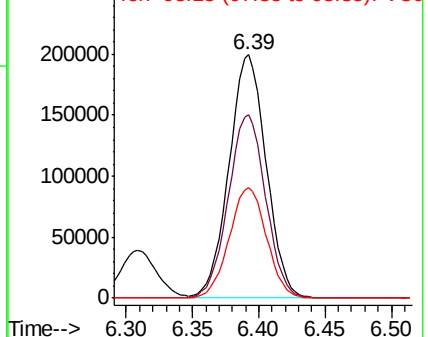
98 45.5 37.4 56.0

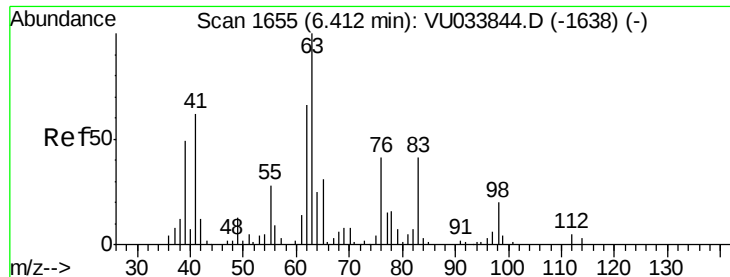


Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0

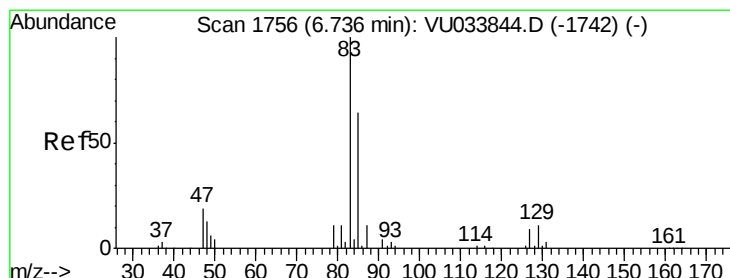
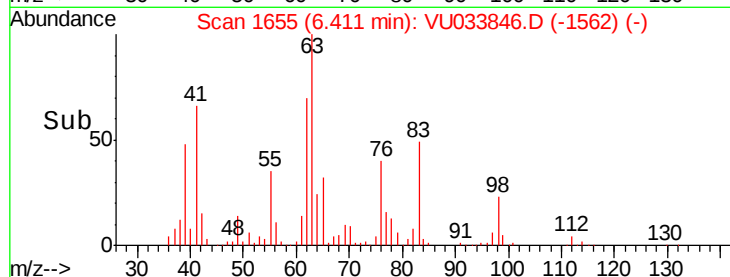
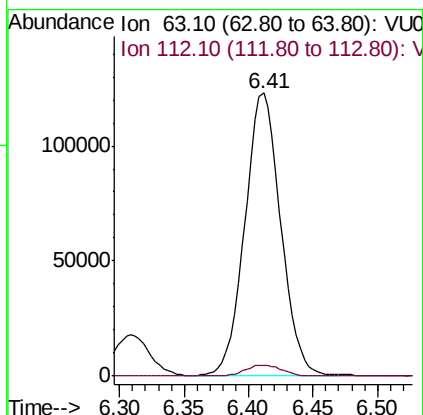
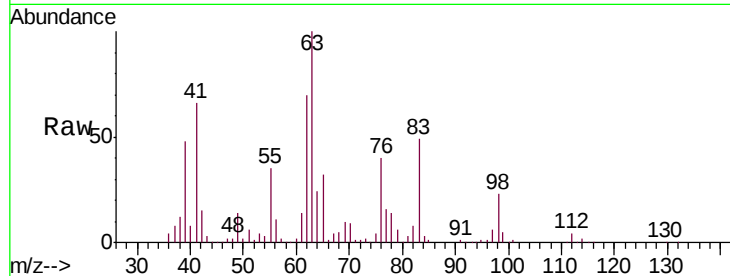




#37  
 1,2-Dichloropropane  
 Concen: 20.365 ug/L  
 RT: 6.41 min Scan# 1655  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

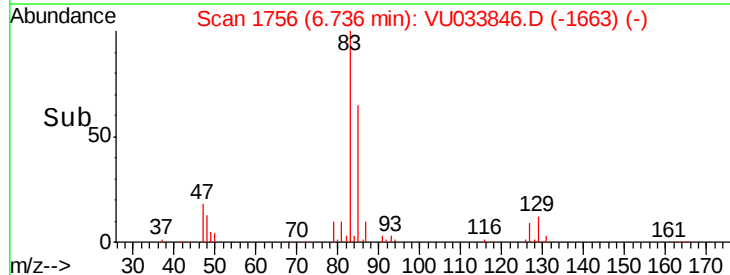
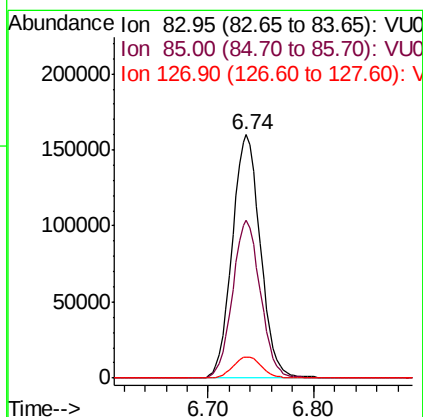
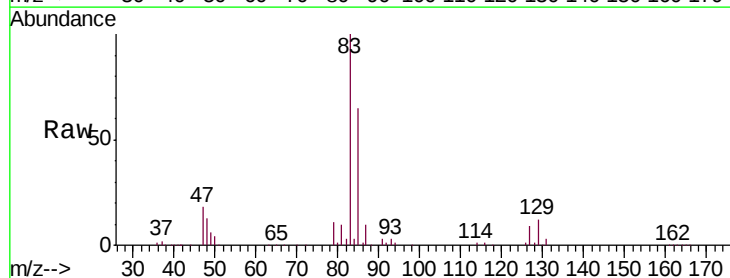
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD02003

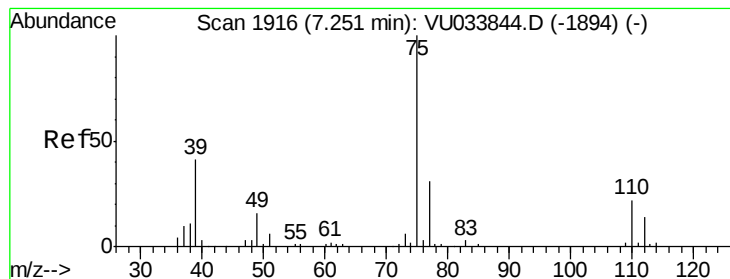
Tgt Ion: 63 Resp: 237302  
 Ion Ratio Lower Upper  
 63 100  
 112 4.0 3.5 5.3



#38  
 Bromodichloromethane  
 Concen: 19.722 ug/L  
 RT: 6.74 min Scan# 1756  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

Tgt Ion: 83 Resp: 295951  
 Ion Ratio Lower Upper  
 83 100  
 85 64.8 44.7 83.1  
 127 8.8 7.1 10.7



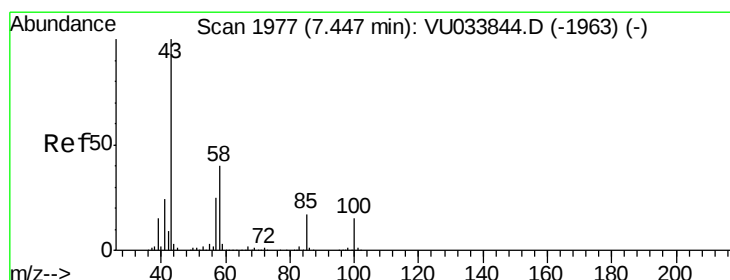
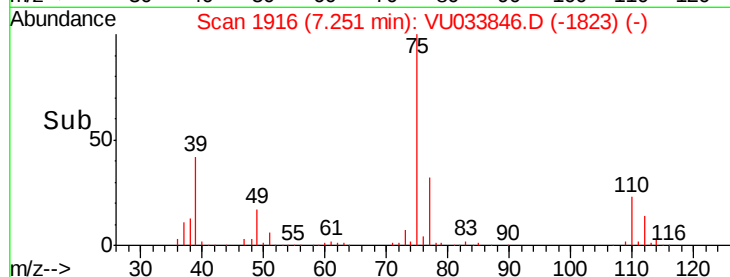
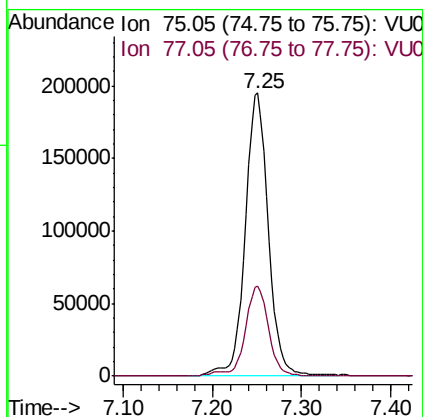
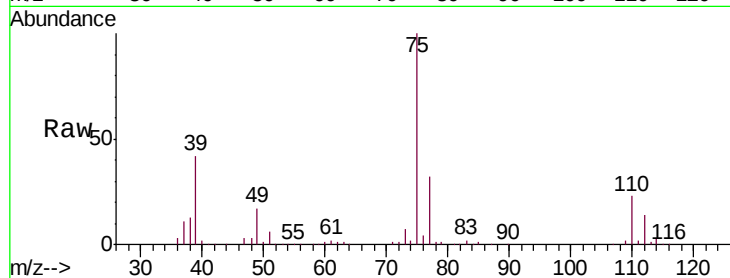


#39

cis-1,3-Dichloropropene  
 Concen: 22.937 ug/L  
 RT: 7.25 min Scan# 1916  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD02003

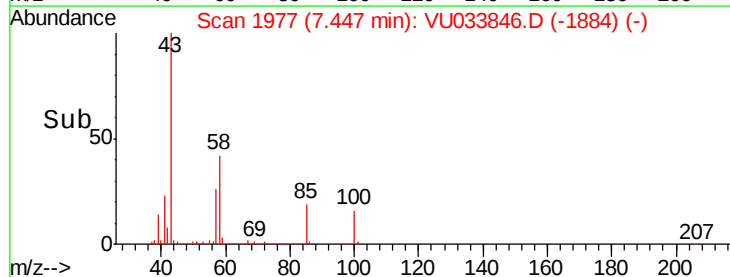
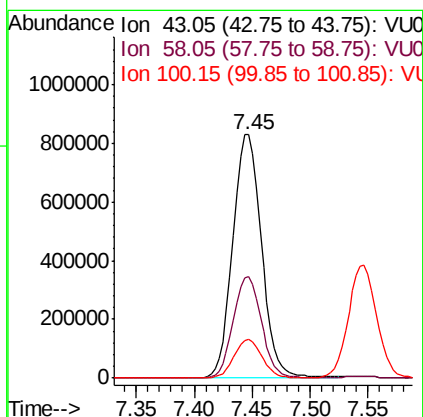
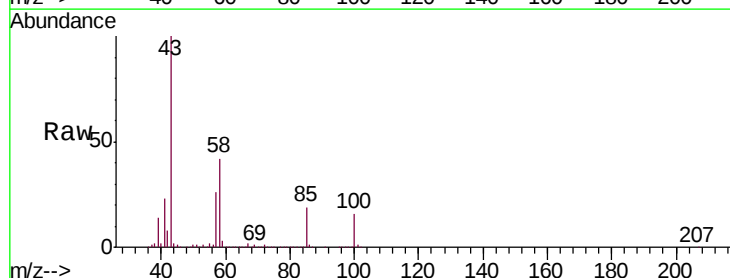
Tgt Ion: 75 Resp: 353156  
 Ion Ratio Lower Upper  
 75 100  
 77 31.9 21.6 40.2

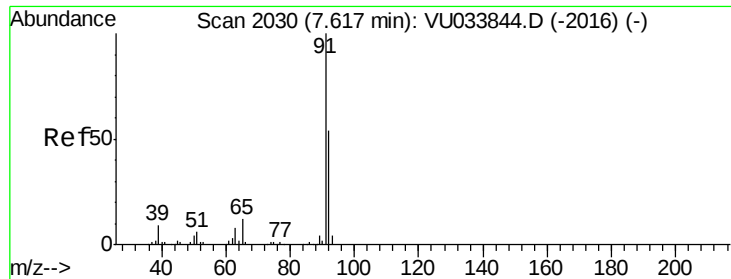


#40

4-Methyl-2-pentanone  
 Concen: 231.285 ug/L  
 RT: 7.45 min Scan# 1977  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

Tgt Ion: 43 Resp: 1427219  
 Ion Ratio Lower Upper  
 43 100  
 58 41.3 32.0 48.0  
 100 15.5 11.8 17.6





#42

Toluene

Concen: 22.497 ug/L

RT: 7.62 min Scan# 2030

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

Instrument :

MSVOA\_U

ClientSampleId :

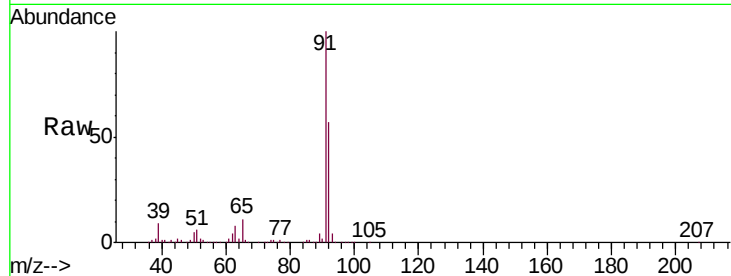
VSTD02003

Tgt Ion: 91 Resp: 1014753

Ion Ratio Lower Upper

91 100

92 56.7 38.1 70.7



Abundance Ion 91.15 (90.85 to 91.85): VU033844.D (-2016) (-)

Ion 92.15 (91.85 to 92.85): VU033844.D (-2016) (-)

7.62

600000

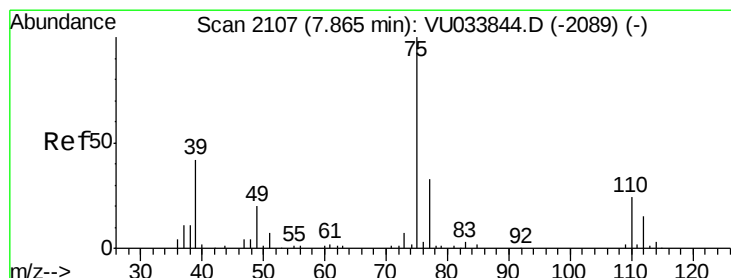
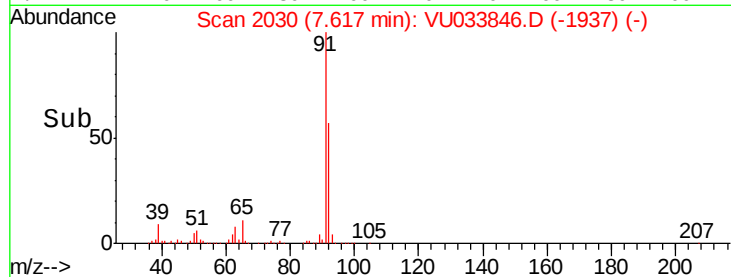
400000

200000

0

7.50 7.60 7.70

Time-->



#44

trans-1,3-Dichloropropene

Concen: 22.541 ug/L

RT: 7.86 min Scan# 2106

Delta R.T. -0.00 min

Lab File: VU033846.D

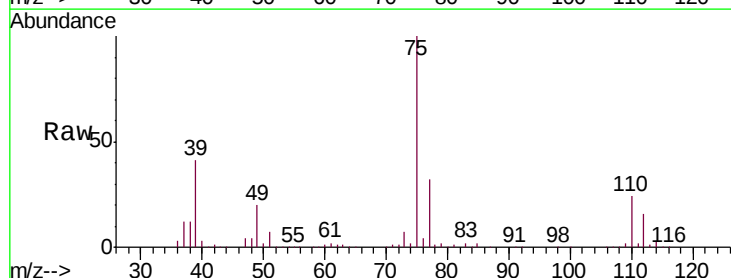
Acq: 20 Aug 2019 11:40

Tgt Ion: 75 Resp: 290233

Ion Ratio Lower Upper

75 100

77 32.1 23.0 42.6



Abundance Ion 75.05 (74.75 to 75.75): VU033844.D (-2089) (-)

Ion 77.05 (76.75 to 77.75): VU033844.D (-2089) (-)

7.86

150000

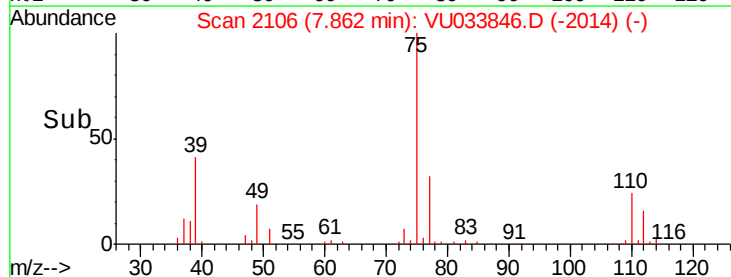
100000

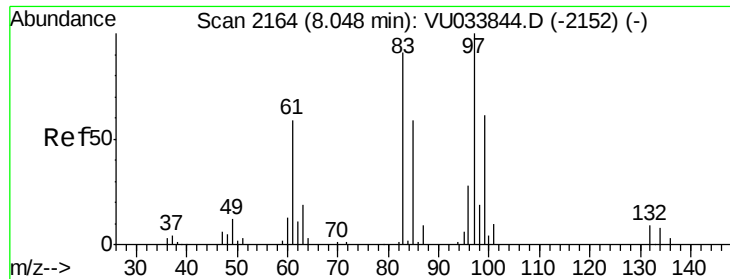
50000

0

7.80 7.90 8.00

Time-->

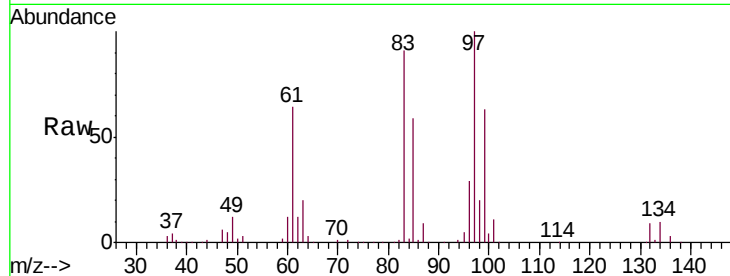




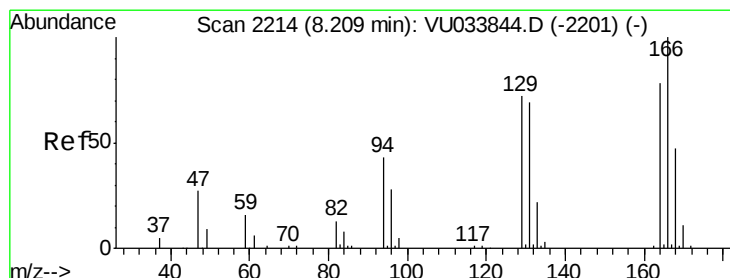
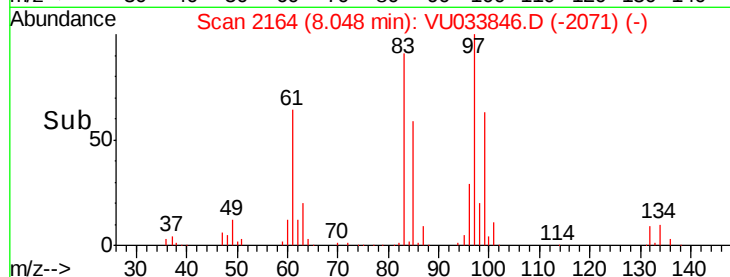
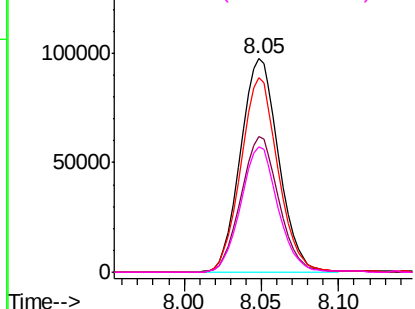
#45  
 1,1,2-Trichloroethane  
 Concen: 20.092 ug/L  
 RT: 8.05 min Scan# 2164  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD02003

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 97    | Resp: | 167548 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 99       | 63.5  | 42.8  | 79.6   |
| 83       | 91.2  | 63.6  | 118.0  |
| 85       | 59.0  | 41.2  | 76.6   |

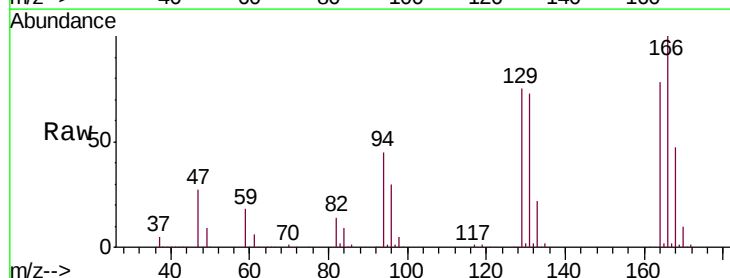


Abundance Ion 96.95 (96.65 to 97.65): VU0  
 Ion 99.05 (98.75 to 99.75): VU0  
 Ion 82.95 (82.65 to 83.65): VU0  
 Ion 85.00 (84.70 to 85.70): VU0

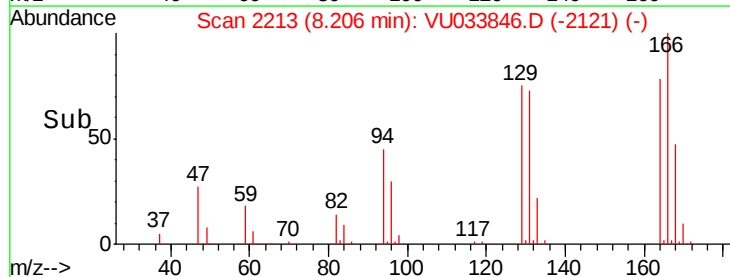
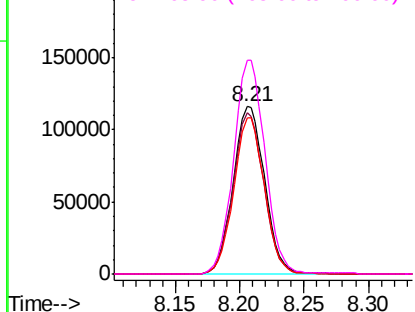


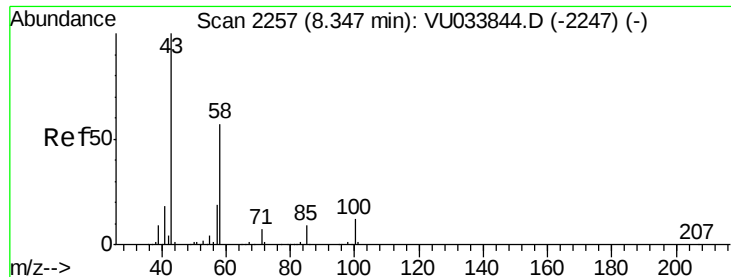
#47  
 Tetrachloroethene  
 Concen: 20.323 ug/L  
 RT: 8.21 min Scan# 2213  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 196956 |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 129      | 96.2  | 63.9  | 118.7  |
| 131      | 93.6  | 61.5  | 114.1  |
| 166      | 127.7 | 89.2  | 165.6  |



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

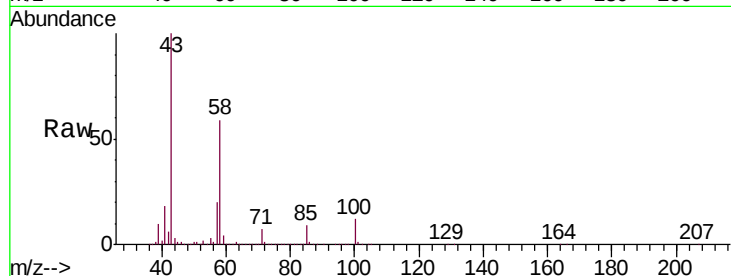




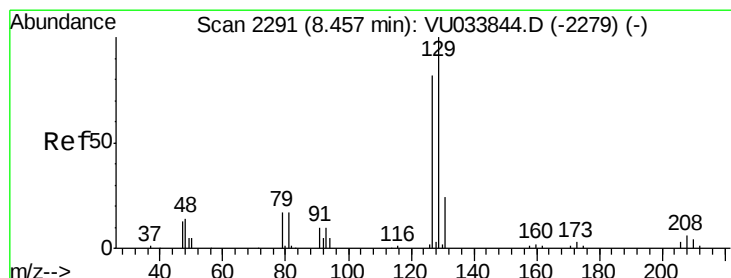
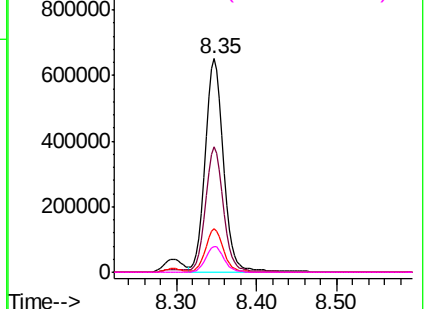
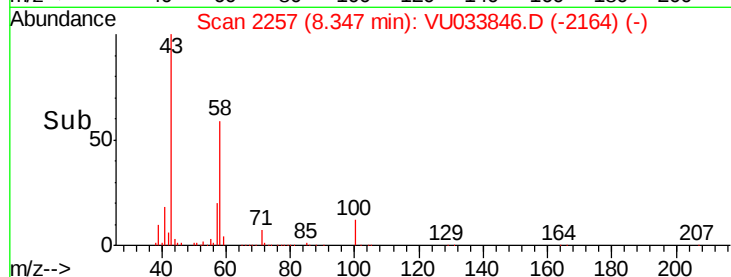
#48  
2-Hexanone  
Concen: 231.012 ug/L  
RT: 8.35 min Scan# 2257  
Delta R.T. -0.00 min  
Lab File: VU033846.D  
Acq: 20 Aug 2019 11:40

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD02003

Tgt Ion: 43 Resp: 1041625  
Ion Ratio Lower Upper  
43 100  
58 57.8 45.1 67.7  
57 19.7 15.4 23.0  
100 11.9 8.9 13.3

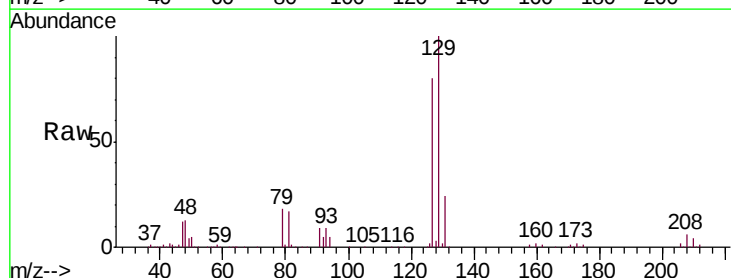


Abundance Ion 43.05 (42.75 to 43.75): VU0  
Ion 58.05 (57.75 to 58.75): VU0  
Ion 57.20 (56.90 to 57.90): VU0  
Ion 100.15 (99.85 to 100.85): VU0

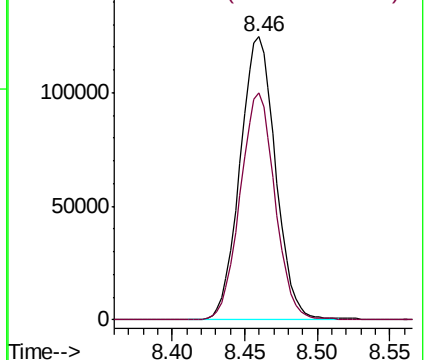
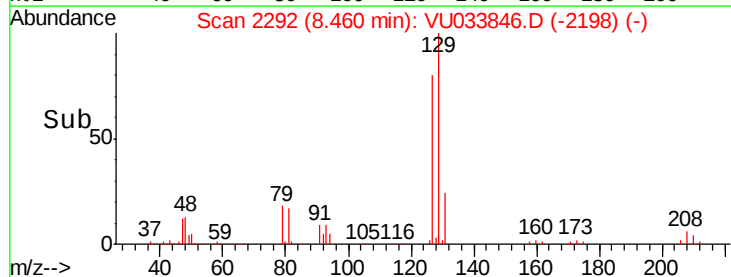


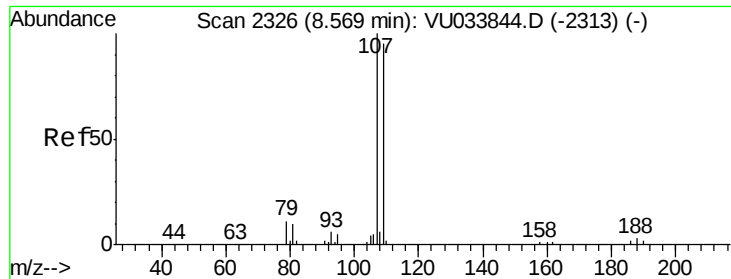
#49  
Dibromochloromethane  
Concen: 20.430 ug/L  
RT: 8.46 min Scan# 2292  
Delta R.T. 0.00 min  
Lab File: VU033846.D  
Acq: 20 Aug 2019 11:40

Tgt Ion: 129 Resp: 212702  
Ion Ratio Lower Upper  
129 100  
127 80.0 57.1 106.1



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

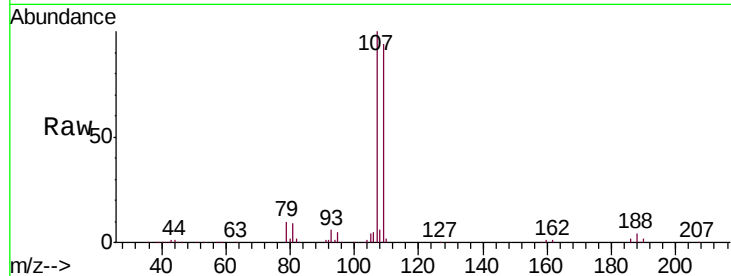




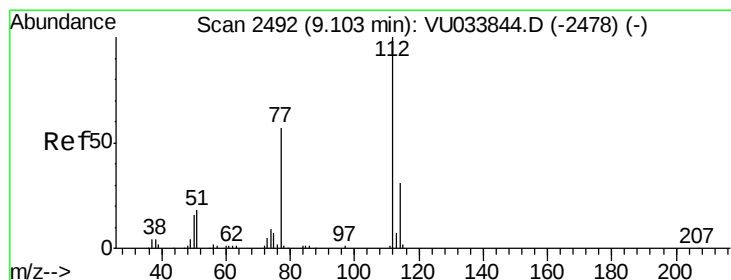
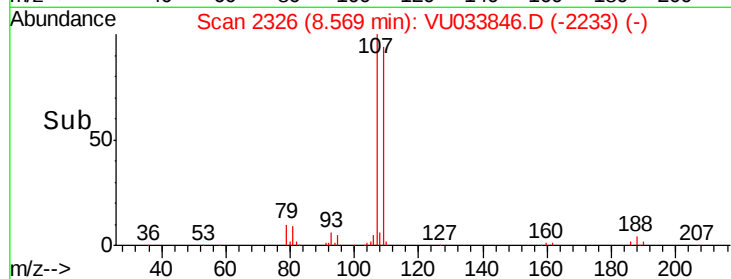
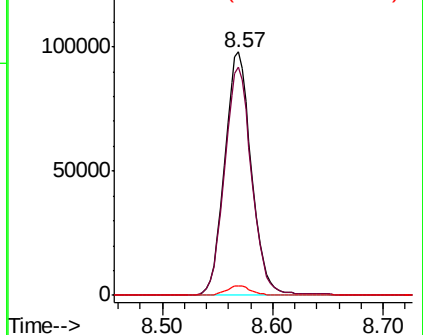
#50  
 1,2-Dibromoethane  
 Concen: 20.662 ug/L  
 RT: 8.57 min Scan# 2326  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD02003

Tgt Ion:107 Resp: 164689  
 Ion Ratio Lower Upper  
 107 100  
 109 94.0 66.3 123.1  
 188 4.1 2.4 3.6#

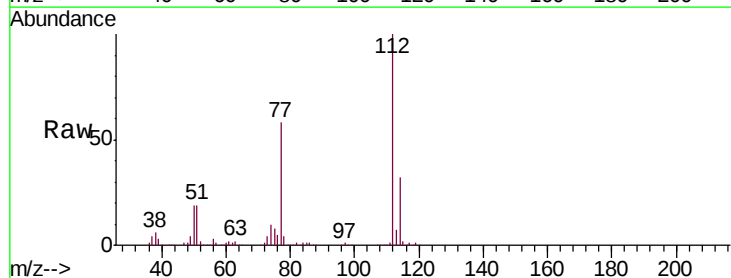


Abundance Ion 106.95 (106.65 to 107.65): V  
 Ion 109.00 (108.70 to 109.70): V  
 Ion 187.90 (187.60 to 188.60): V

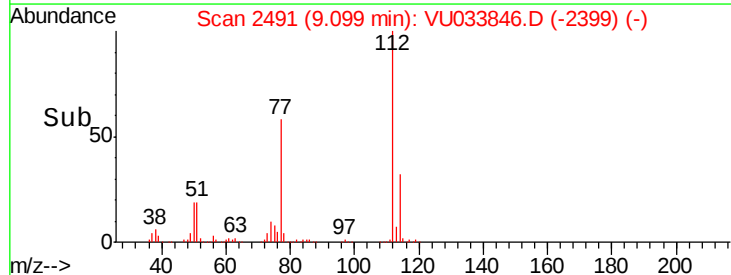
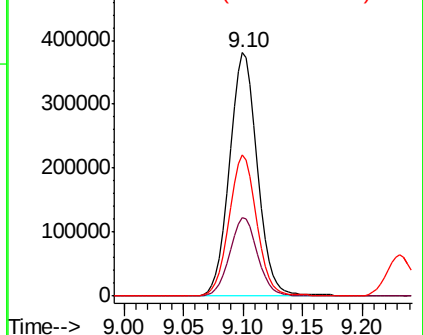


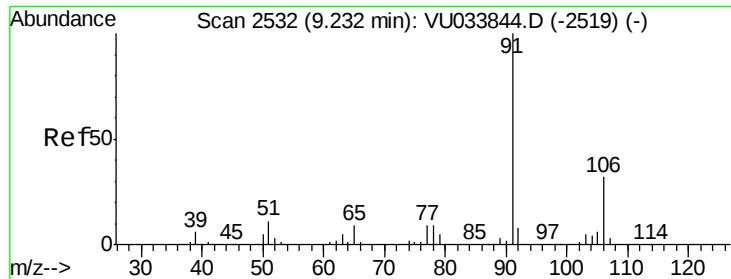
#51  
 Chlorobenzene  
 Concen: 20.754 ug/L  
 RT: 9.10 min Scan# 2491  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

Tgt Ion:112 Resp: 619146  
 Ion Ratio Lower Upper  
 112 100  
 114 32.3 21.3 39.6  
 77 57.9 46.6 69.8



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





#52

Ethylbenzene

Concen: 23.935 ug/L

RT: 9.23 min Scan# 2532

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

Instrument :

MSVOA\_U

ClientSampleId :

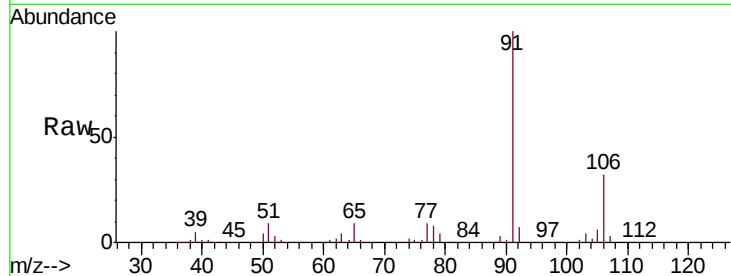
VSTD02003

Tgt Ion: 91 Resp: 1080642

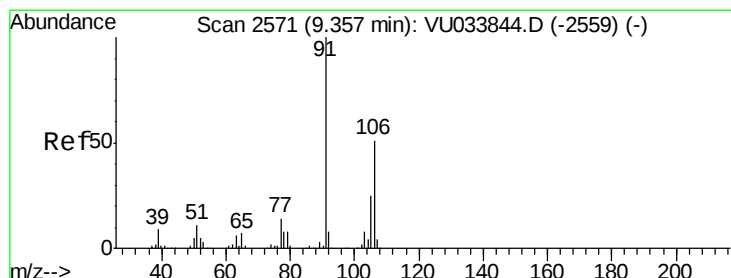
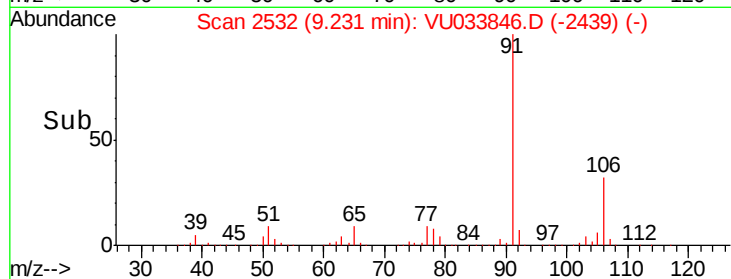
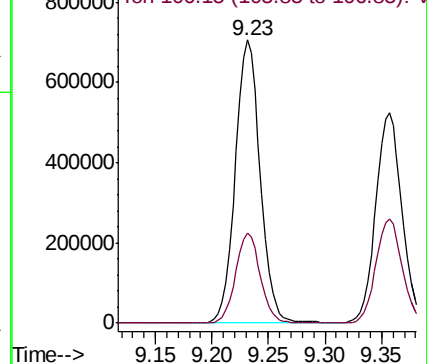
Ion Ratio Lower Upper

91 100

106 31.6 22.3 41.3



Abundance Ion 91.15 (90.85 to 91.85): VU033844.D (-2519) (-)



#53

m,p-Xylene

Concen: 24.950 ug/L

RT: 9.36 min Scan# 2571

Delta R.T. -0.00 min

Lab File: VU033846.D

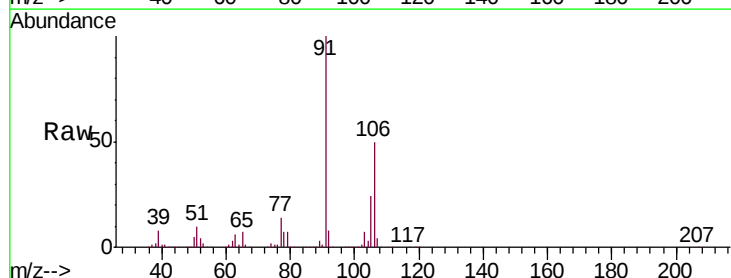
Acq: 20 Aug 2019 11:40

Tgt Ion: 106 Resp: 422838

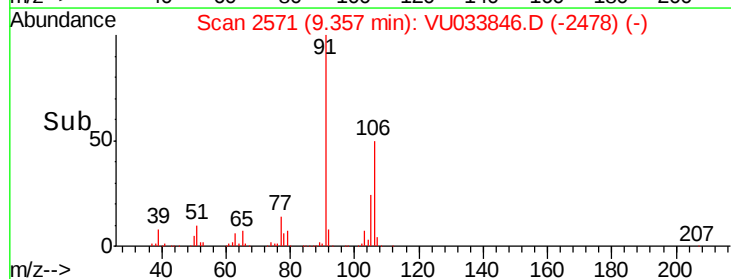
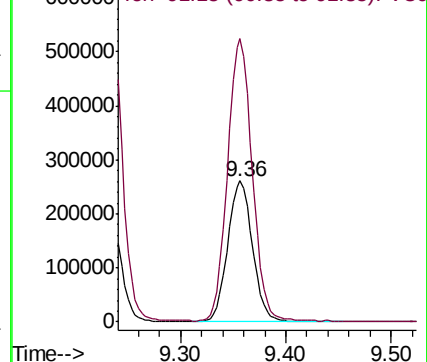
Ion Ratio Lower Upper

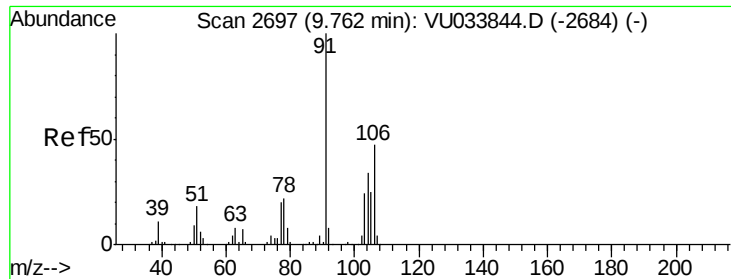
106 100

91 200.7 137.7 255.7



Abundance Ion 106.15 (105.85 to 106.85): VU033844.D (-2559) (-)





#54

o-Xylene

Concen: 24.964 ug/L

RT: 9.76 min Scan# 2697

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

Instrument :

MSVOA\_U

ClientSampleId :

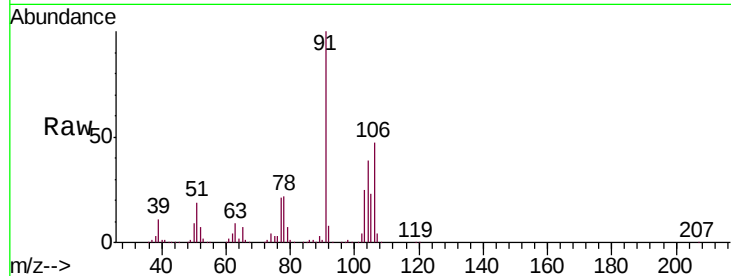
VSTD02003

Tgt Ion:106 Resp: 405720

Ion Ratio Lower Upper

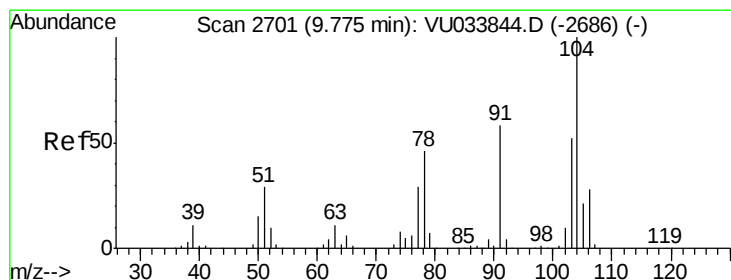
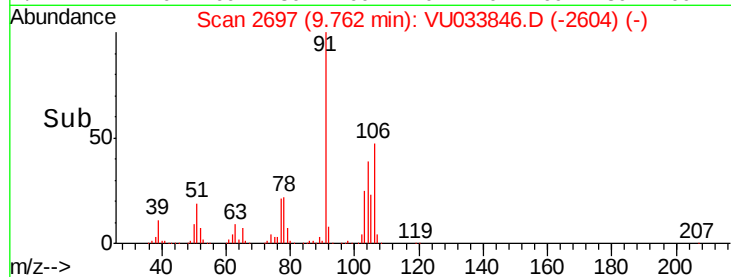
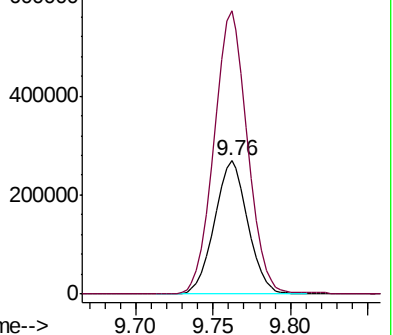
106 100

91 212.7 148.6 276.0



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VU0



#55

Styrene

Concen: 25.402 ug/L

RT: 9.77 min Scan# 2701

Delta R.T. -0.00 min

Lab File: VU033846.D

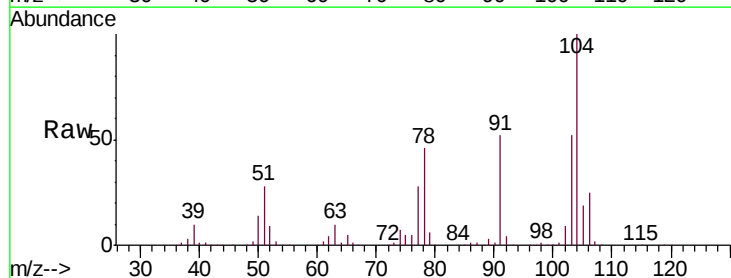
Acq: 20 Aug 2019 11:40

Tgt Ion:104 Resp: 715512

Ion Ratio Lower Upper

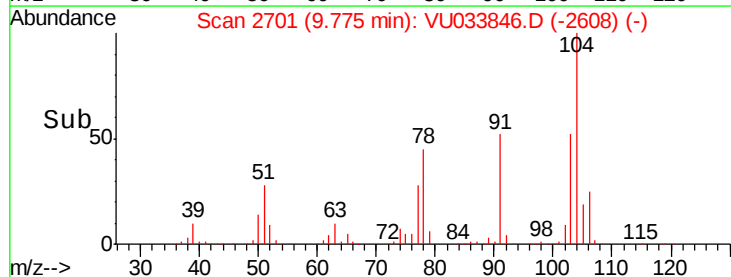
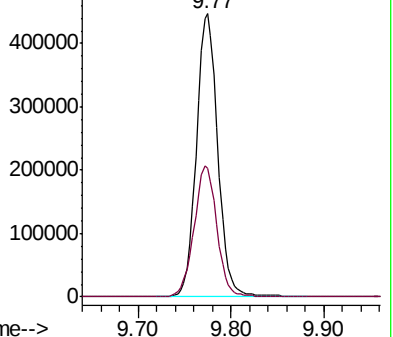
104 100

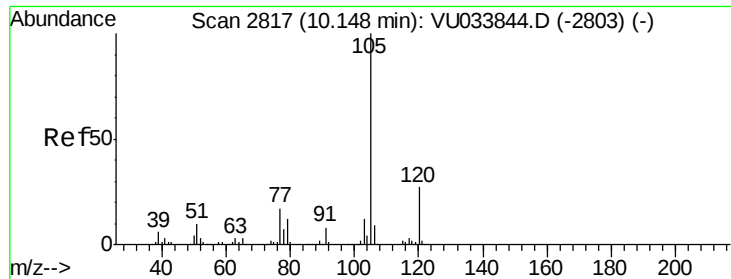
78 45.5 32.3 59.9



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VU0





#56

Isopropylbenzene

Concen: 25.560 ug/L

RT: 10.15 min Scan# 2817

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

Instrument :

MSVOA\_U

ClientSampleId :

VSTD02003

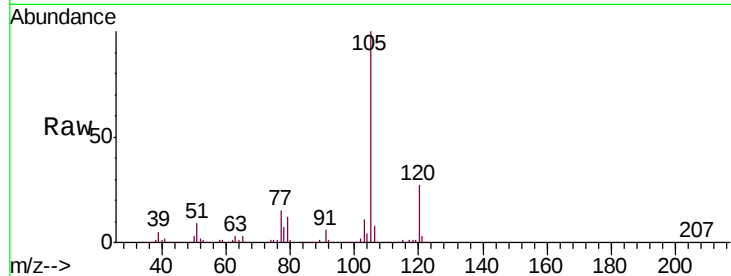
Tgt Ion:105 Resp: 1074832

Ion Ratio Lower Upper

105 100

120 26.7 21.2 31.8

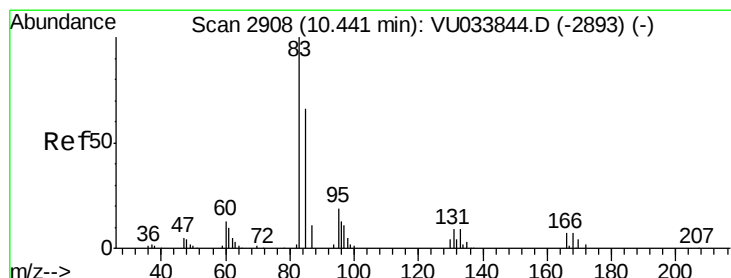
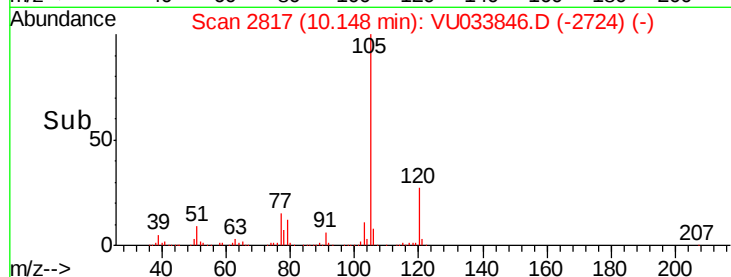
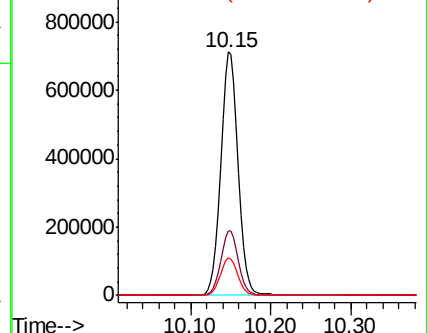
77 15.6 13.1 19.7



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 21.040 ug/L

RT: 10.44 min Scan# 2908

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

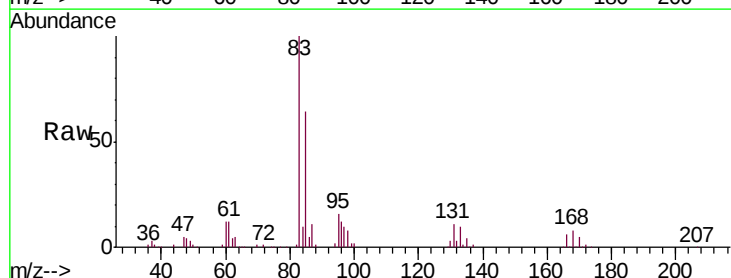
Tgt Ion: 83 Resp: 220258

Ion Ratio Lower Upper

83 100

85 64.1 46.5 86.3

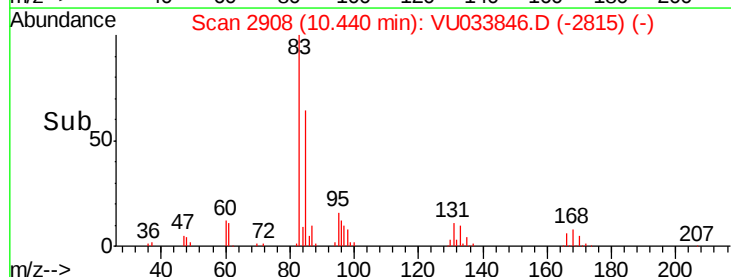
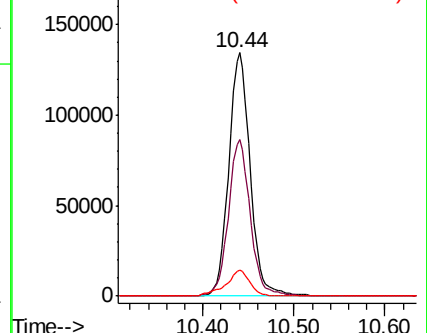
131 10.7 7.1 10.7#

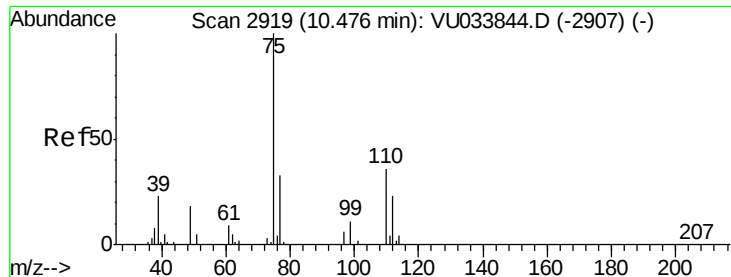


Abundance Ion 82.95 (82.65 to 83.65): V

Ion 85.00 (84.70 to 85.70): V

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 20.440 ug/L

RT: 10.48 min Scan# 2919

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

Instrument :

MSVOA\_U

ClientSampleId :

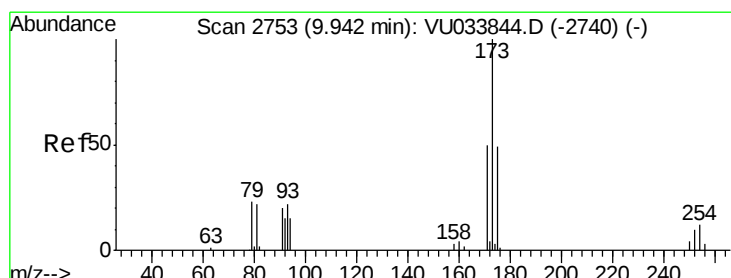
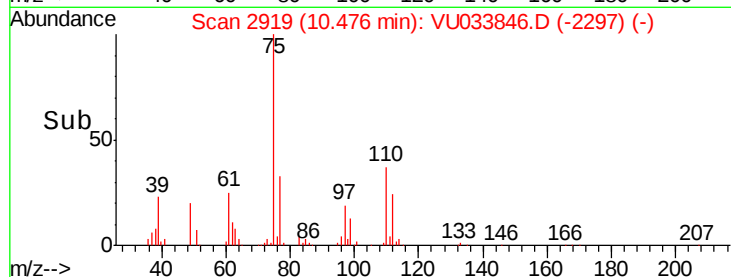
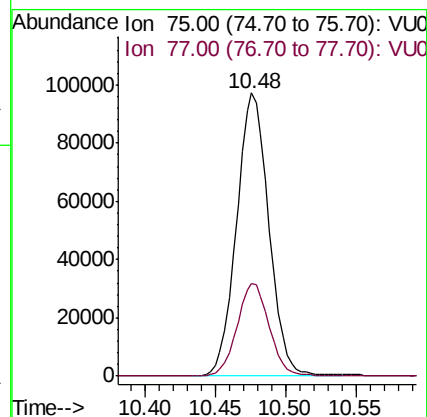
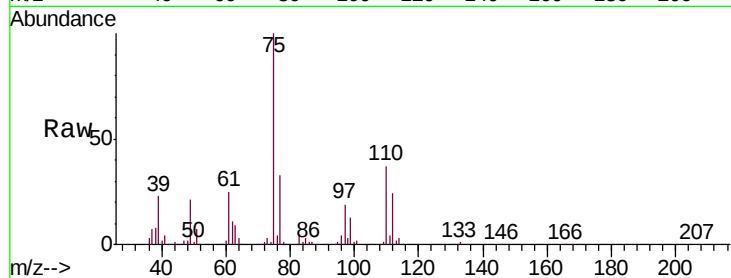
VSTD02003

Tgt Ion: 75 Resp: 156068

Ion Ratio Lower Upper

75 100

77 32.7 26.3 39.5



#61

Bromoform

Concen: 19.174 ug/L

RT: 9.94 min Scan# 2752

Delta R.T. -0.00 min

Lab File: VU033846.D

Acq: 20 Aug 2019 11:40

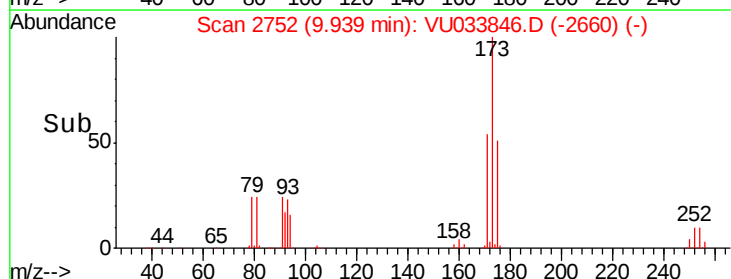
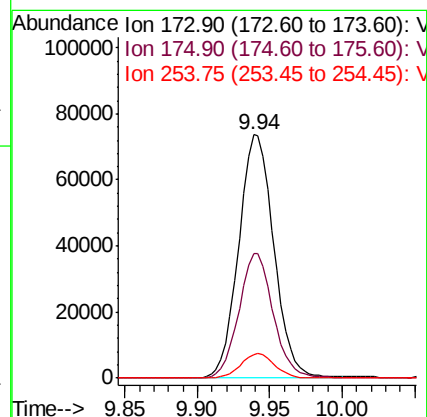
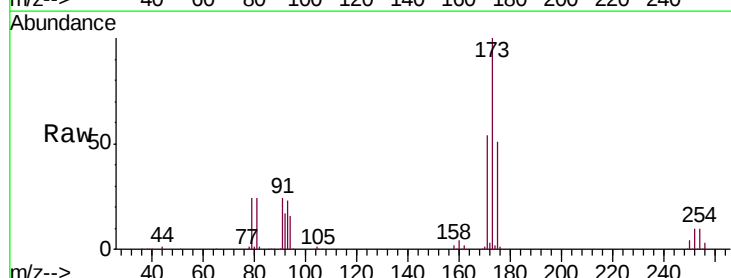
Tgt Ion: 173 Resp: 124302

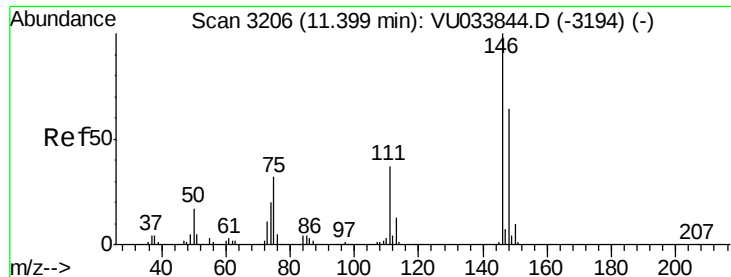
Ion Ratio Lower Upper

173 100

175 49.8 39.3 58.9

254 9.5 8.1 12.1

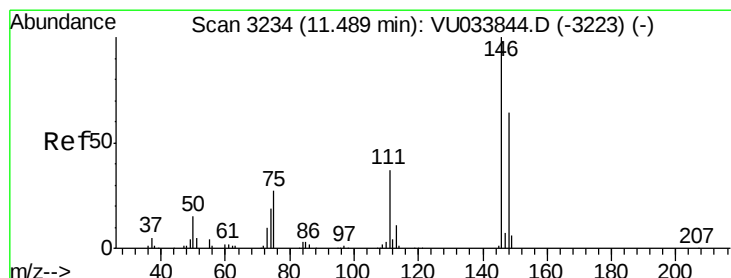
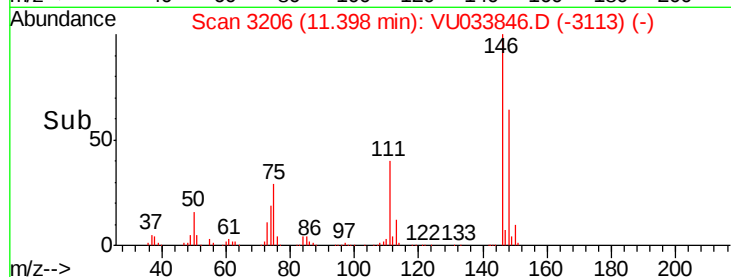
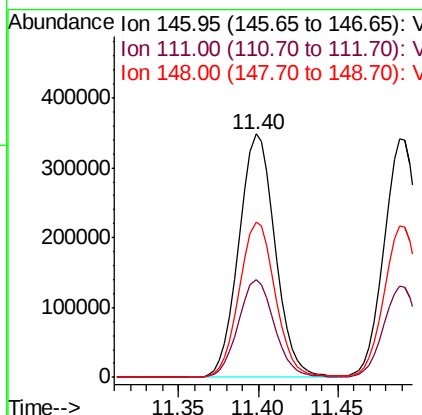
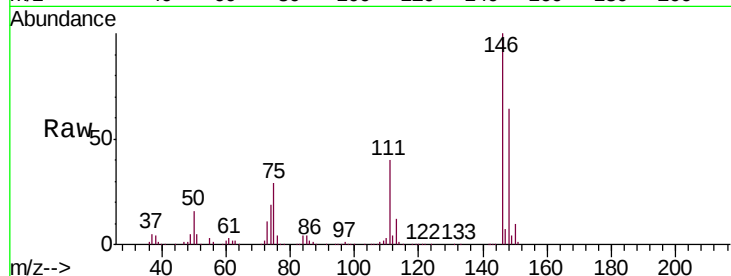




#62  
 1,3-Dichlorobenzene  
 Concen: 20.644 ug/L  
 RT: 11.40 min Scan# 3206  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

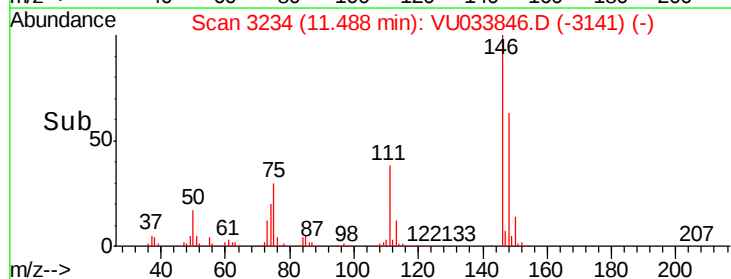
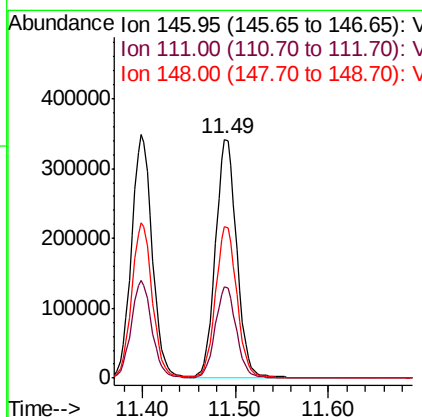
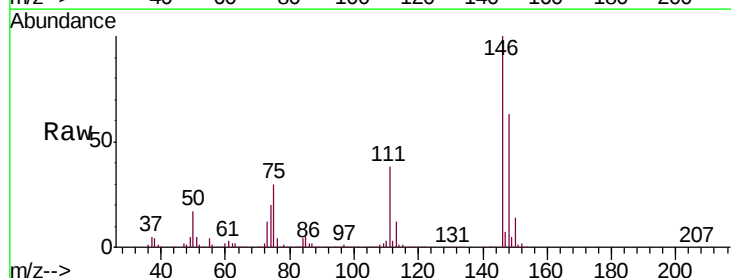
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD02003

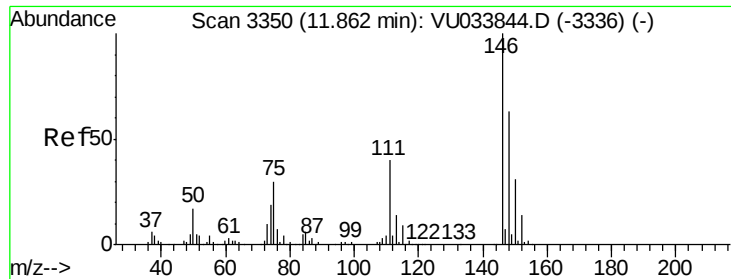
Tgt Ion:146 Resp: 538273  
 Ion Ratio Lower Upper  
 146 100  
 111 40.1 25.9 48.1  
 148 64.0 44.7 83.1



#63  
 1,4-Dichlorobenzene  
 Concen: 20.296 ug/L  
 RT: 11.49 min Scan# 3234  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

Tgt Ion:146 Resp: 544141  
 Ion Ratio Lower Upper  
 146 100  
 111 38.1 26.2 48.6  
 148 63.3 44.7 83.1

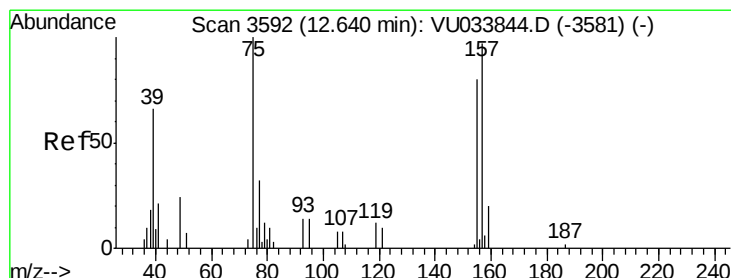
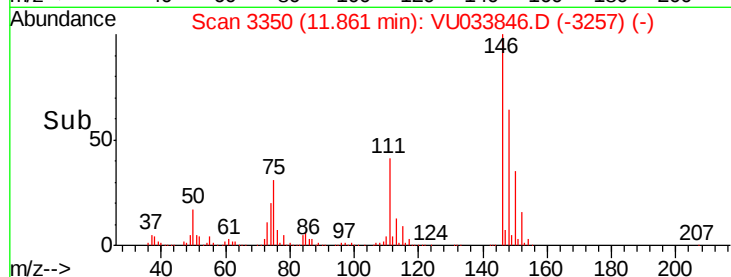
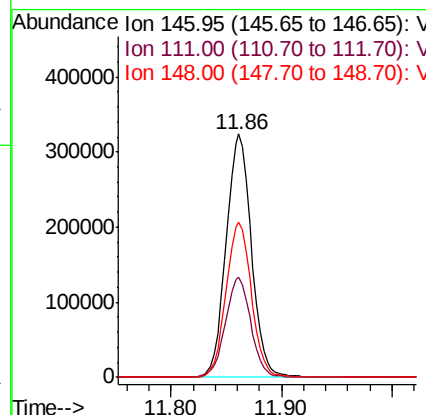
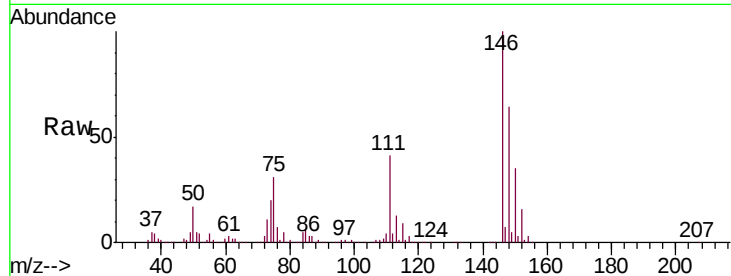




#65  
 1,2-Dichlorobenzene  
 Concen: 20.407 ug/L  
 RT: 11.86 min Scan# 3350  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

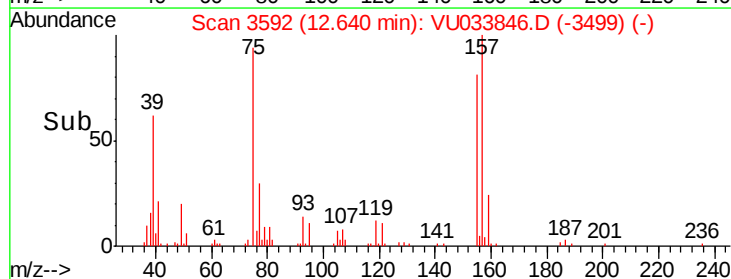
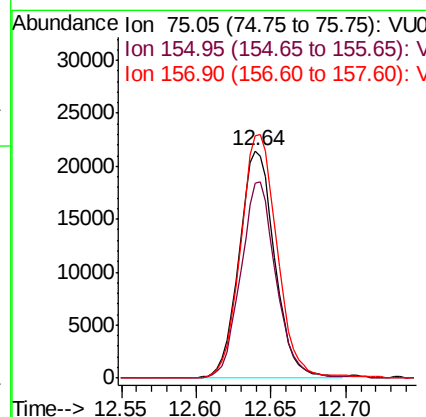
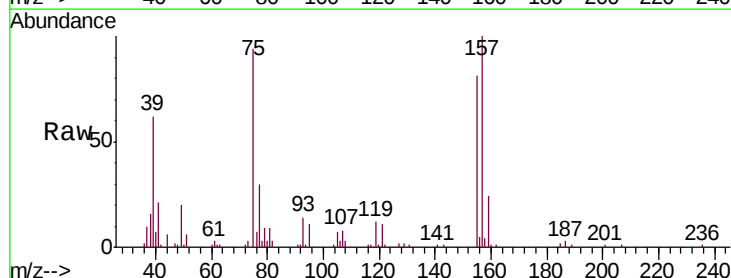
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD02003

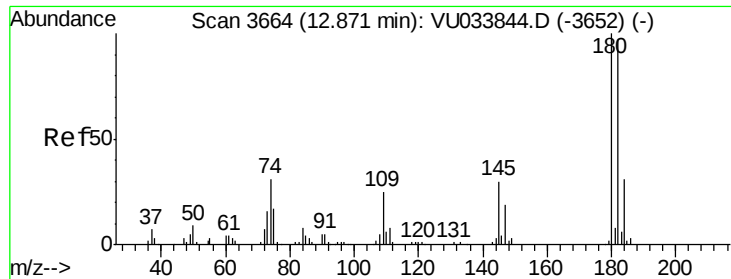
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 41.2  | 31.9  | 47.9  |
| 148     | 64.0  | 50.6  | 76.0  |



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 19.949 ug/L  
 RT: 12.64 min Scan# 3592  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 155     | 86.1  | 64.1  | 96.1  |
| 157     | 106.9 | 77.5  | 116.3 |

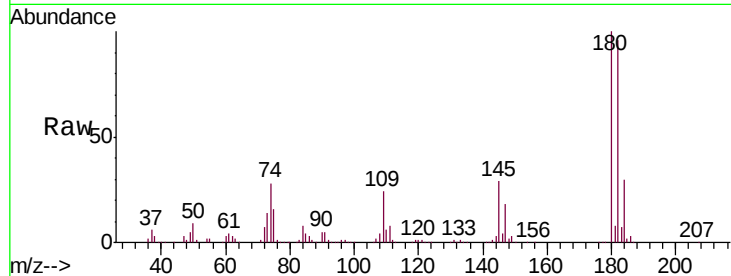




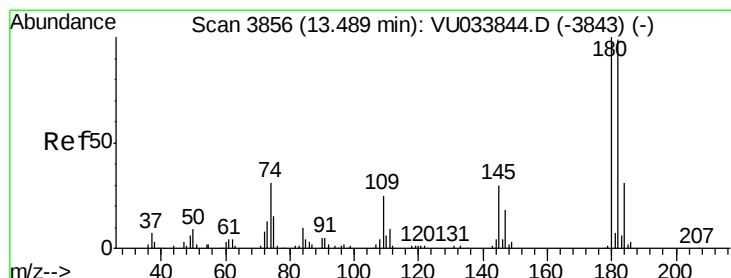
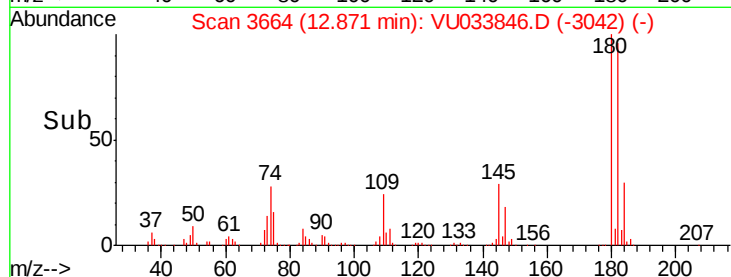
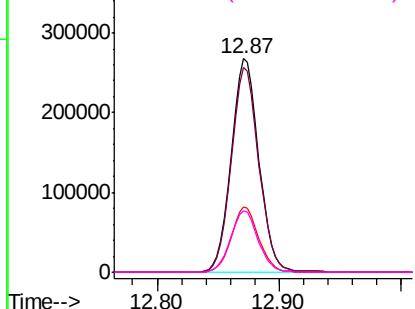
#67  
 1,3,5-Trichlorobenzene  
 Concen: 21.330 ug/L  
 RT: 12.87 min Scan# 3664  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD02003

Tgt Ion:180 Resp: 422124  
 Ion Ratio Lower Upper  
 180 100  
 182 95.7 77.5 116.3  
 184 30.2 24.2 36.4  
 145 28.7 23.4 35.2

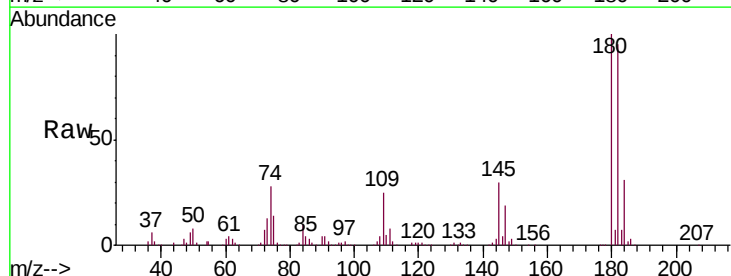


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

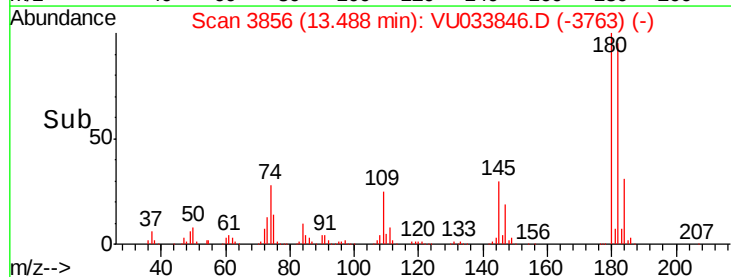
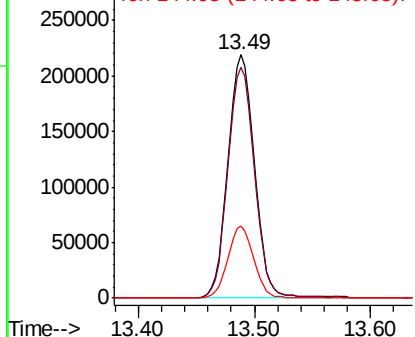


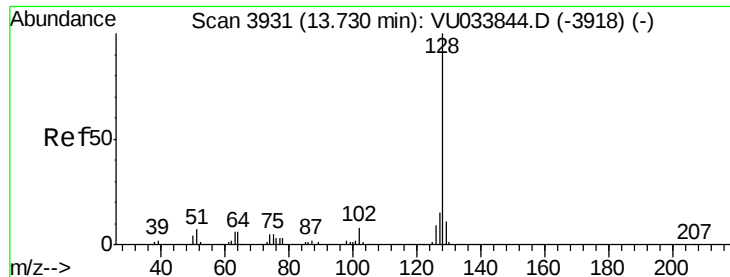
#68  
 1,2,4-trichlorobenzene  
 Concen: 24.080 ug/L  
 RT: 13.49 min Scan# 3856  
 Delta R.T. -0.00 min  
 Lab File: VU033846.D  
 Acq: 20 Aug 2019 11:40

Tgt Ion:180 Resp: 346846  
 Ion Ratio Lower Upper  
 180 100  
 182 95.0 77.6 116.4  
 145 28.7 24.4 36.6



Abundance Ion 179.90 (179.60 to 180.60): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 144.95 (144.65 to 145.65): V

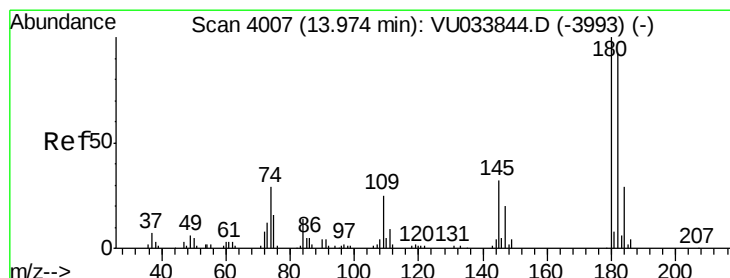
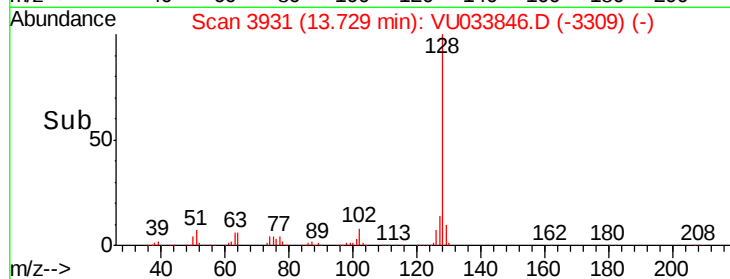
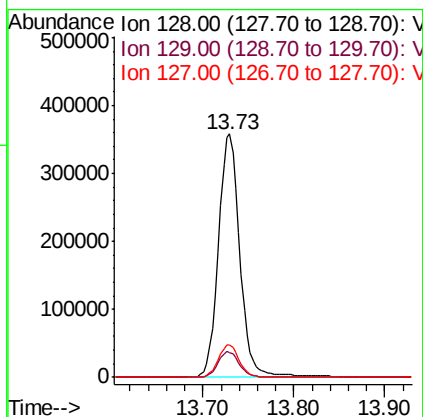
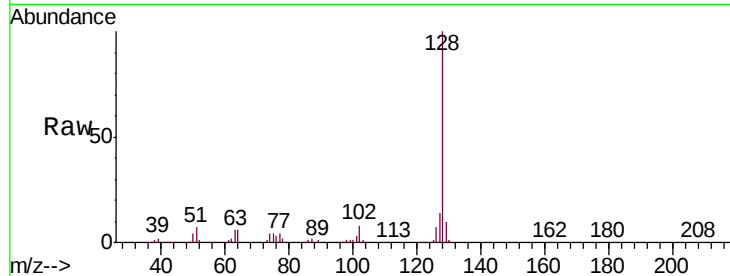




#69  
Naphthalene  
Concen: 29.772 ug/L  
RT: 13.73 min Scan# 3931  
Delta R.T. -0.00 min  
Lab File: VU033846.D  
Acq: 20 Aug 2019 11:40

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD02003

Tgt Ion:128 Resp: 586795  
Ion Ratio Lower Upper  
128 100  
129 10.6 9.0 13.6  
127 13.4 10.9 16.3



#70  
1,2,3-Trichlorobenzene  
Concen: 24.230 ug/L  
RT: 13.97 min Scan# 4007  
Delta R.T. -0.00 min  
Lab File: VU033846.D  
Acq: 20 Aug 2019 11:40

Tgt Ion:180 Resp: 327871  
Ion Ratio Lower Upper  
180 100  
182 96.5 76.9 115.3  
145 31.5 24.6 36.8

