

Data File : VU028812.D  
Acq On : 20 Dec 2018 10:10  
Operator : MD/SY  
Sample : VSTD05057  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05057

Quant Time: Dec 21 03:32:23 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM122018WMA.M  
Quant Title : VOC Analysis  
QLast Update : Fri Dec 21 03:28:44 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 195627   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 188066   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 90289    | 50.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |       |     |        |        |      |      |
|--------------------------------|-------|-----|--------|--------|------|------|
| 4) Vinyl Chloride-d3           | 1.40  | 65  | 82215  | 52.42  | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.67  | 69  | 62159  | 51.31  | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.27  | 63  | 135922 | 51.54  | ug/L | 0.00 |
| 21) 2-Butanone-d5              | 4.17  | 46  | 119070 | 108.36 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.65  | 84  | 129585 | 52.54  | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.31  | 65  | 78871  | 51.88  | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.34  | 84  | 279801 | 52.66  | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.33  | 67  | 93558  | 51.83  | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.56  | 98  | 255366 | 53.04  | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.85  | 79  | 43300  | 53.54  | ug/L | 0.00 |
| 47) 2-Hexanone-d5              | 8.31  | 63  | 94042  | 109.70 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43 | 84  | 129211 | 51.60  | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.86 | 152 | 93189  | 51.03  | ug/L | 0.00 |

#### Target Compounds

|                                |      |     |        |         |      | Qvalue |
|--------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane     | 1.21 | 85  | 80312  | 50.347  | ug/L | 100    |
| 3) Chloromethane               | 1.33 | 50  | 108771 | 50.146  | ug/L | 100    |
| 5) Vinyl chloride              | 1.40 | 62  | 98734  | 51.525  | ug/L | 100    |
| 6) Bromomethane                | 1.61 | 94  | 39413  | 48.286  | ug/L | 100    |
| 8) Chloroethane                | 1.69 | 64  | 56736  | 51.872  | ug/L | 100    |
| 9) Trichlorofluoromethane      | 1.88 | 101 | 101629 | 51.864  | ug/L | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.28 | 101 | 65087  | 51.338  | ug/L | 100    |
| 12) 1,1-Dichloroethene         | 2.28 | 96  | 63287  | 50.456  | ug/L | 100    |
| 13) Acetone                    | 2.32 | 43  | 115678 | 103.304 | ug/L | 100    |
| 14) Carbon disulfide           | 2.48 | 76  | 219927 | 50.210  | ug/L | 100    |
| 15) Methyl Acetate             | 2.61 | 43  | 88781  | 50.855  | ug/L | 100    |
| 16) Methylene chloride         | 2.70 | 84  | 77837  | 50.320  | ug/L | 100    |
| 17) trans-1,2-Dichloroethene   | 2.98 | 96  | 69557  | 51.185  | ug/L | 100    |
| 18) Methyl tert-butyl Ether    | 3.00 | 73  | 213796 | 51.163  | ug/L | 100    |
| 19) 1,1-Dichloroethane         | 3.44 | 63  | 134681 | 50.984  | ug/L | 100    |
| 20) cis-1,2-Dichloroethene     | 4.22 | 96  | 78552  | 51.028  | ug/L | 100    |
| 22) 2-Butanone                 | 4.26 | 43  | 142533 | 104.527 | ug/L | 100    |
| 23) Bromochloromethane         | 4.55 | 128 | 37722  | 51.403  | ug/L | 100    |
| 25) Chloroform                 | 4.67 | 83  | 127846 | 50.848  | ug/L | 100    |
| 27) 1,2-Dichloroethane         | 5.40 | 62  | 95845  | 51.293  | ug/L | 100    |
| 29) Cyclohexane                | 4.99 | 56  | 129311 | 51.661  | ug/L | 100    |
| 30) 1,1,1-Trichloroethane      | 4.91 | 97  | 101694 | 51.089  | ug/L | 100    |
| 31) Carbon tetrachloride       | 5.13 | 117 | 81702  | 50.899  | ug/L | 100    |
| 33) Benzene                    | 5.39 | 78  | 307744 | 51.400  | ug/L | 100    |
| 34) Trichloroethene            | 6.18 | 95  | 73204  | 50.643  | ug/L | 100    |
| 35) Methylcyclohexane          | 6.41 | 83  | 125649 | 52.191  | ug/L | 100    |
| 37) 1,2-Dichloropropane        | 6.43 | 63  | 85761  | 51.241  | ug/L | 100    |
| 38) Bromodichloromethane       | 6.76 | 83  | 95714  | 51.642  | ug/L | 100    |
| 39) cis-1,3-Dichloropropene    | 7.27 | 75  | 122487 | 51.334  | ug/L | 100    |
| 40) 4-Methyl-2-pentanone       | 7.46 | 43  | 233358 | 103.733 | ug/L | 100    |

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MSVOA\_U  
ClientSampleId :  
VSTD05057

Quant Time: Dec 21 03:32:23 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM122018WMA.M  
Quant Title : VOC Analysis  
QLast Update : Fri Dec 21 03:28:44 2018  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 42) Toluene                    | 7.64  | 91   | 316146   | 52.089  | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene  | 7.88  | 75   | 111823   | 52.574  | ug/L  | 100      |
| 45) 1,1,2-Trichloroethane      | 8.06  | 97   | 72634    | 50.757  | ug/L  | 100      |
| 46) Tetrachloroethene          | 8.22  | 164  | 55851    | 50.168  | ug/L  | 100      |
| 48) 2-Hexanone                 | 8.36  | 43   | 194267   | 105.216 | ug/L  | 100      |
| 49) Dibromochloromethane       | 8.48  | 129  | 73366    | 51.471  | ug/L  | 100      |
| 50) 1,2-Dibromoethane          | 8.58  | 107  | 77498    | 52.051  | ug/L  | 100      |
| 51) Chlorobenzene              | 9.12  | 112  | 195499   | 51.109  | ug/L  | 100      |
| 52) Ethylbenzene               | 9.25  | 91   | 337186   | 51.704  | ug/L  | 100      |
| 53) m,p-Xylene                 | 9.37  | 106  | 126874   | 52.610  | ug/L  | 100      |
| 54) o-xylene                   | 9.78  | 106  | 126733   | 52.434  | ug/L  | 100      |
| 55) Styrene                    | 9.79  | 104  | 216096   | 52.790  | ug/L  | 100      |
| 56) Isopropylbenzene           | 10.16 | 105  | 318837   | 52.000  | ug/L  | 100      |
| 58) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 132336   | 50.905  | ug/L  | 100      |
| 59) 1,2,3-Trichloropropane     | 10.49 | 75   | 101148   | 50.643  | ug/L  | 100      |
| 61) Bromoform                  | 9.96  | 173  | 56211    | 50.222  | ug/L  | 100      |
| 62) 1,3-Dichlorobenzene        | 11.41 | 146  | 143337   | 49.975  | ug/L  | 100      |
| 63) 1,4-Dichlorobenzene        | 11.50 | 146  | 146043   | 49.422  | ug/L  | 100      |
| 65) 1,2-Dichlorobenzene        | 11.88 | 146  | 151432   | 50.613  | ug/L  | 100      |
| 66) 1,2-Dibromo-3-chloropropan | 12.66 | 75   | 25820    | 50.030  | ug/L  | 100      |
| 67) 1,3,5-Trichlorobenzene     | 12.88 | 180  | 107293   | 50.737  | ug/L  | 100      |
| 68) 1,2,4-trichlorobenzene     | 13.50 | 180  | 90544    | 51.130  | ug/L  | 100      |
| 69) Naphthalene                | 13.74 | 128  | 315516   | 51.318  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.98 | 180  | 96737    | 50.660  | ug/L  | 100      |

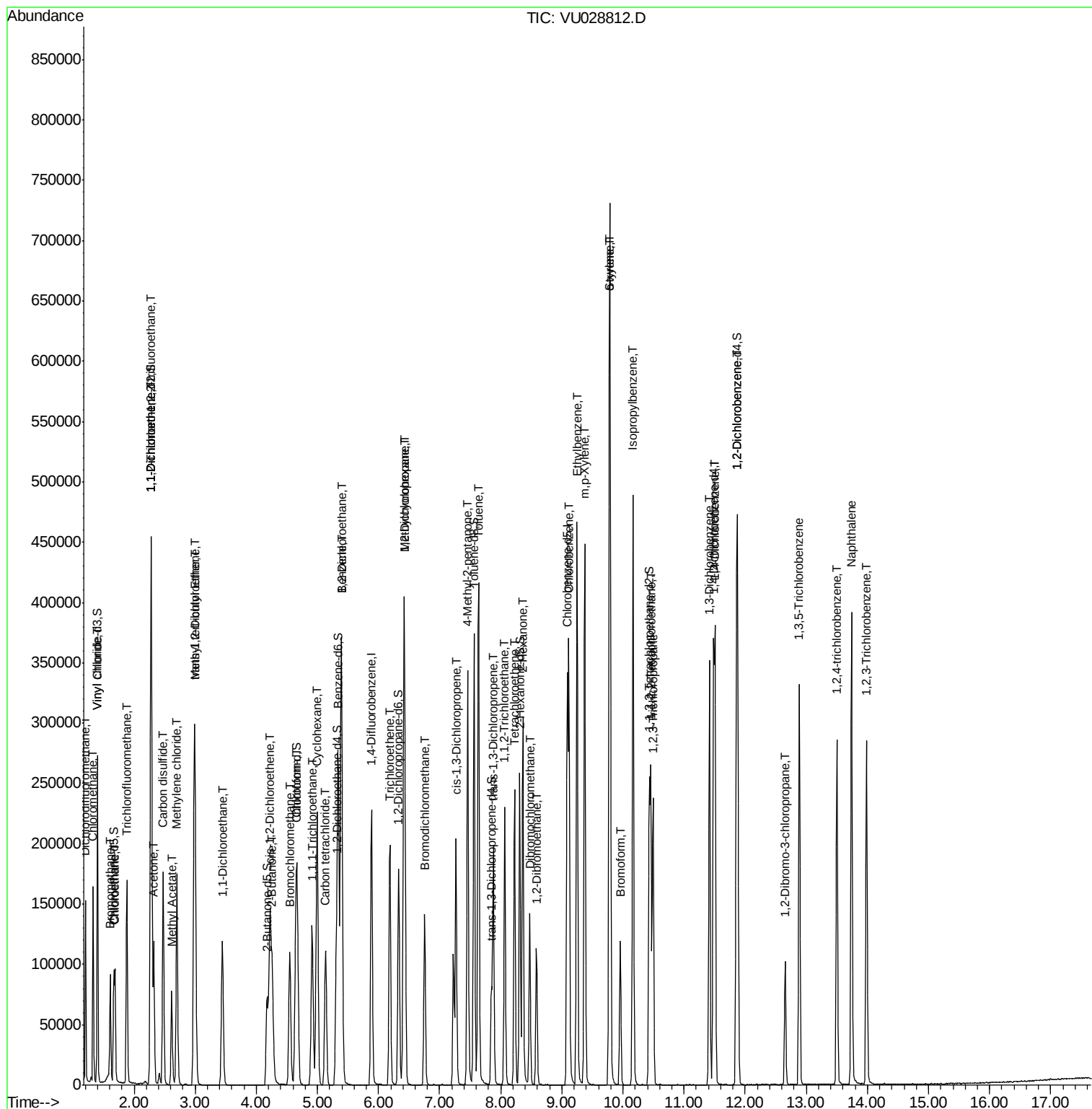
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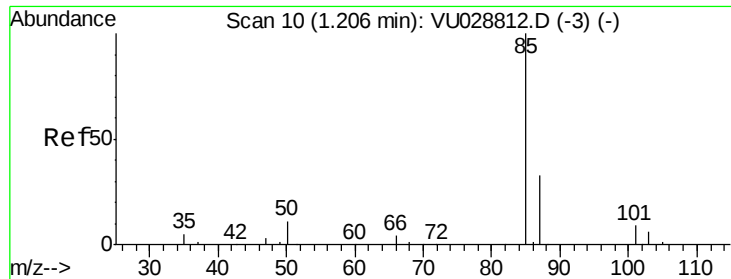
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**Instrument :**  
MSVOA\_U  
**ClientSampleId :**  
VSTD05057

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Quant Title : VOC Analysis  
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#2

Dichlorodifluoromethane

Concen: 50.347 ug/L

RT: 1.21 min Scan# 10

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

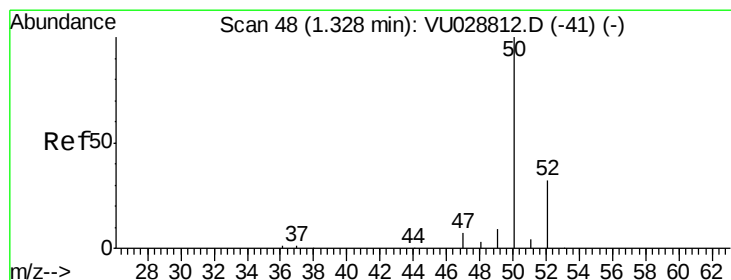
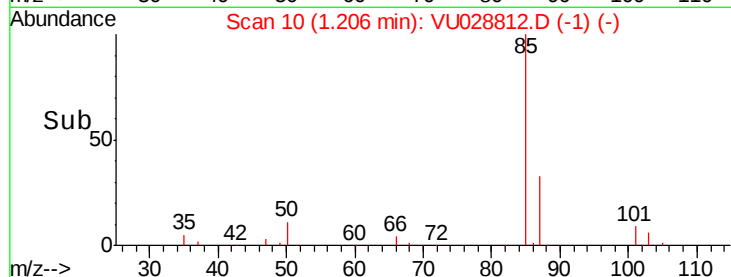
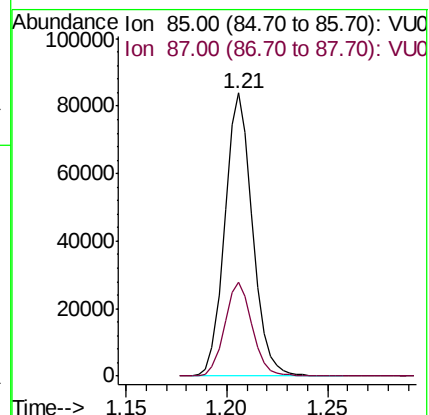
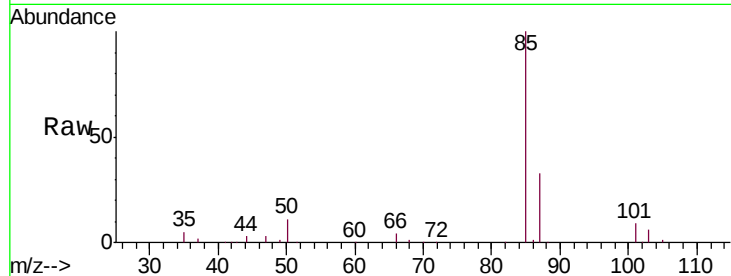
VSTD05057

Tgt Ion: 85 Resp: 80312

Ion Ratio Lower Upper

85 100

87 32.9 26.3 39.5



#3

Chloromethane

Concen: 50.146 ug/L

RT: 1.33 min Scan# 48

Delta R.T. 0.00 min

Lab File: VU028812.D

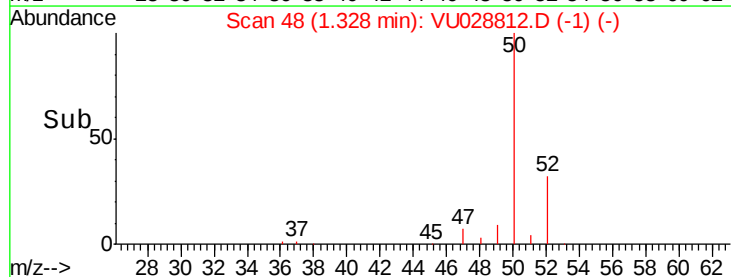
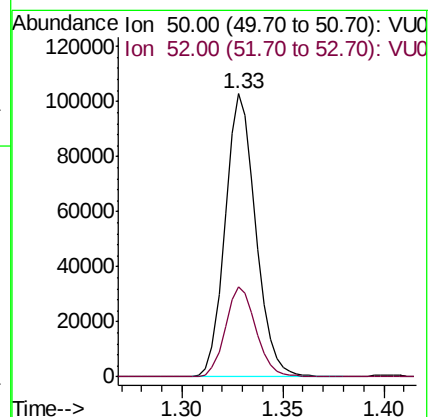
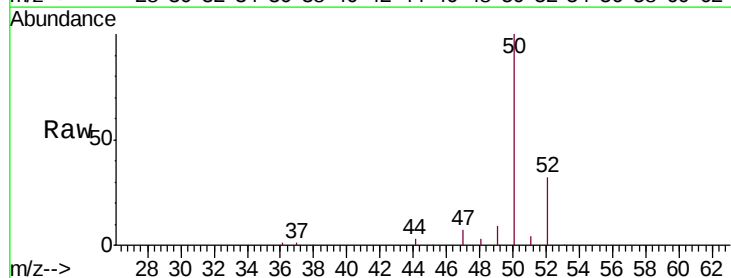
Acq: 20 Dec 2018 10:10

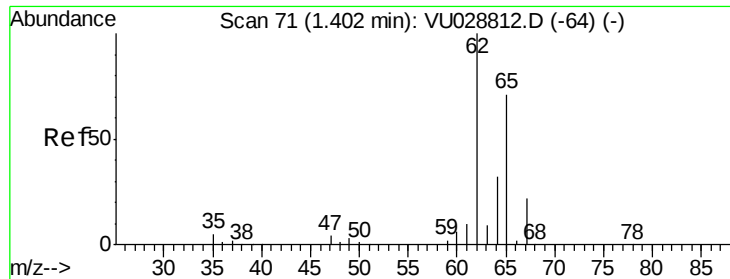
Tgt Ion: 50 Resp: 108771

Ion Ratio Lower Upper

50 100

52 31.8 22.3 41.3





#5

Vinyl chloride

Concen: 51.525 ug/L

RT: 1.40 min Scan# 71

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

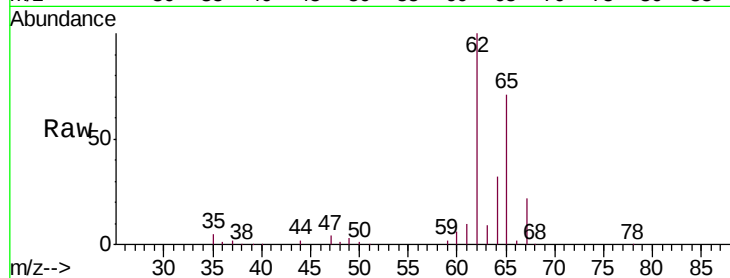
VSTD05057

Tgt Ion: 62 Resp: 98734

Ion Ratio Lower Upper

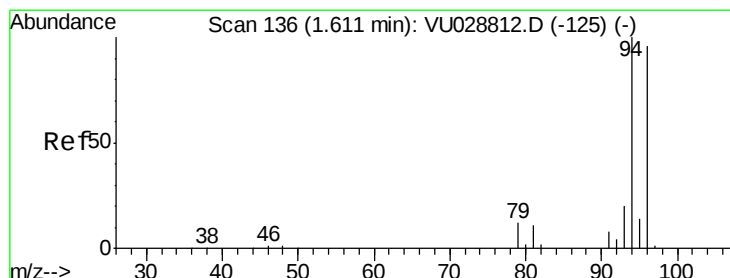
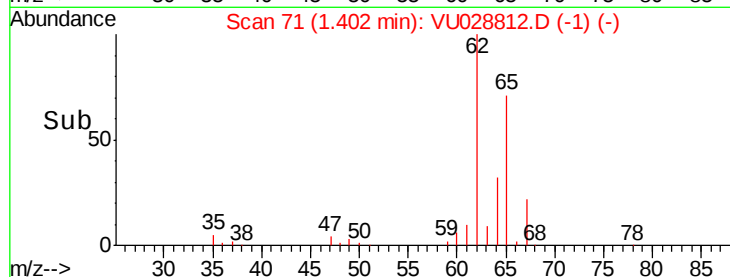
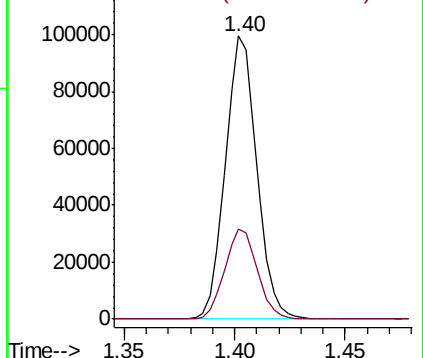
62 100

64 31.8 22.3 41.3



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.00 (63.70 to 64.70): VU0



#6

Bromomethane

Concen: 48.286 ug/L

RT: 1.61 min Scan# 136

Delta R.T. 0.00 min

Lab File: VU028812.D

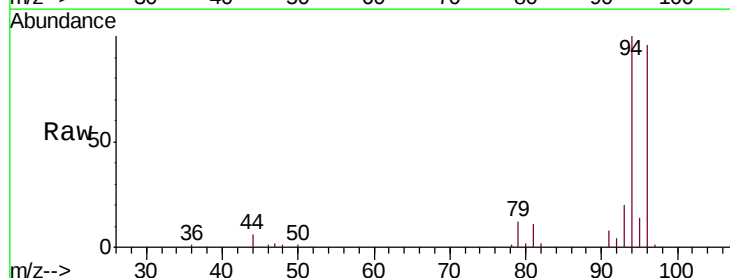
Acq: 20 Dec 2018 10:10

Tgt Ion: 94 Resp: 39413

Ion Ratio Lower Upper

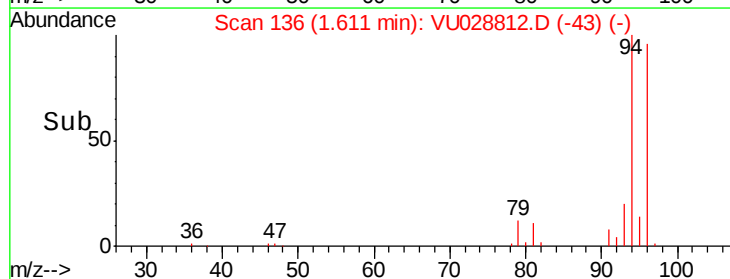
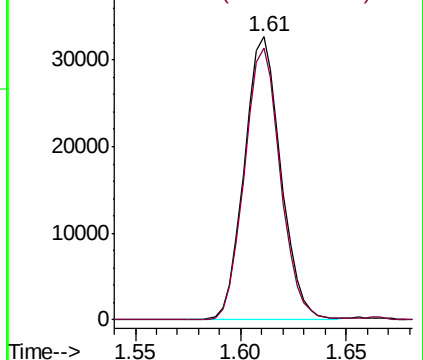
94 100

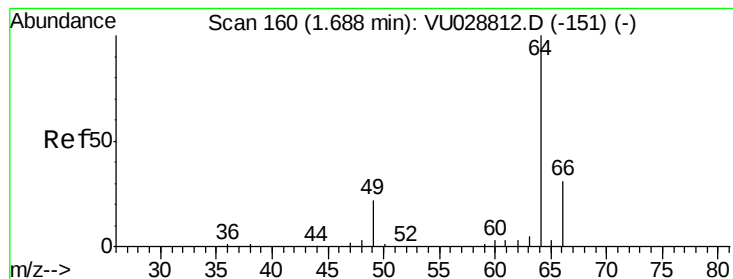
96 96.2 67.3 125.1



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0





#8

Chloroethane

Concen: 51.872 ug/L

RT: 1.69 min Scan# 160

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

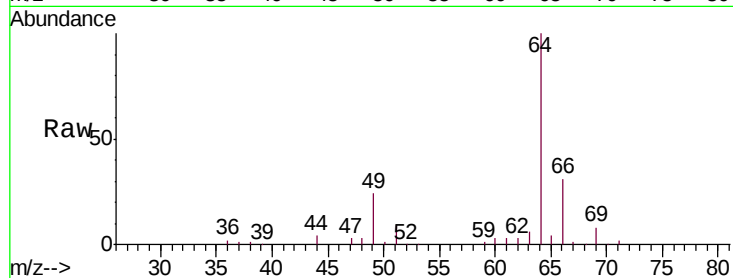
VSTD05057

Tgt Ion: 64 Resp: 56736

Ion Ratio Lower Upper

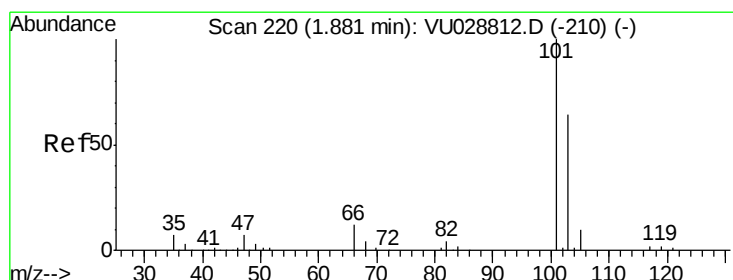
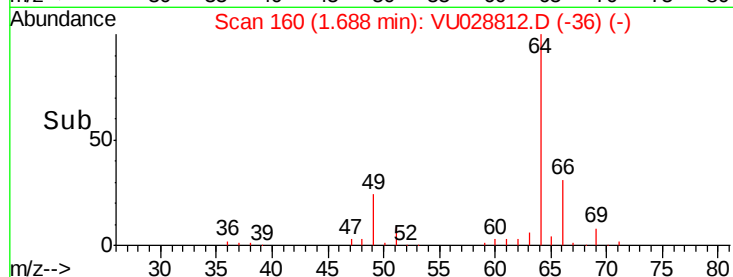
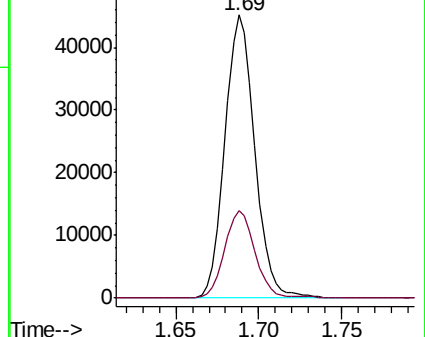
64 100

66 30.7 21.5 39.9



Abundance Ion 64.00 (63.70 to 64.70): VU028812.D (-151) (-)

Ion 66.00 (65.70 to 66.70): VU028812.D (-151) (-)



#9

Trichlorofluoromethane

Concen: 51.864 ug/L

RT: 1.88 min Scan# 220

Delta R.T. 0.00 min

Lab File: VU028812.D

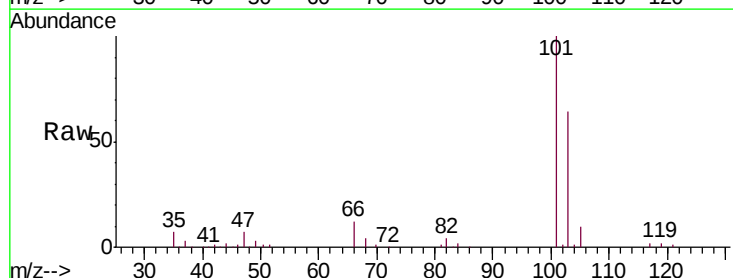
Acq: 20 Dec 2018 10:10

Tgt Ion: 101 Resp: 101629

Ion Ratio Lower Upper

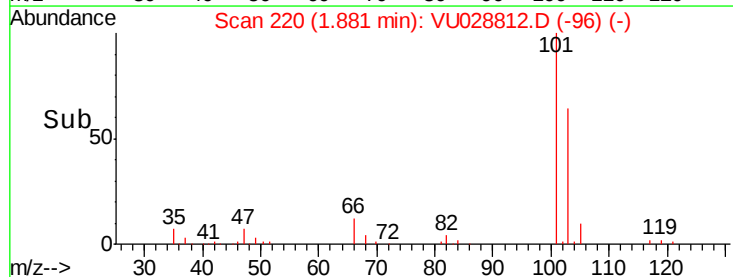
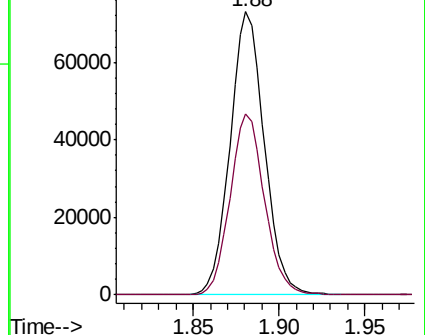
101 100

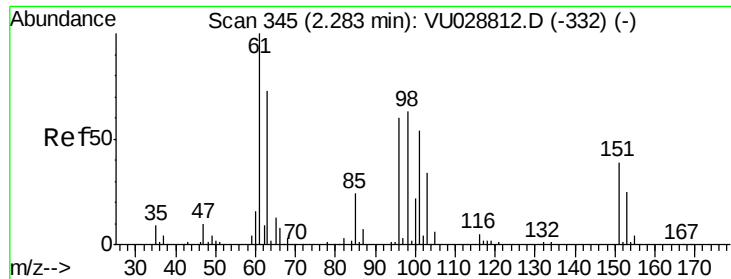
103 64.2 51.4 77.0



Abundance Ion 101.00 (100.70 to 101.70): VU028812.D (-210) (-)

Ion 103.00 (102.70 to 103.70): VU028812.D (-210) (-)





#10

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

Concen: 51.338 ug/L

RT: 2.28 min Scan# 345

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

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ClientSampleId :

VSTD05057

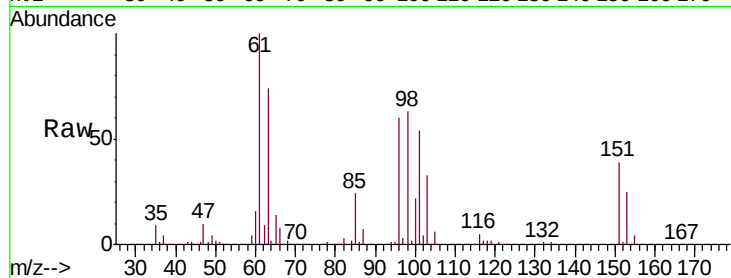
Tgt Ion:101 Resp: 65087

Ion Ratio Lower Upper

101 100

85 42.2 33.8 50.6

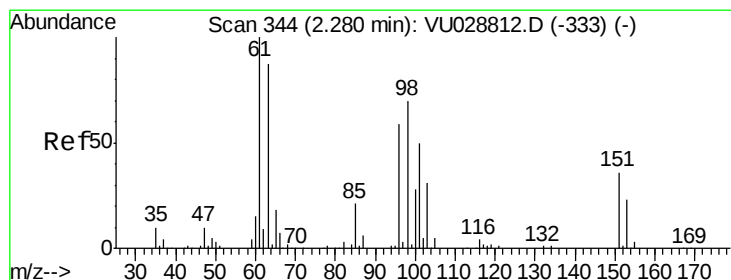
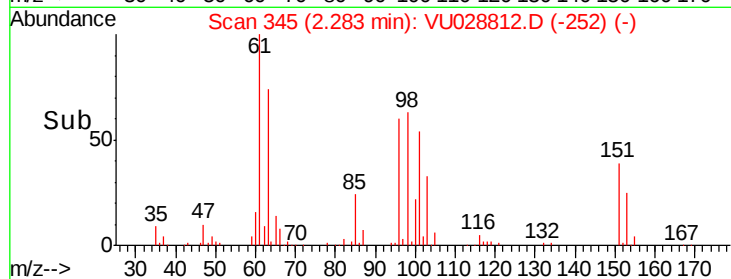
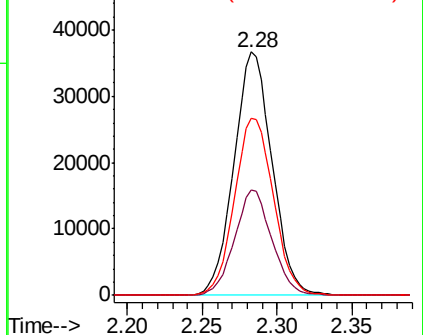
151 74.2 59.4 89.0



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: 50.456 ug/L

RT: 2.28 min Scan# 344

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

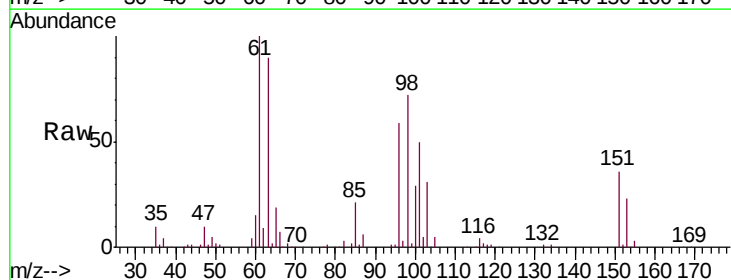
Tgt Ion: 96 Resp: 63287

Ion Ratio Lower Upper

96 100

61 170.4 119.3 221.5

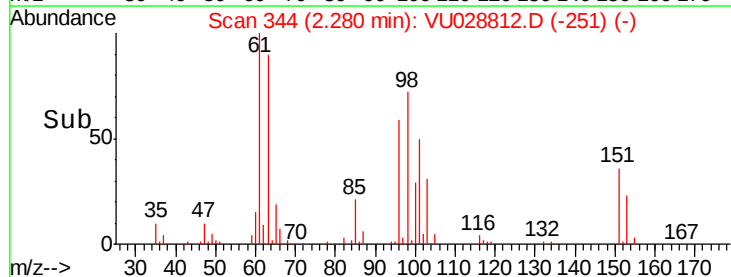
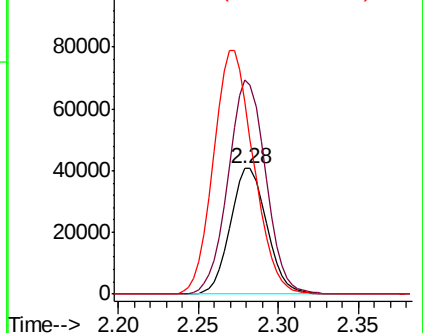
63 153.5 107.4 199.6

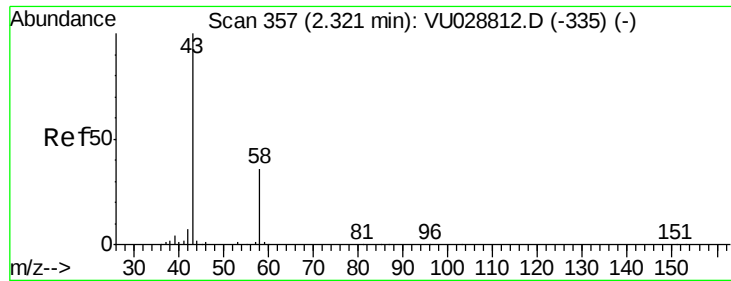


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 103.304 ug/L

RT: 2.32 min Scan# 357

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

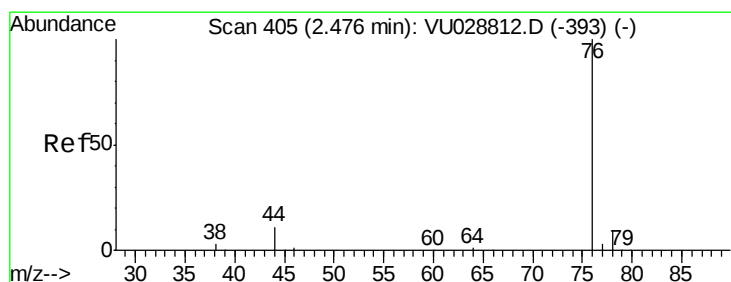
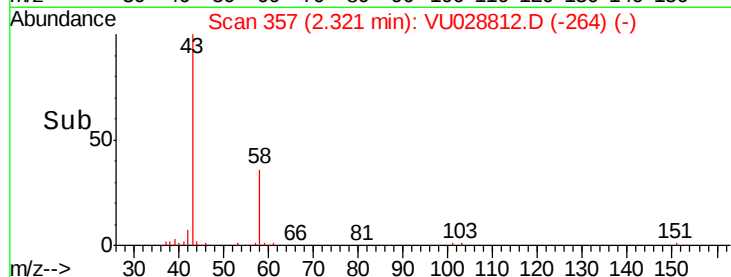
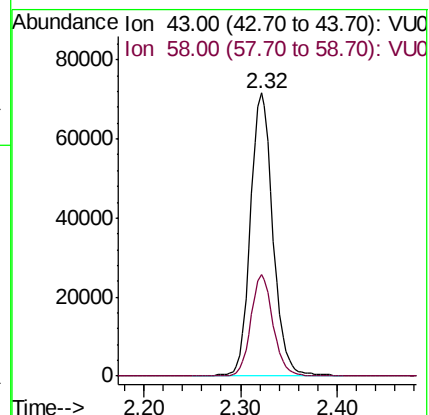
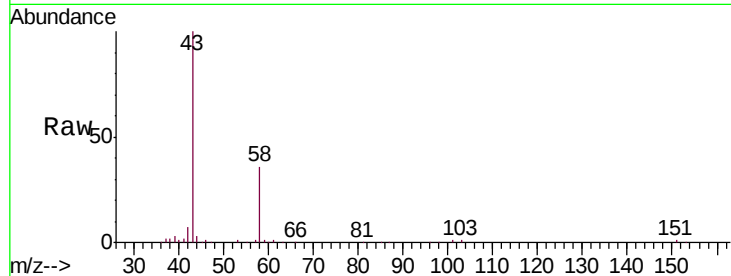
VSTD05057

Tgt Ion: 43 Resp: 115678

Ion Ratio Lower Upper

43 100

58 35.1 0.0 70.2



#14

Carbon disulfide

Concen: 50.210 ug/L

RT: 2.48 min Scan# 405

Delta R.T. 0.00 min

Lab File: VU028812.D

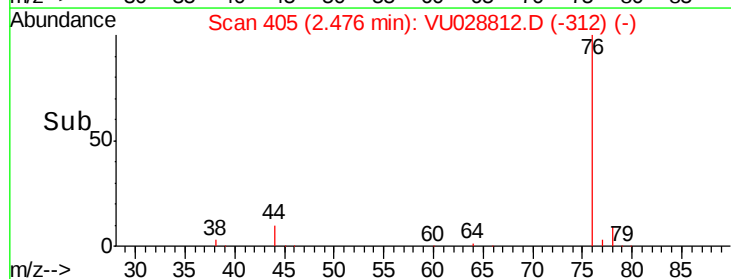
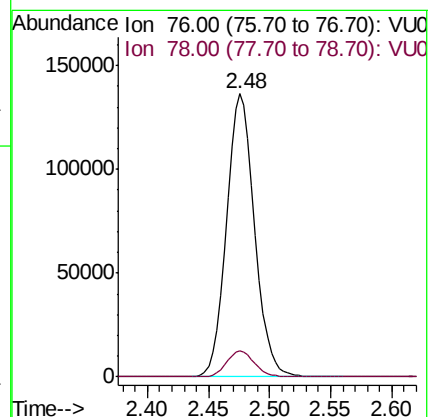
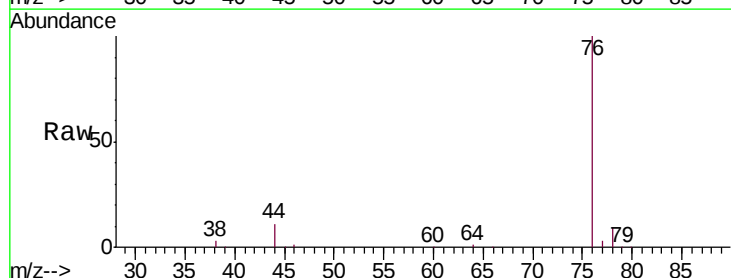
Acq: 20 Dec 2018 10:10

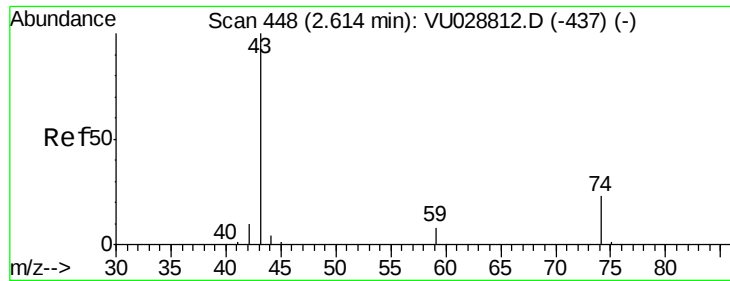
Tgt Ion: 76 Resp: 219927

Ion Ratio Lower Upper

76 100

78 9.2 7.4 11.0

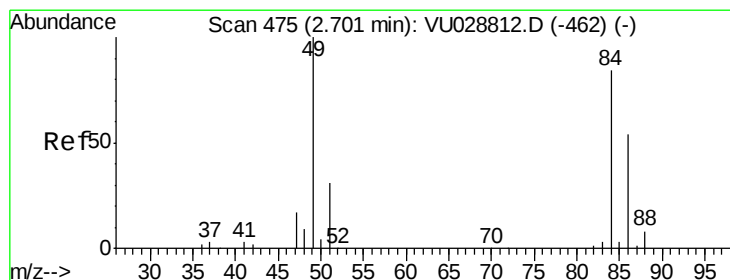
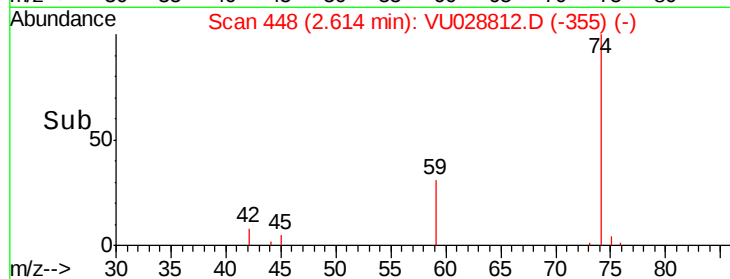
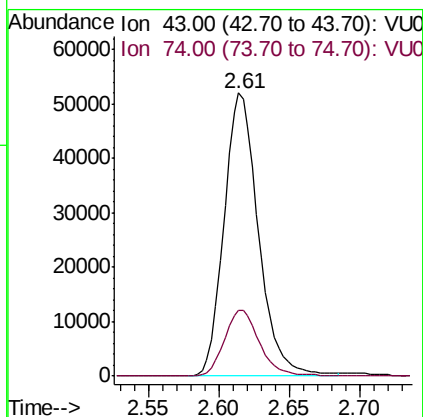
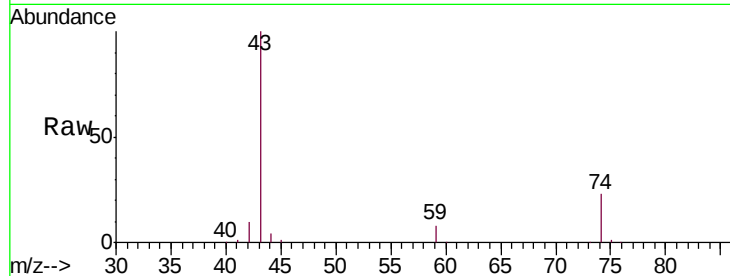




#15  
Methyl Acetate  
Concen: 50.855 ug/L  
RT: 2.61 min Scan# 448  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

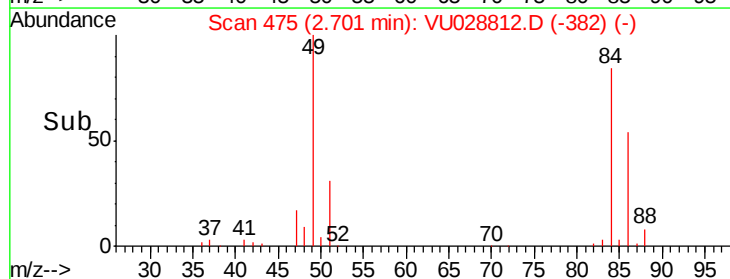
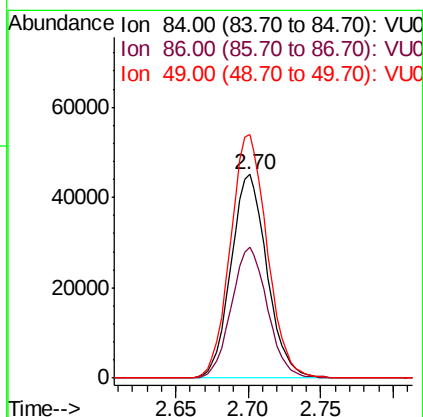
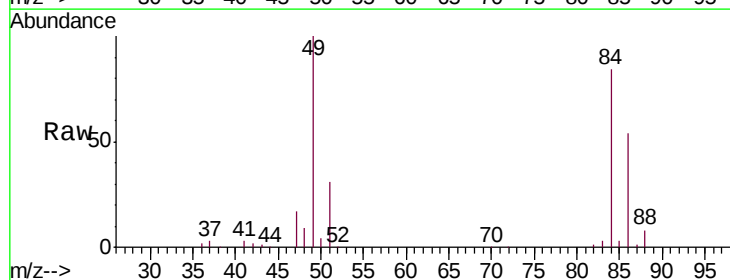
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05057

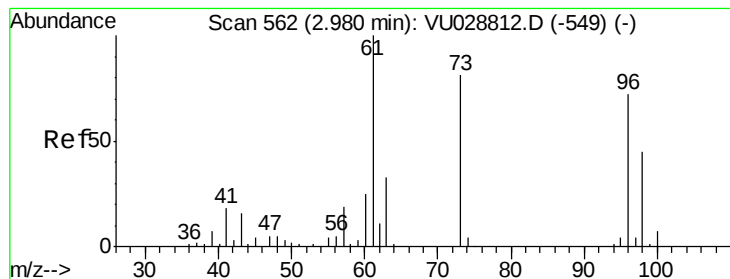
Tgt Ion: 43 Resp: 88781  
Ion Ratio Lower Upper  
43 100  
74 23.7 19.0 28.4



#16  
Methylene chloride  
Concen: 50.320 ug/L  
RT: 2.70 min Scan# 475  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

Tgt Ion: 84 Resp: 77837  
Ion Ratio Lower Upper  
84 100  
86 64.1 44.9 83.3  
49 119.8 83.9 155.7





#17

trans-1,2-Dichloroethene

Concen: 51.185 ug/L

RT: 2.98 min Scan# 562

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05057

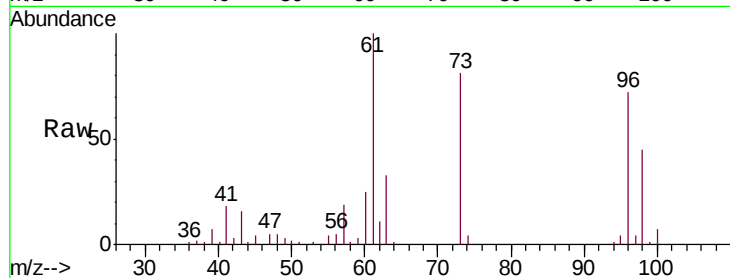
Tgt Ion: 96 Resp: 69557

Ion Ratio Lower Upper

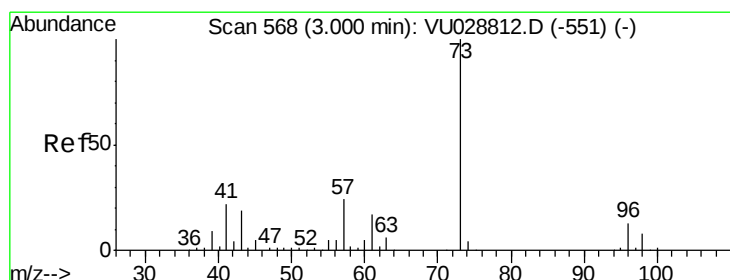
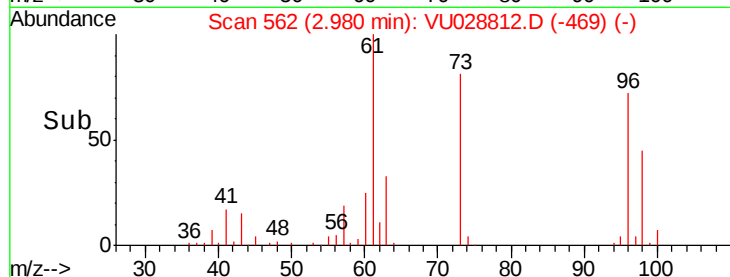
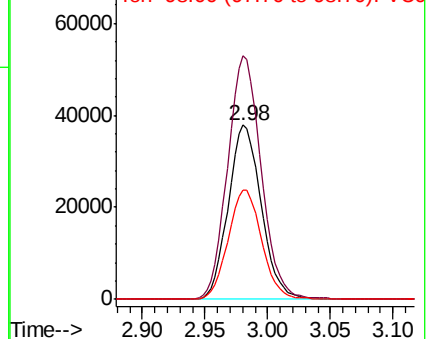
96 100

61 139.8 97.9 181.7

98 63.0 44.1 81.9



Abundance Ion 96.00 (95.70 to 96.70): VU0  
Ion 61.00 (60.70 to 61.70): VU0  
Ion 98.00 (97.70 to 98.70): VU0



#18

Methyl tert-butyl Ether

Concen: 51.163 ug/L

RT: 3.00 min Scan# 568

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

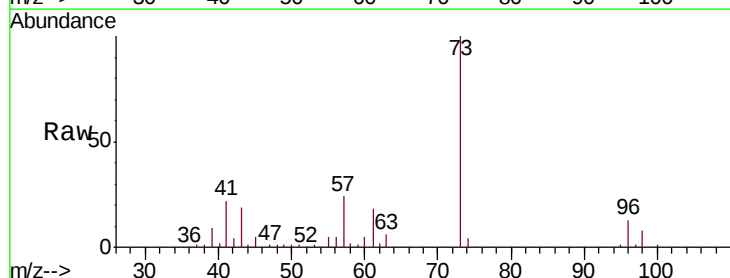
Tgt Ion: 73 Resp: 213796

Ion Ratio Lower Upper

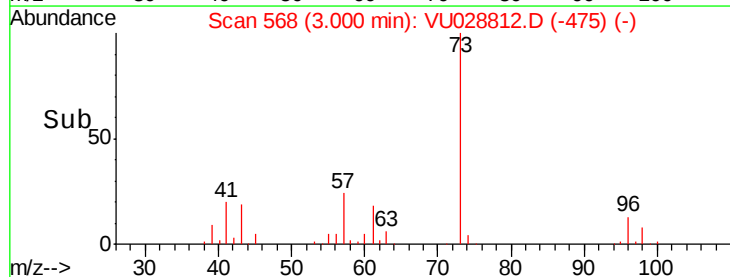
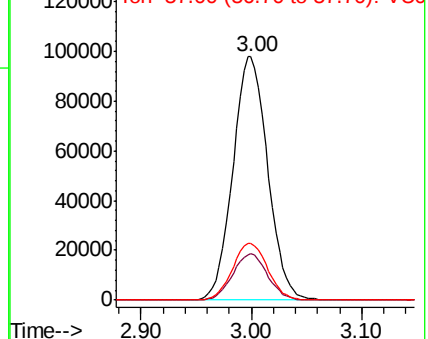
73 100

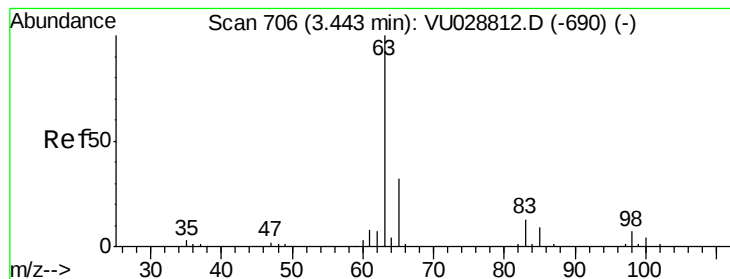
43 19.1 15.3 22.9

57 23.7 19.0 28.4



Abundance Ion 73.00 (72.70 to 73.70): VU0  
Ion 43.00 (42.70 to 43.70): VU0  
Ion 57.00 (56.70 to 57.70): VU0

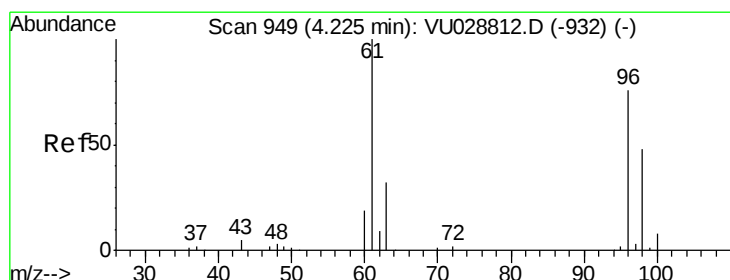
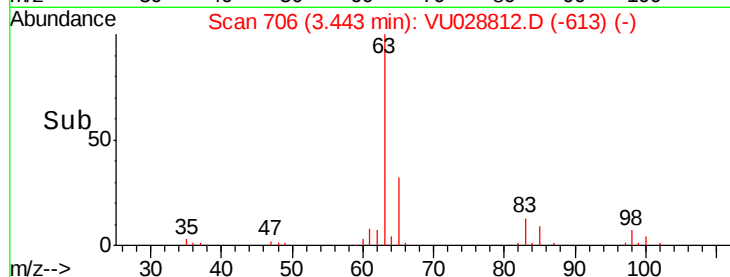
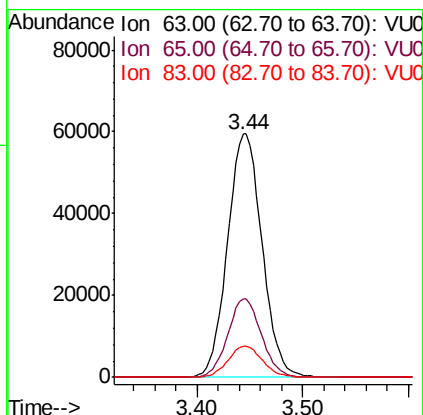
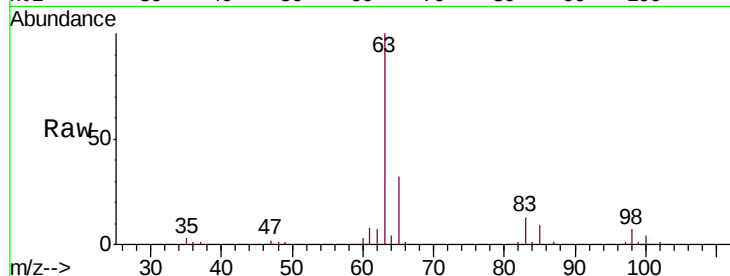




#19  
 1,1-Dichloroethane  
 Concen: 50.984 ug/L  
 RT: 3.44 min Scan# 706  
 Delta R.T. 0.00 min  
 Lab File: VU028812.D  
 Acq: 20 Dec 2018 10:10

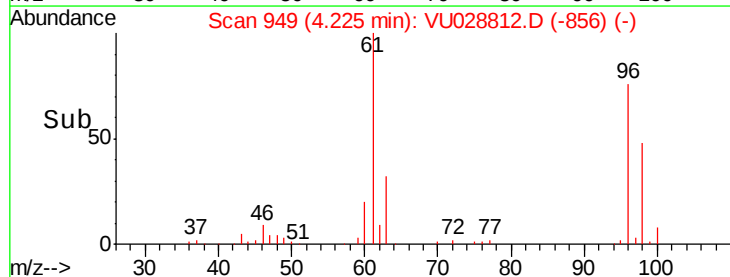
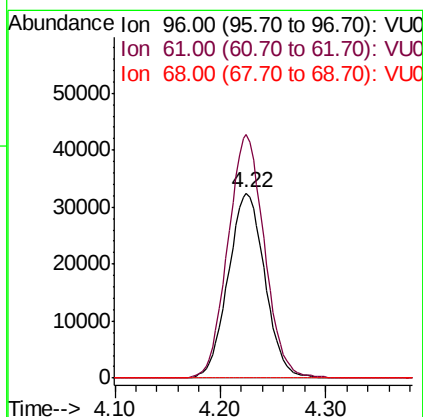
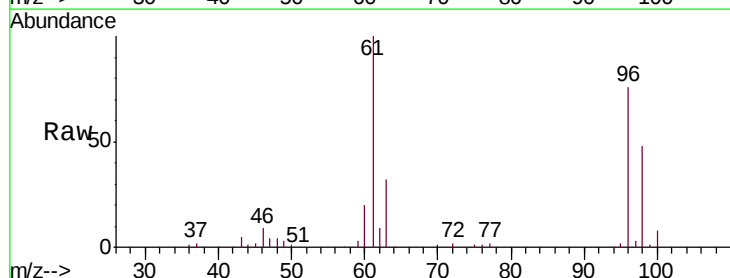
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05057

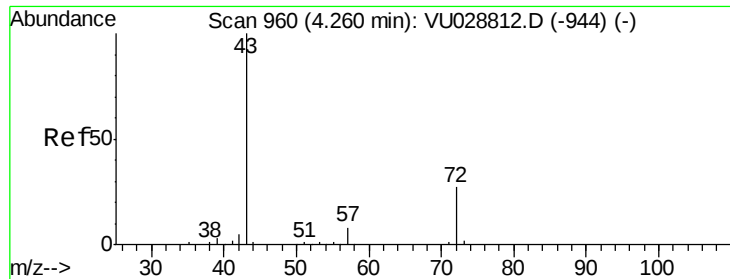
Tgt Ion: 63 Resp: 134681  
 Ion Ratio Lower Upper  
 63 100  
 65 32.4 22.7 42.1  
 83 12.9 9.0 16.8



#20  
 cis-1,2-Dichloroethene  
 Concen: 51.028 ug/L  
 RT: 4.22 min Scan# 949  
 Delta R.T. 0.00 min  
 Lab File: VU028812.D  
 Acq: 20 Dec 2018 10:10

Tgt Ion: 96 Resp: 78552  
 Ion Ratio Lower Upper  
 96 100  
 61 131.6 92.1 171.1  
 68 0.0 0.0 0.0





#22

2-Butanone

Concen: 104.527 ug/L

RT: 4.26 min Scan# 960

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

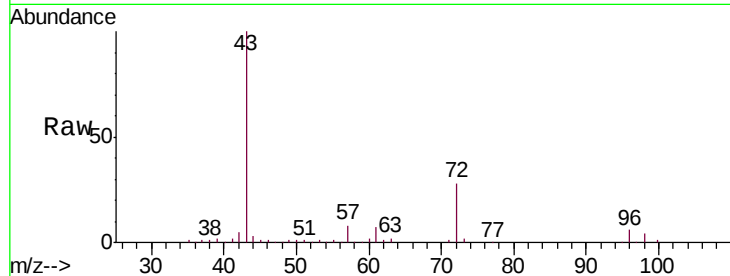
VSTD05057

Tgt Ion: 43 Resp: 142533

Ion Ratio Lower Upper

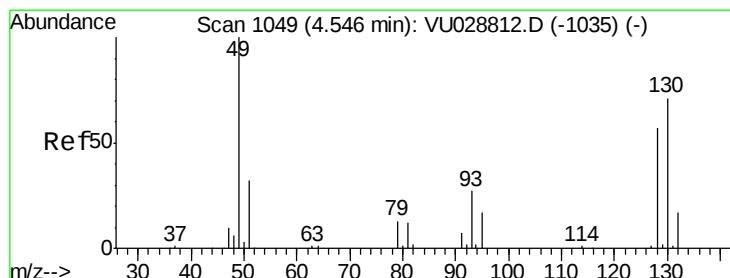
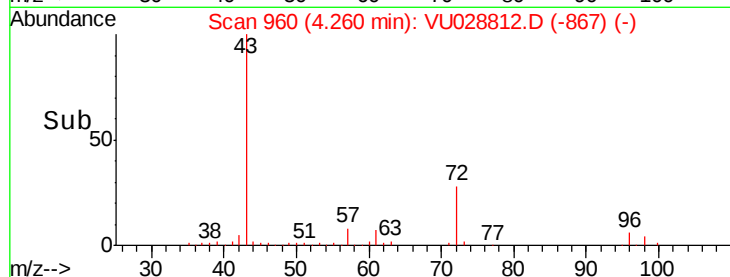
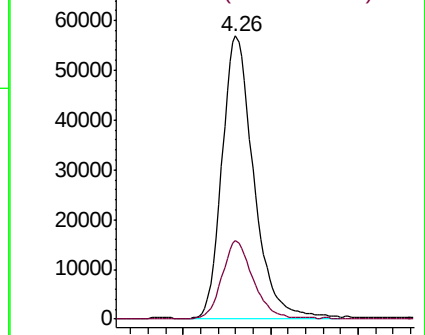
43 100

72 27.4 13.7 41.1



Abundance Ion 43.00 (42.70 to 43.70): VU028812.D (-944) (-)

Ion 72.00 (71.70 to 72.70): VU028812.D (-944) (-)



#23

Bromochloromethane

Concen: 51.403 ug/L

RT: 4.55 min Scan# 1049

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Tgt Ion: 128 Resp: 37722

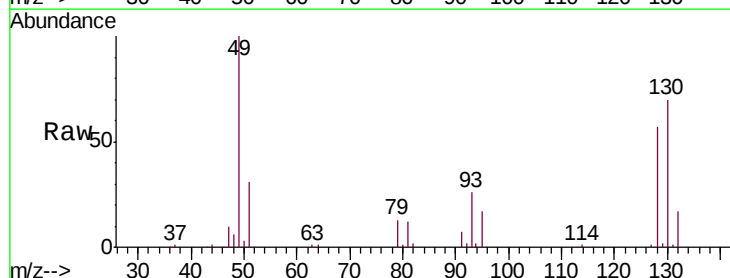
Ion Ratio Lower Upper

128 100

49 175.7 123.0 228.4

130 123.6 86.5 160.7

51 55.1 44.1 66.1

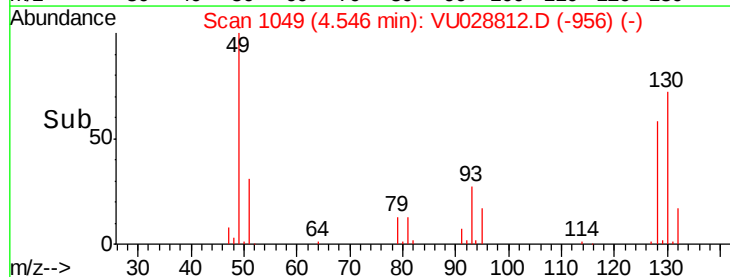
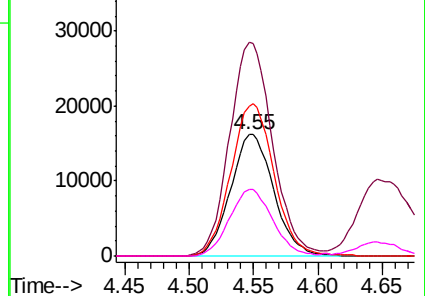


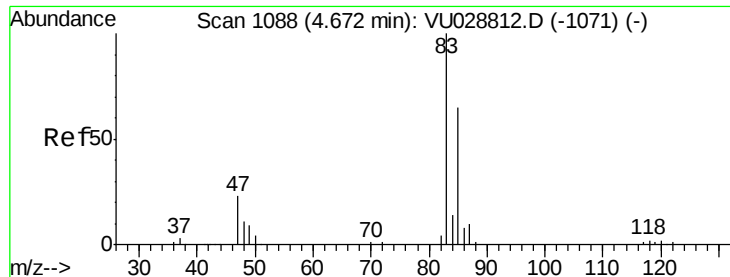
Abundance Ion 128.00 (127.70 to 128.70): VU028812.D (-1035) (-)

Ion 49.00 (48.70 to 49.70): VU028812.D (-1035) (-)

Ion 130.00 (129.70 to 130.70): VU028812.D (-1035) (-)

Ion 51.00 (50.70 to 51.70): VU028812.D (-1035) (-)

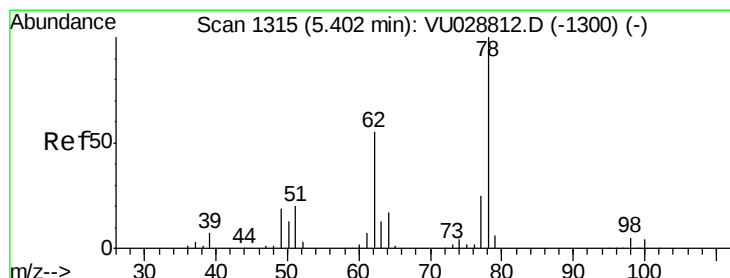
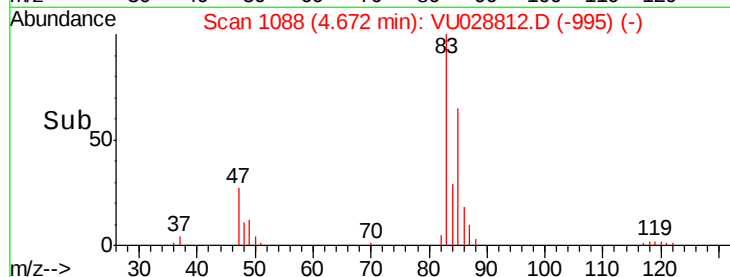
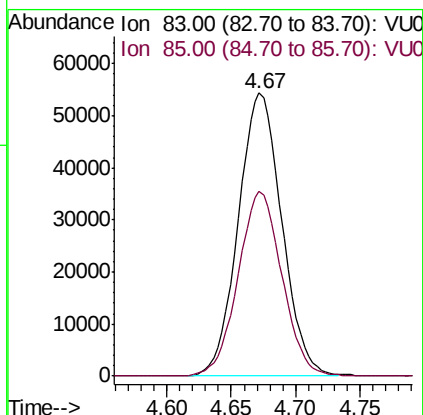
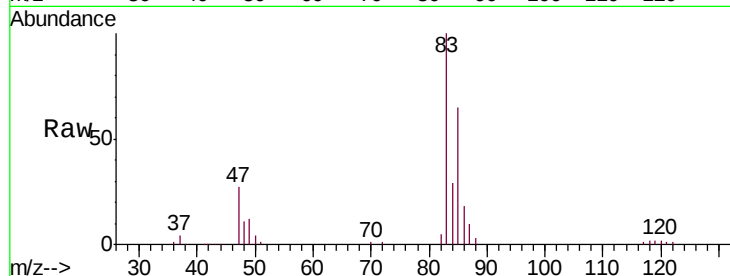




#25  
Chloroform  
Concen: 50.848 ug/L  
RT: 4.67 min Scan# 1088  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

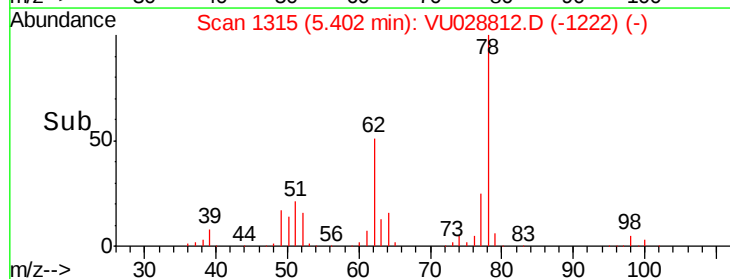
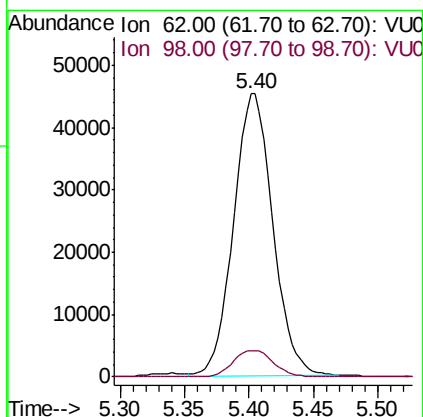
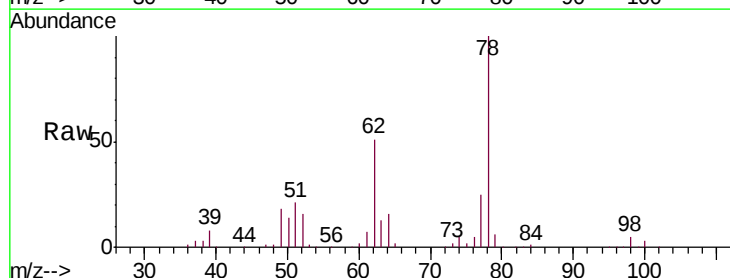
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05057

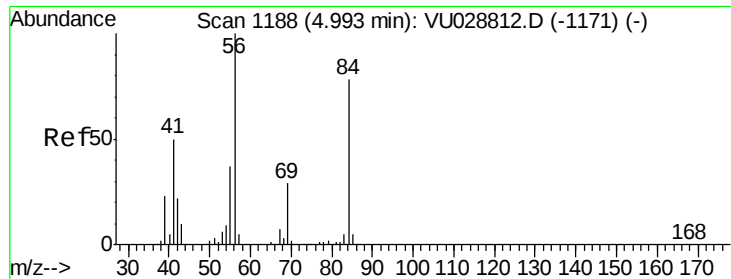
Tgt Ion: 83 Resp: 127846  
Ion Ratio Lower Upper  
83 100  
85 65.1 45.6 84.6



#27  
1,2-Dichloroethane  
Concen: 51.293 ug/L  
RT: 5.40 min Scan# 1315  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

Tgt Ion: 62 Resp: 95845  
Ion Ratio Lower Upper  
62 100  
98 9.4 7.5 11.3

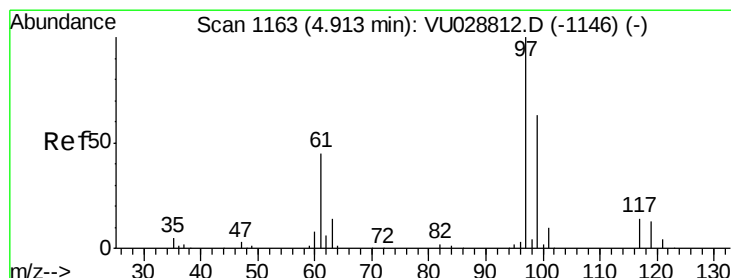
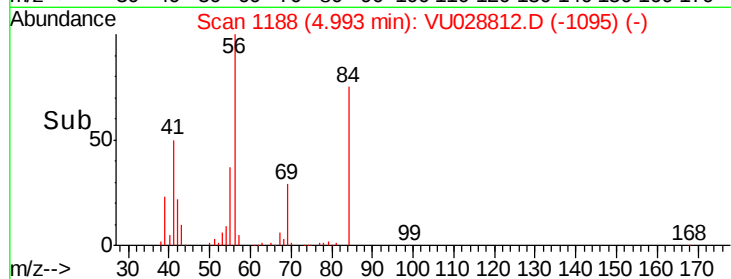
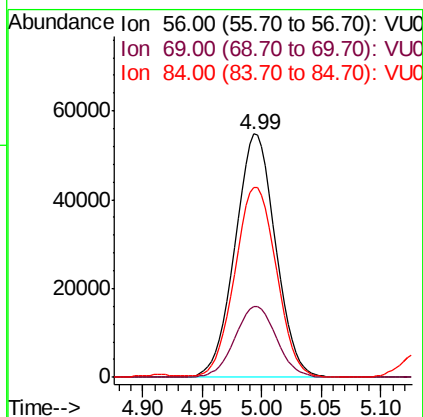
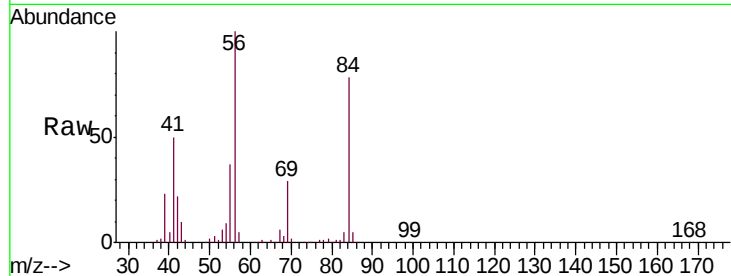




#29  
Cyclohexane  
Concen: 51.661 ug/L  
RT: 4.99 min Scan# 1188  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

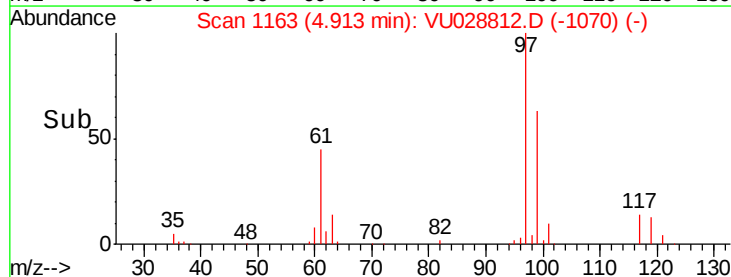
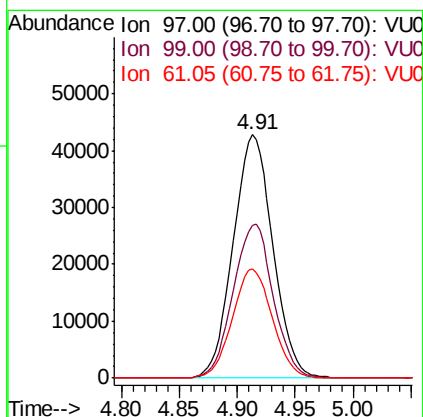
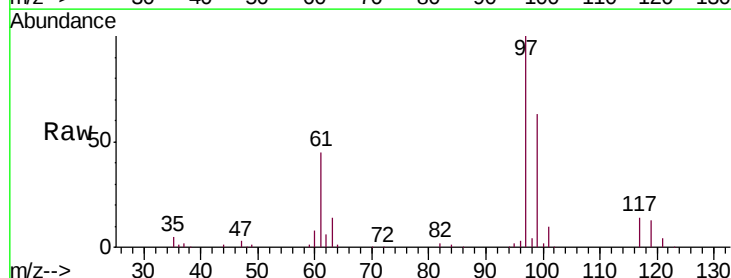
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05057

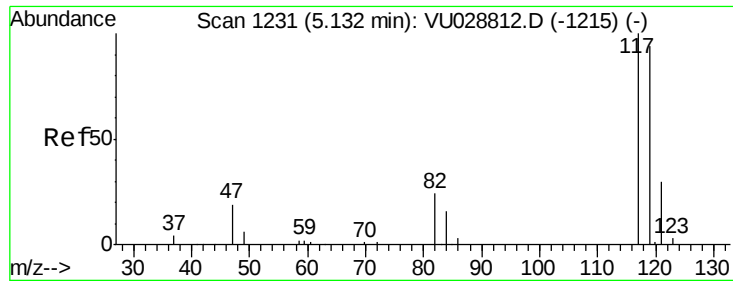
Tgt Ion: 56 Resp: 129311  
Ion Ratio Lower Upper  
56 100  
69 29.8 23.8 35.8  
84 79.8 63.8 95.8



#30  
1,1,1-Trichloroethane  
Concen: 51.089 ug/L  
RT: 4.91 min Scan# 1163  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

Tgt Ion: 97 Resp: 101694  
Ion Ratio Lower Upper  
97 100  
99 64.0 51.2 76.8  
61 45.1 36.1 54.1





#31

Carbon tetrachloride

Concen: 50.899 ug/L

RT: 5.13 min Scan# 1231

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

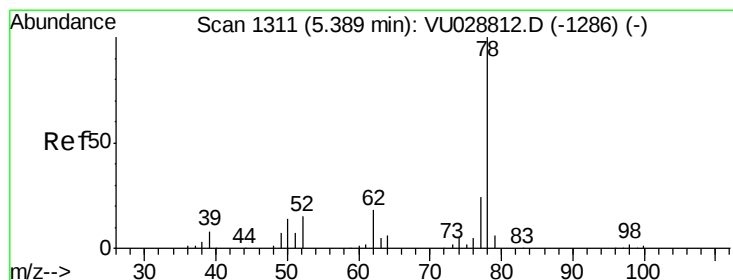
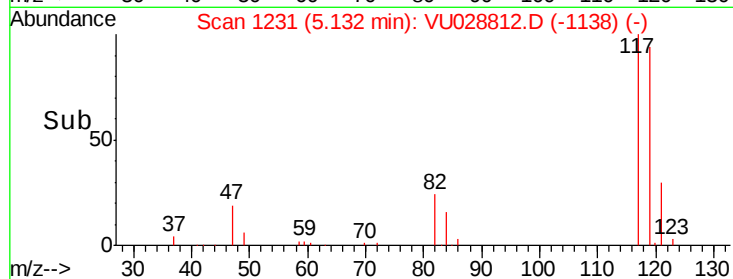
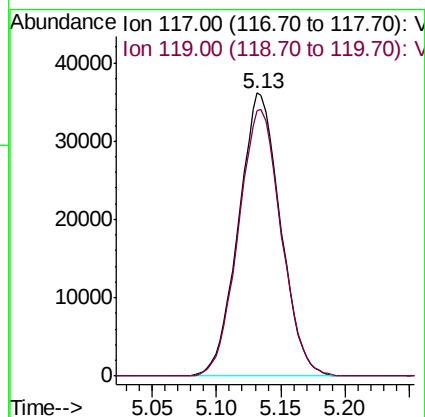
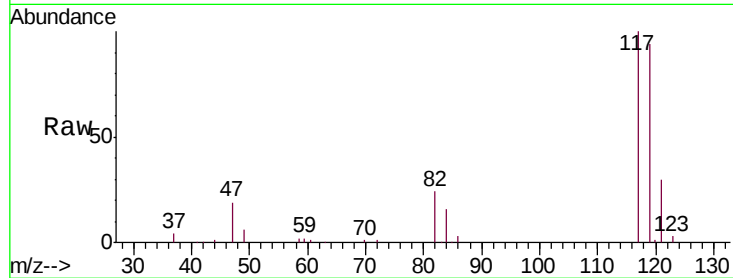
VSTD05057

Tgt Ion:117 Resp: 81702

Ion Ratio Lower Upper

117 100

119 96.3 77.0 115.6



#33

Benzene

Concen: 51.400 ug/L

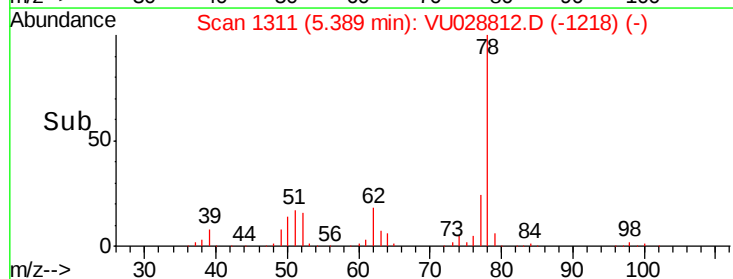
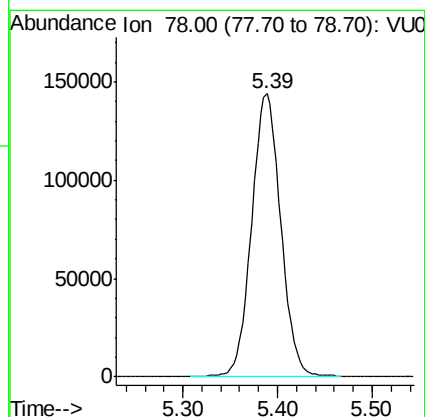
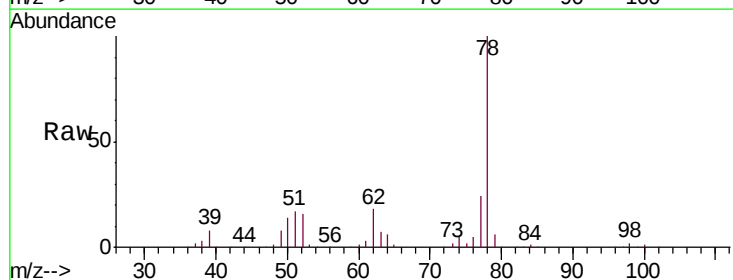
RT: 5.39 min Scan# 1311

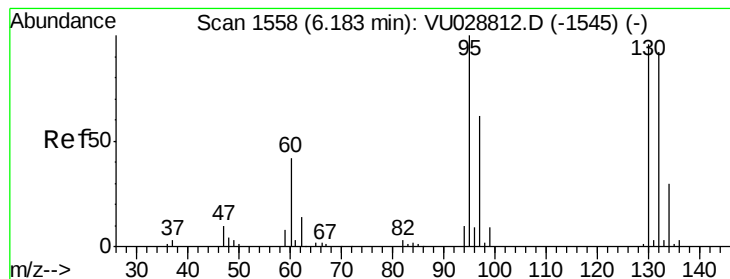
Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Tgt Ion: 78 Resp: 307744





#34

Trichloroethene

Concen: 50.643 ug/L

RT: 6.18 min Scan# 1558

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05057

Tgt Ion: 95 Resp: 73204

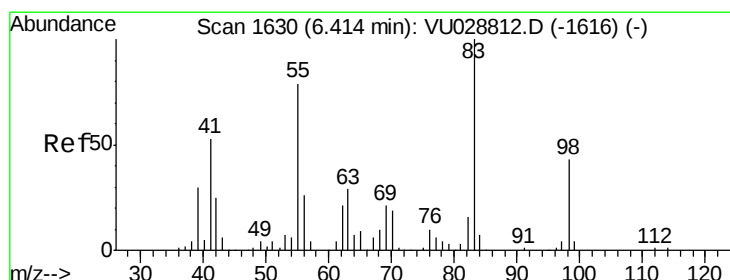
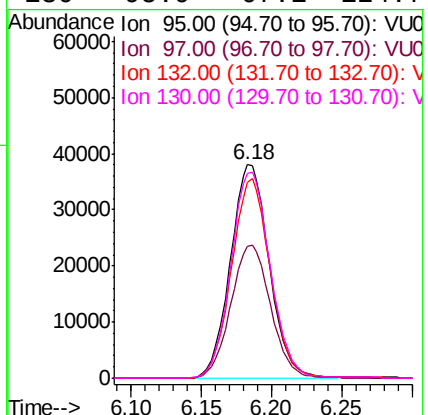
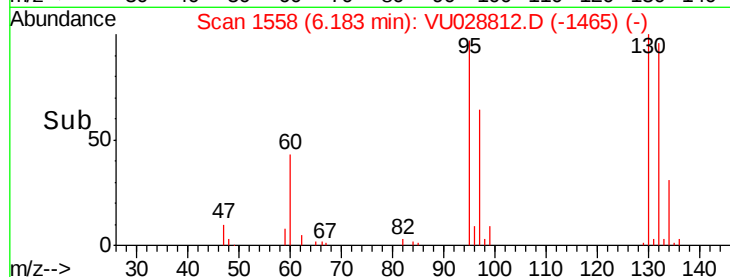
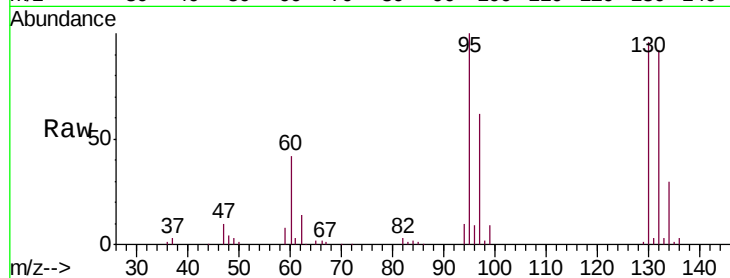
Ion Ratio Lower Upper

95 100

97 61.8 43.3 80.3

132 91.7 64.2 119.2

130 95.9 67.1 124.7



#35

Methylcyclohexane

Concen: 52.191 ug/L

RT: 6.41 min Scan# 1630

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

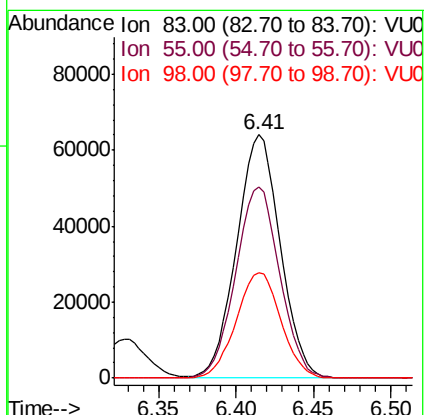
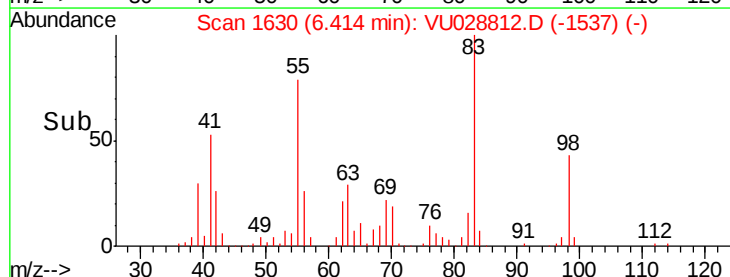
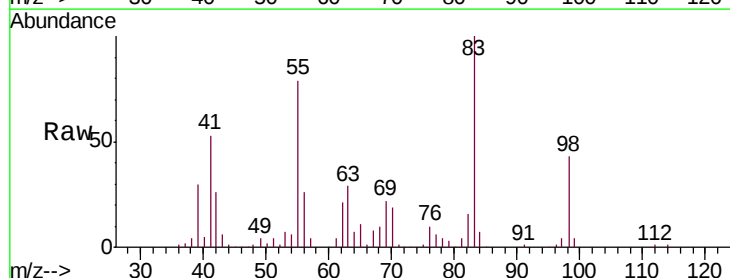
Tgt Ion: 83 Resp: 125649

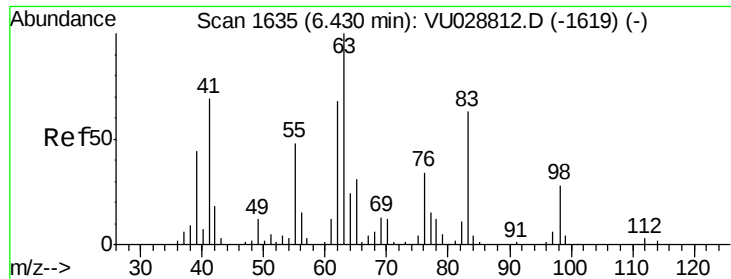
Ion Ratio Lower Upper

83 100

55 79.6 63.7 95.5

98 44.5 35.6 53.4

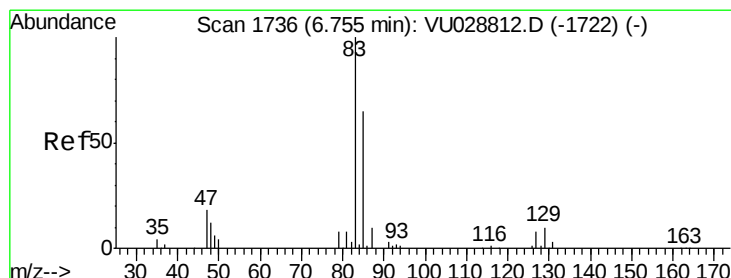
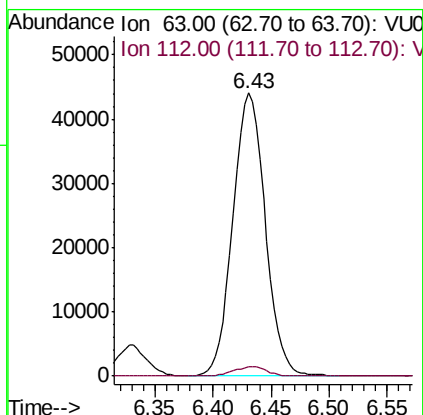
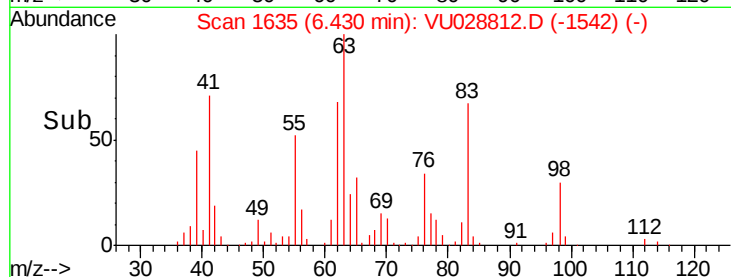
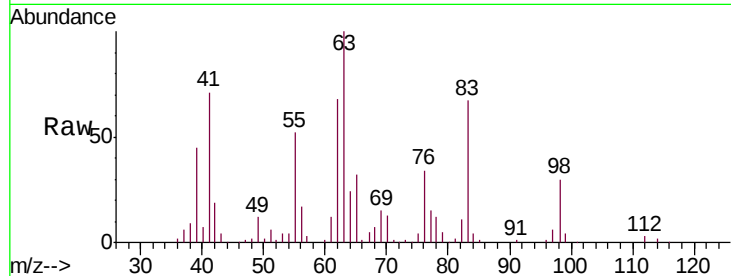




#37  
 1,2-Dichloropropane  
 Concen: 51.241 ug/L  
 RT: 6.43 min Scan# 1635  
 Delta R.T. 0.00 min  
 Lab File: VU028812.D  
 Acq: 20 Dec 2018 10:10

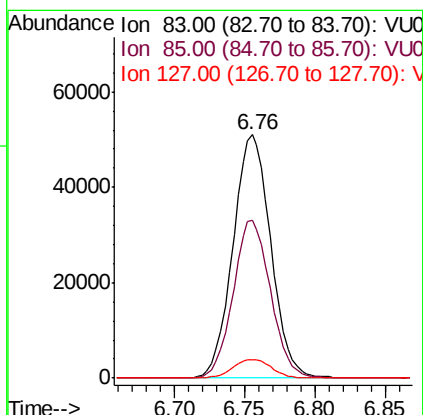
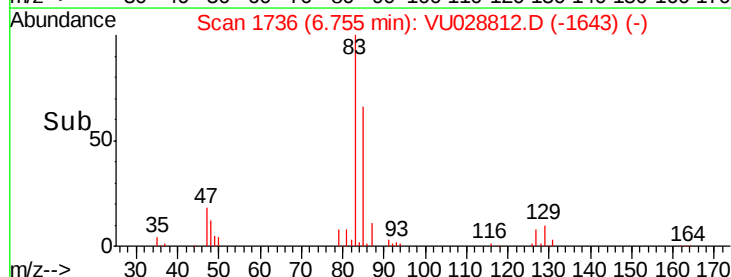
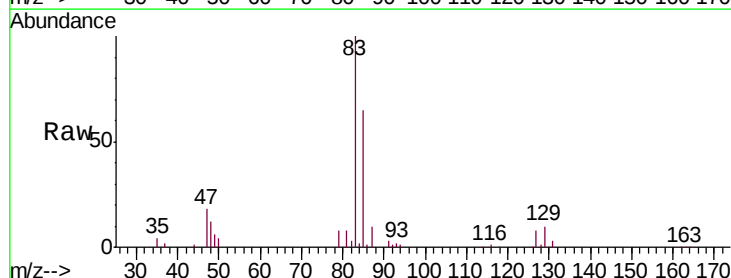
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05057

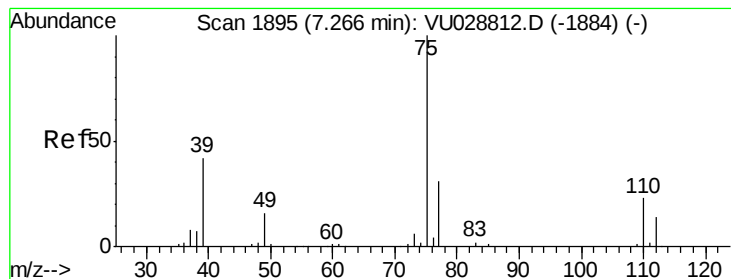
Tgt Ion: 63 Resp: 85761  
 Ion Ratio Lower Upper  
 63 100  
 112 3.4 2.7 4.1



#38  
 Bromodichloromethane  
 Concen: 51.642 ug/L  
 RT: 6.76 min Scan# 1736  
 Delta R.T. 0.00 min  
 Lab File: VU028812.D  
 Acq: 20 Dec 2018 10:10

Tgt Ion: 83 Resp: 95714  
 Ion Ratio Lower Upper  
 83 100  
 85 64.8 45.4 84.2  
 127 7.7 6.2 9.2



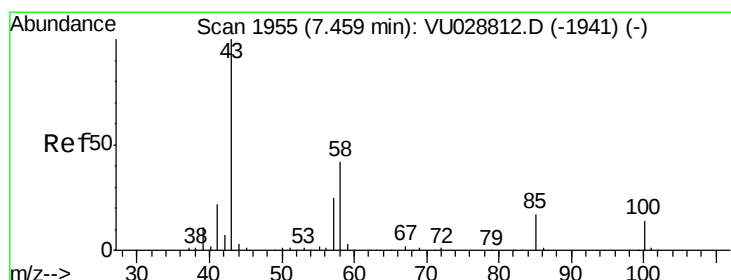
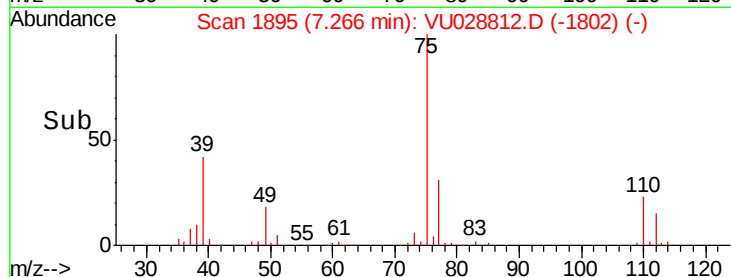
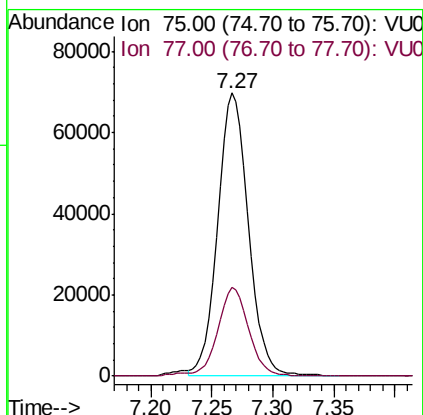
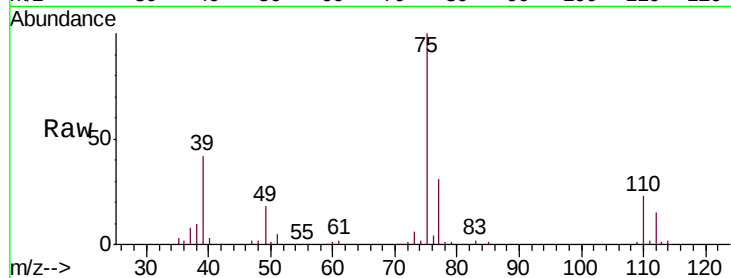


#39

cis-1,3-Dichloropropene  
Concen: 51.334 ug/L  
RT: 7.27 min Scan# 1895  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05057

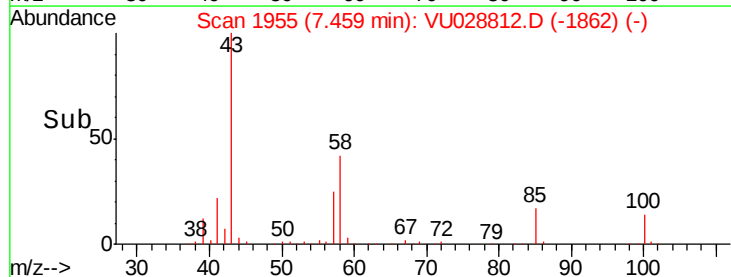
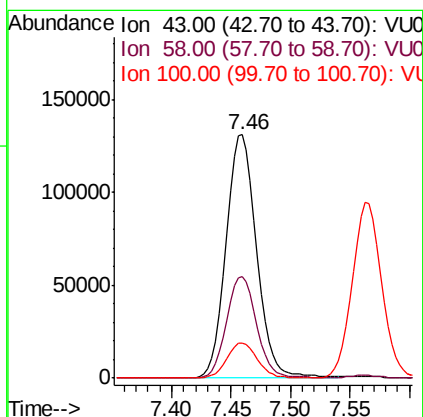
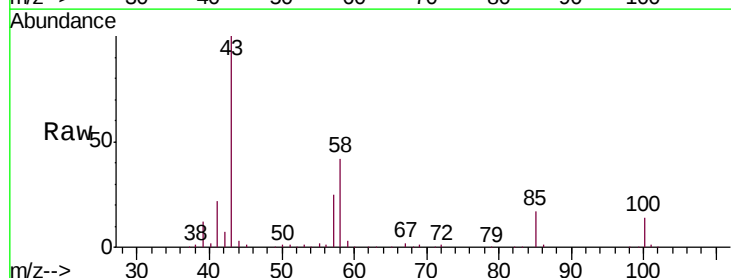
Tgt Ion: 75 Resp: 122487  
Ion Ratio Lower Upper  
75 100  
77 31.2 21.8 40.6

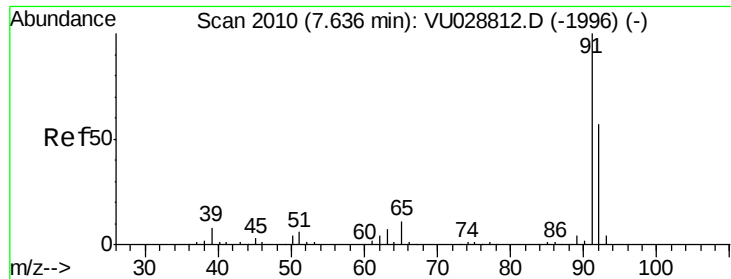


#40

4-Methyl-2-pentanone  
Concen: 103.733 ug/L  
RT: 7.46 min Scan# 1955  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

Tgt Ion: 43 Resp: 233358  
Ion Ratio Lower Upper  
43 100  
58 41.4 33.1 49.7  
100 14.4 11.5 17.3





#42

Toluene

Concen: 52.089 ug/L

RT: 7.64 min Scan# 2010

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

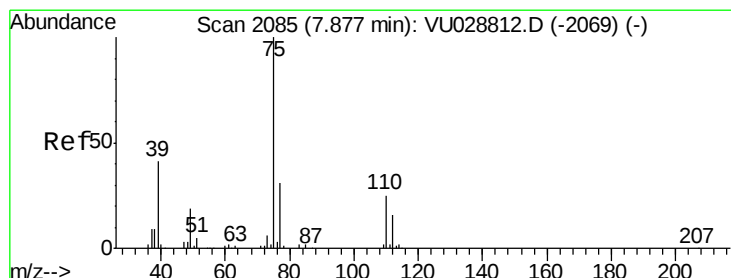
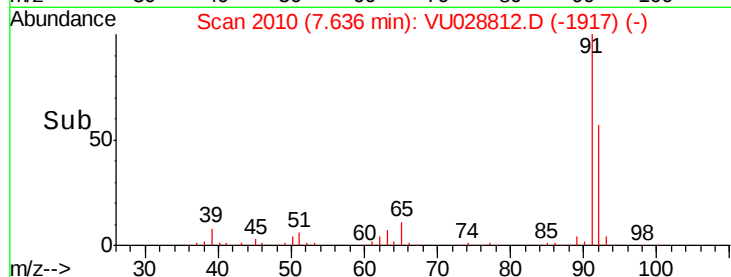
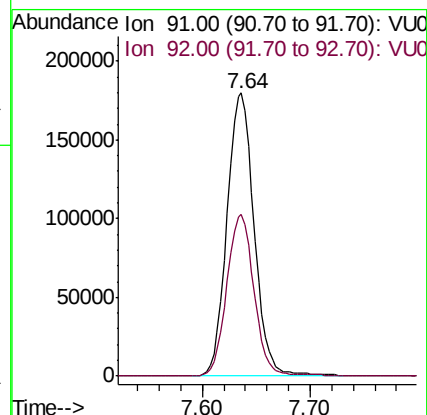
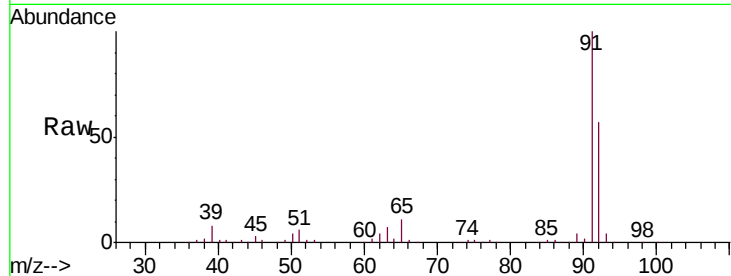
VSTD05057

Tgt Ion: 91 Resp: 316146

Ion Ratio Lower Upper

91 100

92 57.0 39.9 74.1



#44

trans-1,3-Dichloropropene

Concen: 52.574 ug/L

RT: 7.88 min Scan# 2085

Delta R.T. 0.00 min

Lab File: VU028812.D

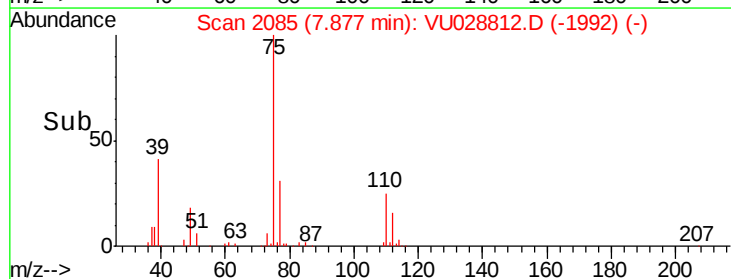
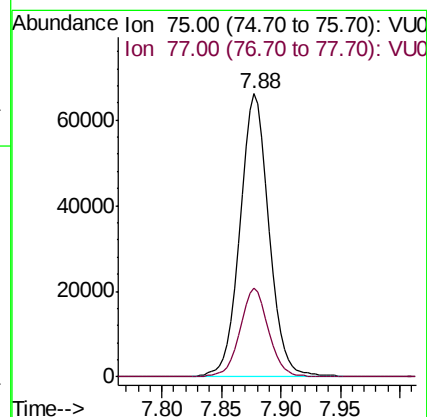
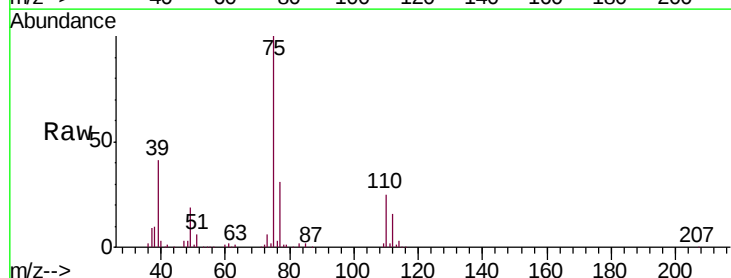
Acq: 20 Dec 2018 10:10

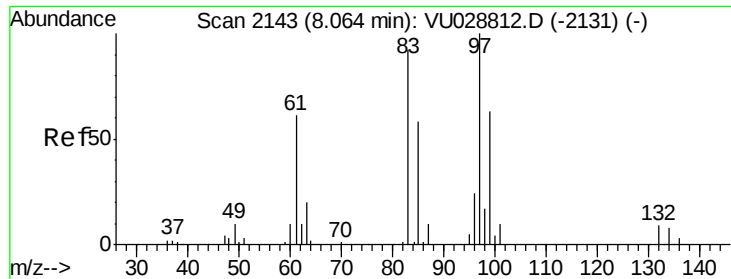
Tgt Ion: 75 Resp: 111823

Ion Ratio Lower Upper

75 100

77 31.2 21.8 40.6

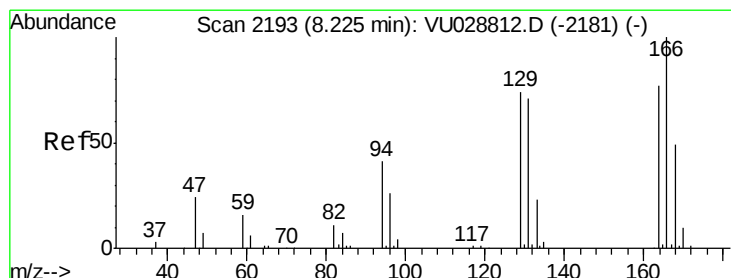
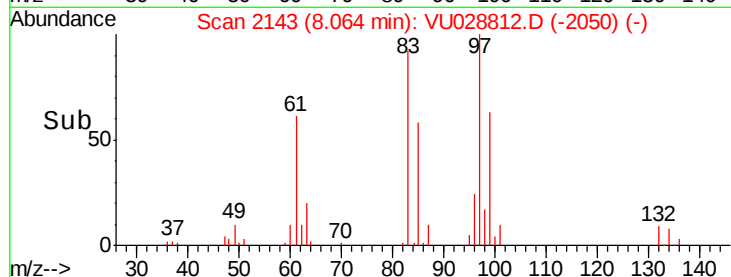
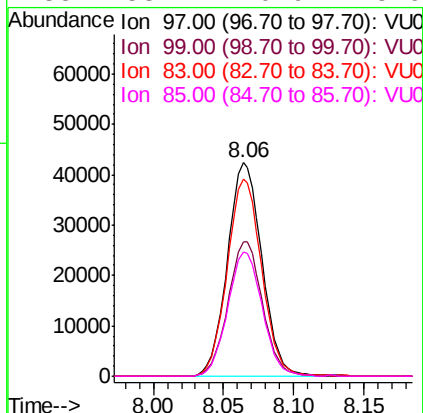
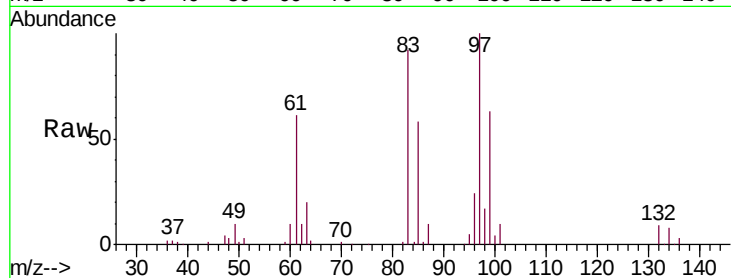




#45  
 1,1,2-Trichloroethane  
 Concen: 50.757 ug/L  
 RT: 8.06 min Scan# 2143  
 Delta R.T. 0.00 min  
 Lab File: VU028812.D  
 Acq: 20 Dec 2018 10:10

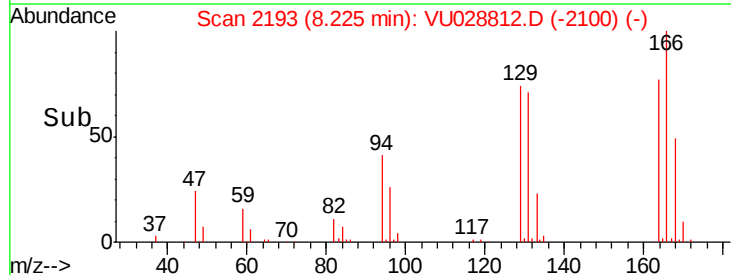
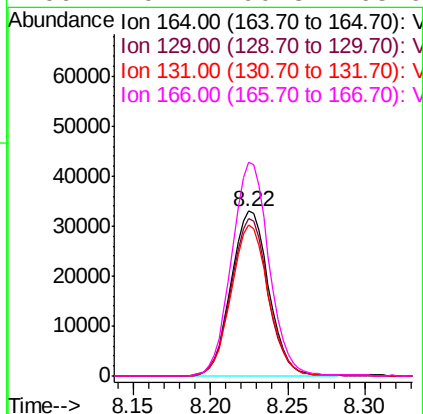
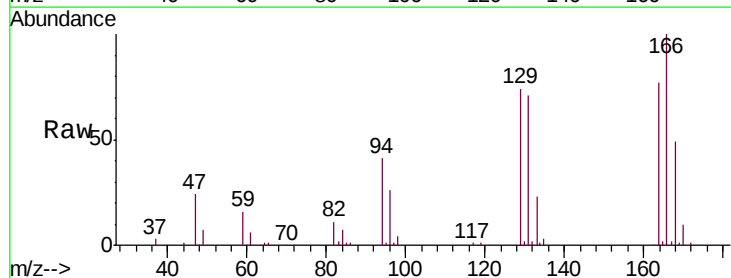
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05057

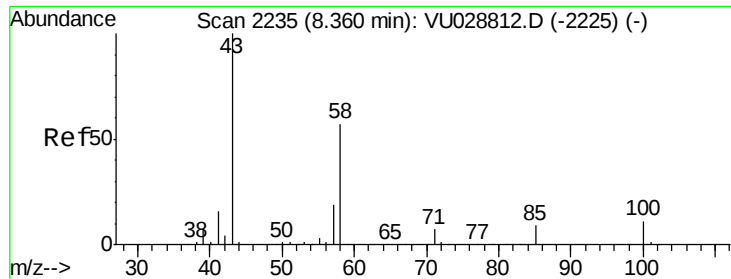
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 72634 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 63.2  | 44.2  | 82.2  |
| 83       | 92.2  | 64.5  | 119.9 |
| 85       | 58.4  | 40.9  | 75.9  |



#46  
 Tetrachloroethene  
 Concen: 50.168 ug/L  
 RT: 8.22 min Scan# 2193  
 Delta R.T. 0.00 min  
 Lab File: VU028812.D  
 Acq: 20 Dec 2018 10:10

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 55851 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 95.4  | 66.8  | 124.0 |
| 131      | 91.7  | 64.2  | 119.2 |
| 166      | 129.7 | 90.8  | 168.6 |

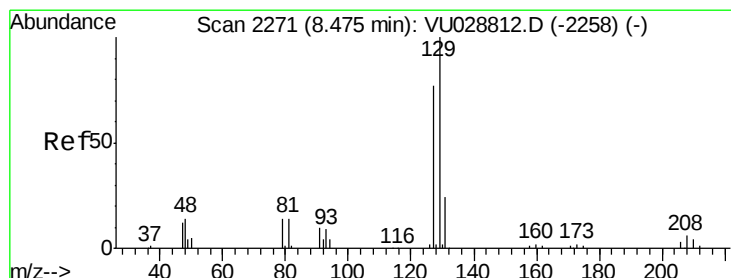
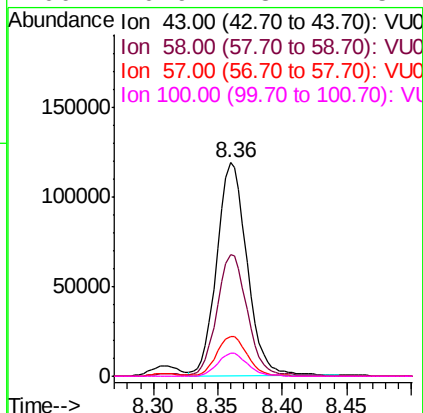
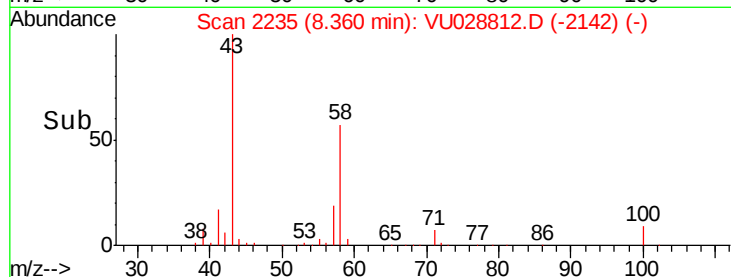
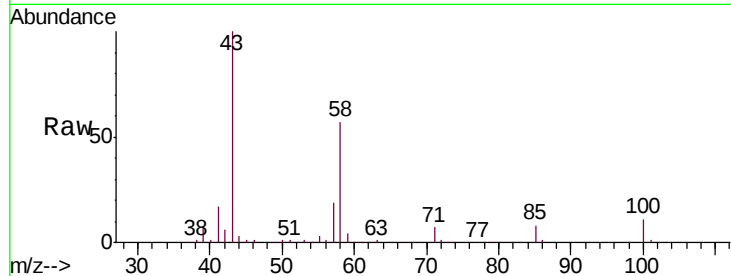




#48  
2-Hexanone  
Concen: 105.216 ug/L  
RT: 8.36 min Scan# 2235  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

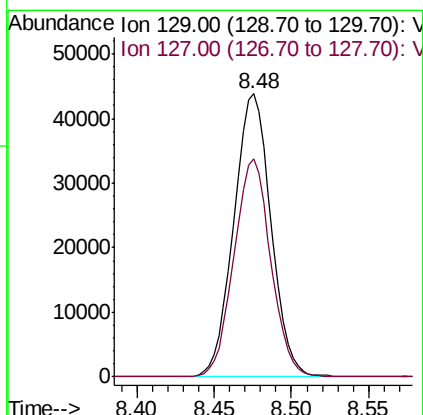
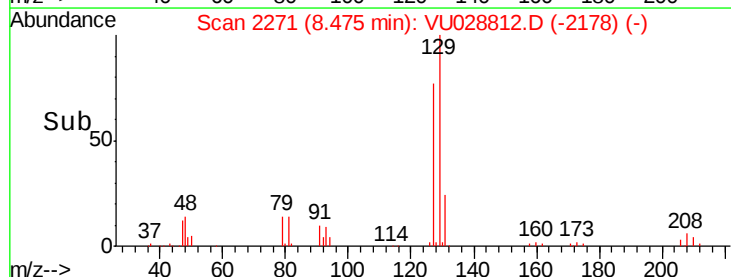
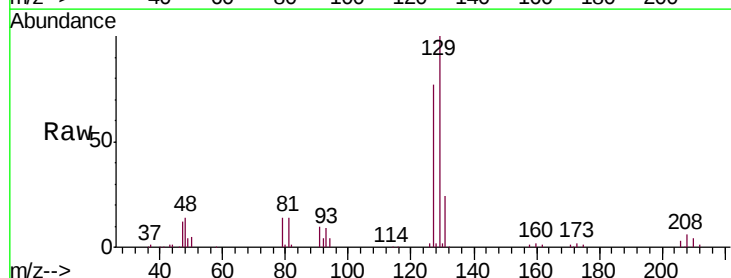
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05057

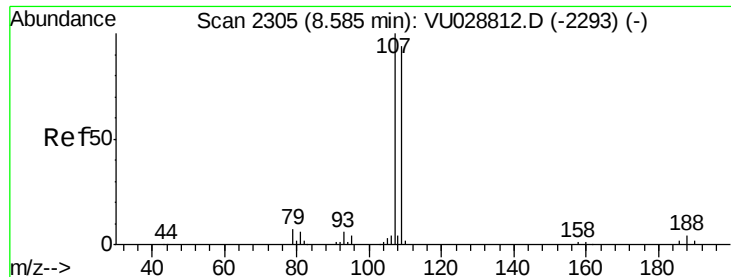
Tgt Ion: 43 Resp: 194267  
Ion Ratio Lower Upper  
43 100  
58 57.4 45.9 68.9  
57 18.7 15.0 22.4  
100 10.9 8.7 13.1



#49  
Dibromochloromethane  
Concen: 51.471 ug/L  
RT: 8.48 min Scan# 2271  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

Tgt Ion: 129 Resp: 73366  
Ion Ratio Lower Upper  
129 100  
127 77.3 54.1 100.5

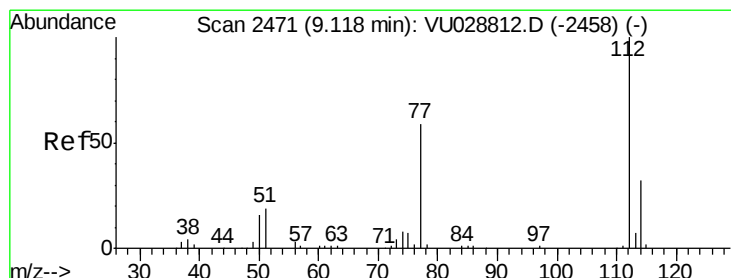
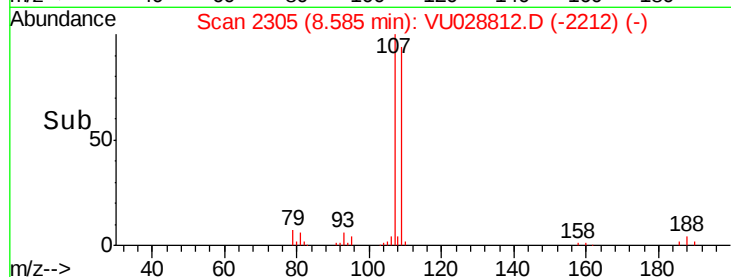
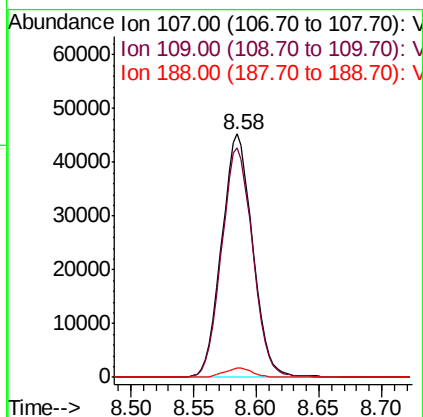
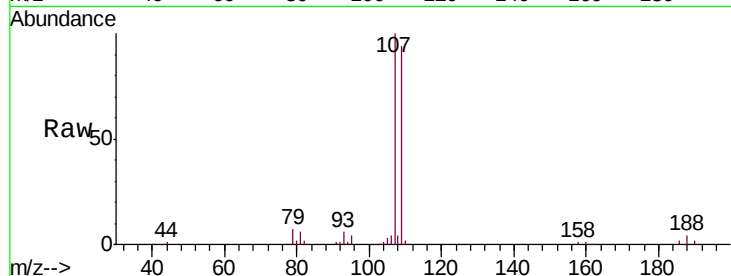




#50  
1,2-Dibromoethane  
Concen: 52.051 ug/L  
RT: 8.58 min Scan# 2305  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

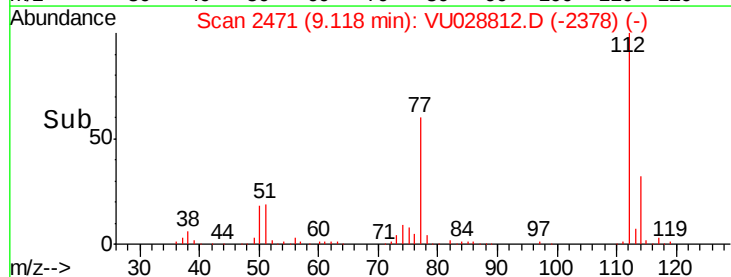
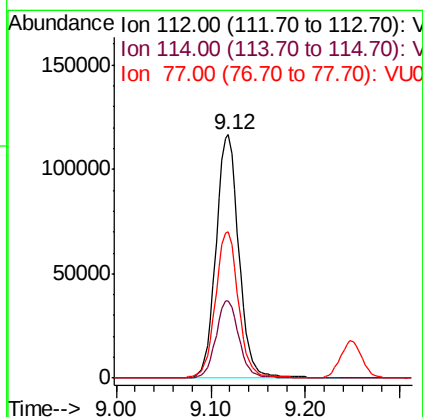
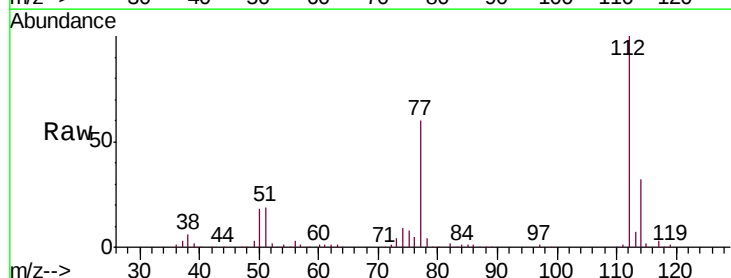
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05057

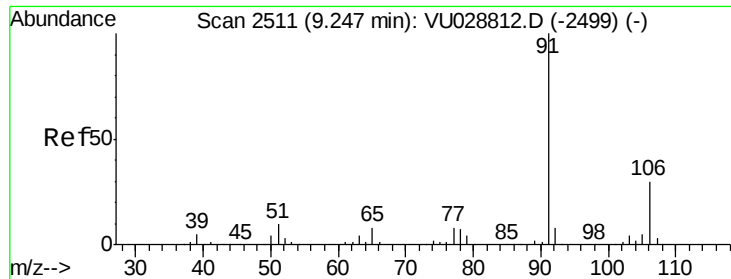
Tgt Ion:107 Resp: 77498  
Ion Ratio Lower Upper  
107 100  
109 94.3 66.0 122.6  
188 3.9 3.1 4.7



#51  
Chlorobenzene  
Concen: 51.109 ug/L  
RT: 9.12 min Scan# 2471  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

Tgt Ion:112 Resp: 195499  
Ion Ratio Lower Upper  
112 100  
114 31.7 22.2 41.2  
77 59.8 47.8 71.8





#52

Ethylbenzene

Concen: 51.704 ug/L

RT: 9.25 min Scan# 2511

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

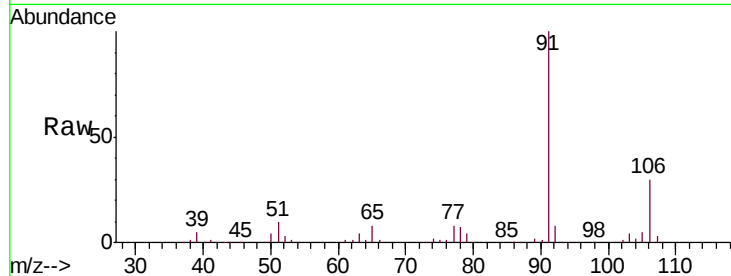
VSTD05057

Tgt Ion: 91 Resp: 337186

Ion Ratio Lower Upper

91 100

106 29.9 20.9 38.9



Abundance Ion 91.00 (90.70 to 91.70): VU028812.D (-2499) (-)

Ion 106.00 (105.70 to 106.70): VU028812.D (-2499) (-)

9.25

250000

200000

150000

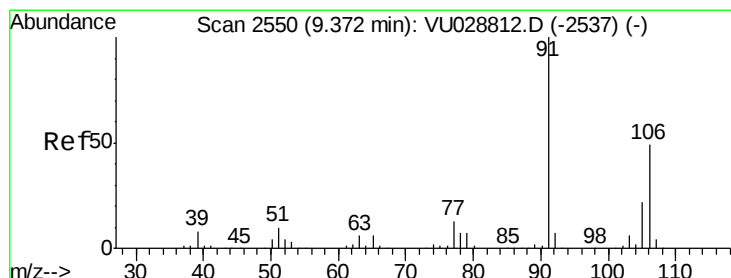
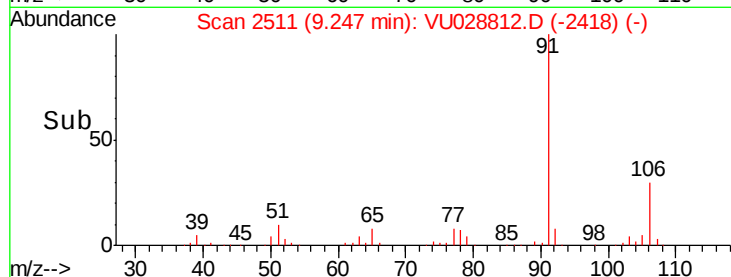
100000

50000

0

9.20 9.25 9.30 9.35

Time-->



#53

m,p-Xylene

Concen: 52.610 ug/L

RT: 9.37 min Scan# 2550

Delta R.T. 0.00 min

Lab File: VU028812.D

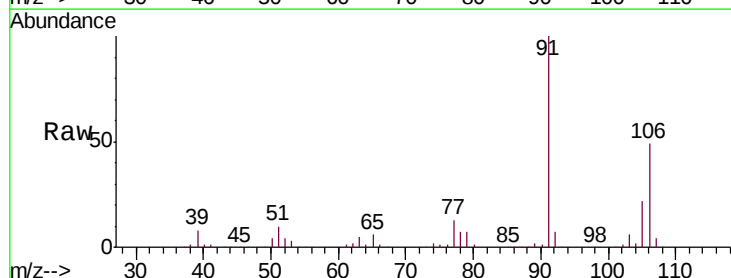
Acq: 20 Dec 2018 10:10

Tgt Ion: 106 Resp: 126874

Ion Ratio Lower Upper

106 100

91 205.8 144.1 267.5



Abundance Ion 106.00 (105.70 to 106.70): VU028812.D (-2537) (-)

Ion 91.00 (90.70 to 91.70): VU028812.D (-2537) (-)

9.37

150000

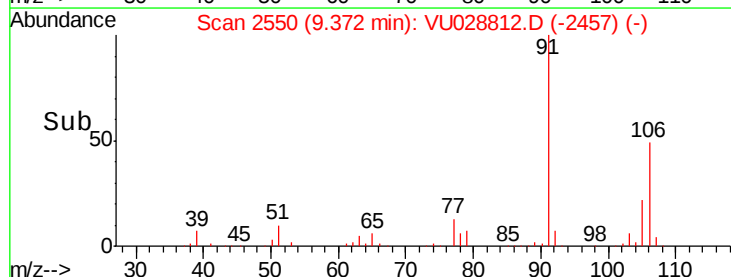
100000

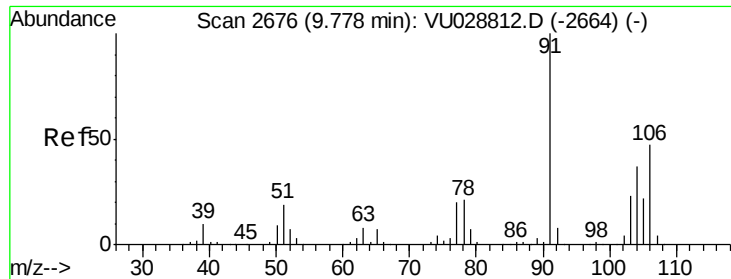
50000

0

9.30 9.35 9.40 9.45

Time-->

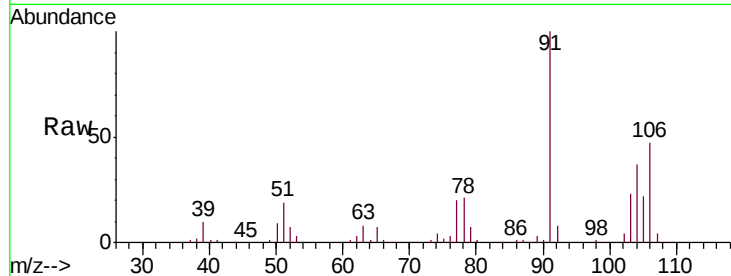




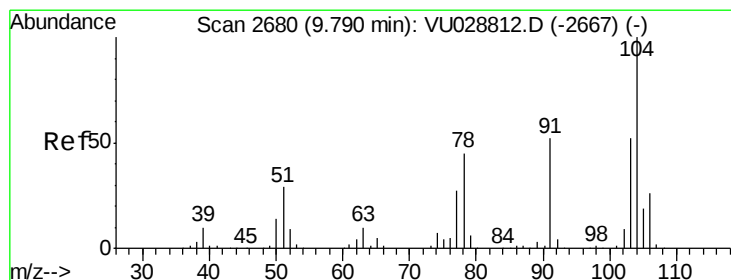
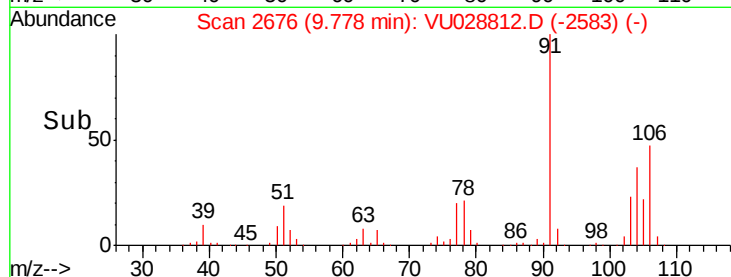
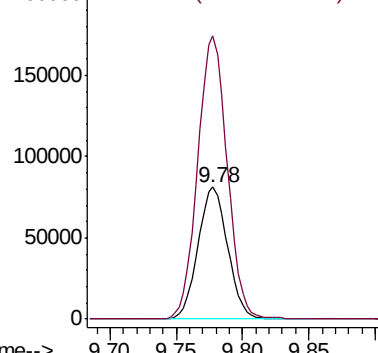
#54  
o-xylene  
Concen: 52.434 ug/L  
RT: 9.78 min Scan# 2676  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05057

Tgt Ion:106 Resp: 126733  
Ion Ratio Lower Upper  
106 100  
91 214.9 150.4 279.4

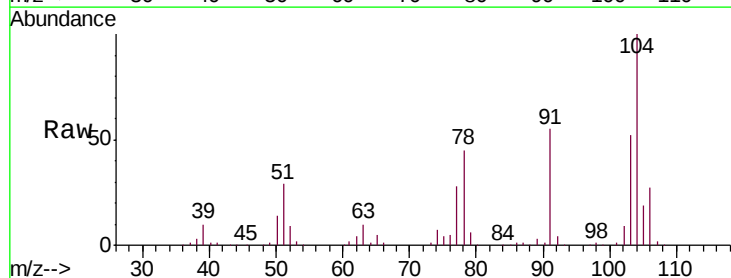


Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): VU0

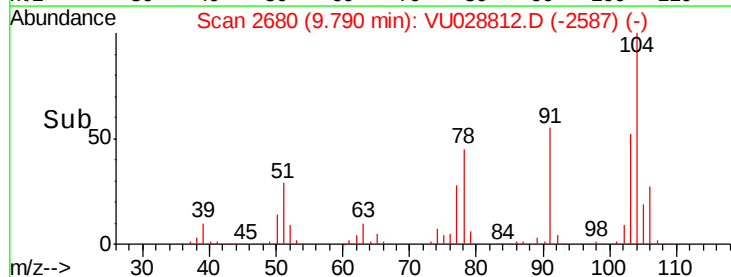
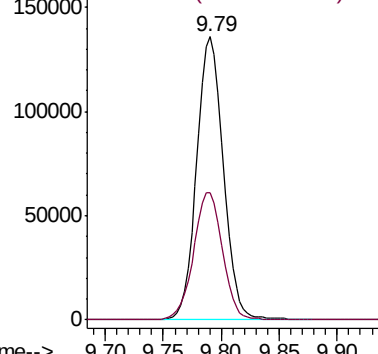


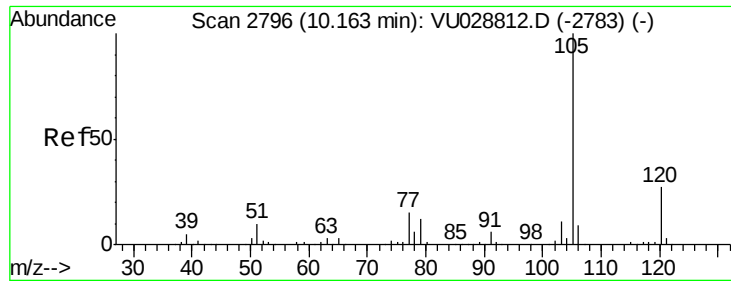
#55  
Styrene  
Concen: 52.790 ug/L  
RT: 9.79 min Scan# 2680  
Delta R.T. 0.00 min  
Lab File: VU028812.D  
Acq: 20 Dec 2018 10:10

Tgt Ion:104 Resp: 216096  
Ion Ratio Lower Upper  
104 100  
78 44.7 31.3 58.1



Abundance Ion 104.00 (103.70 to 104.70): V  
Ion 78.00 (77.70 to 78.70): VU0





#56

Isopropylbenzene

Concen: 52.000 ug/L

RT: 10.16 min Scan# 2796

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05057

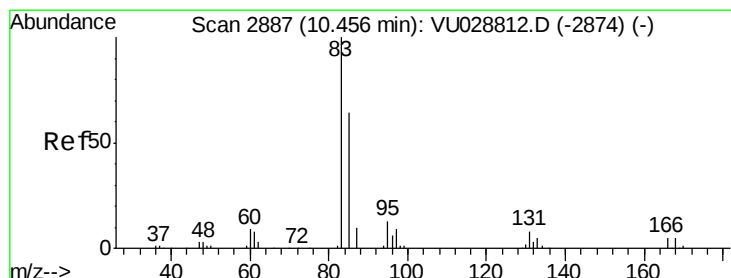
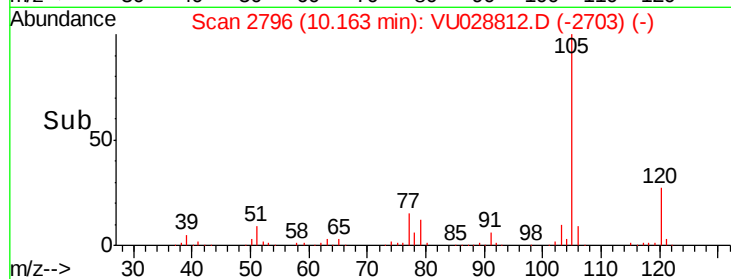
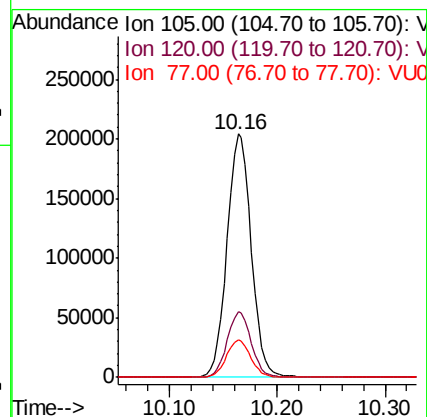
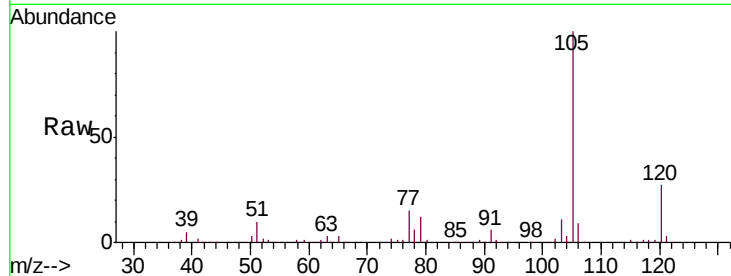
Tgt Ion: 105 Resp: 318837

Ion Ratio Lower Upper

105 100

120 26.8 21.4 32.2

77 15.4 12.3 18.5



#58

1,1,2,2-Tetrachloroethane

Concen: 50.905 ug/L

RT: 10.46 min Scan# 2887

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

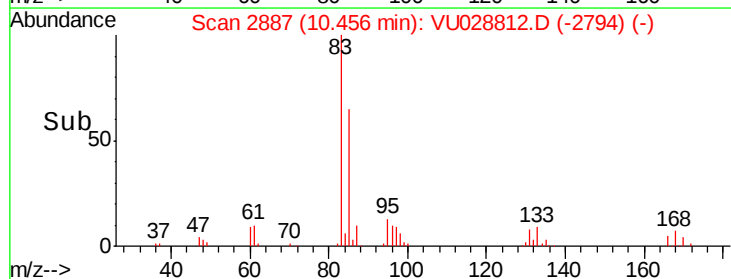
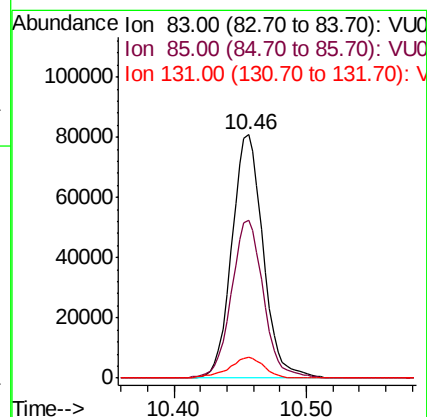
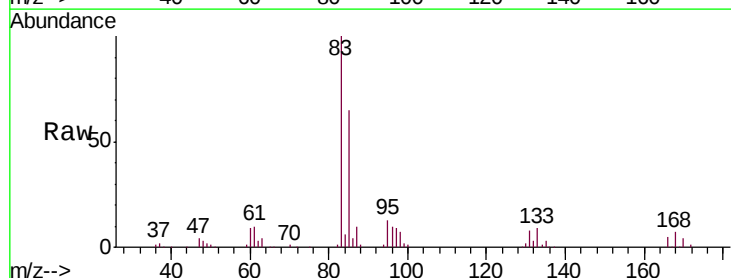
Tgt Ion: 83 Resp: 132336

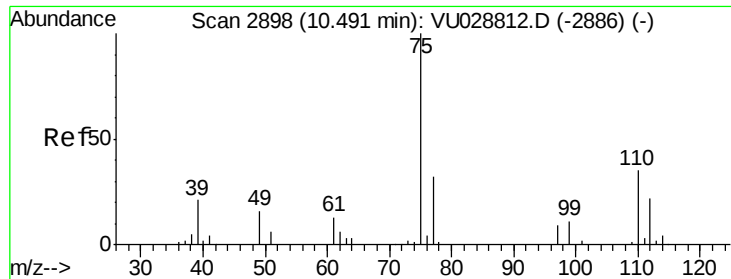
Ion Ratio Lower Upper

83 100

85 64.7 45.3 84.1

131 8.4 6.7 10.1





#59

1,2,3-Trichloropropane

Concen: 50.643 ug/L

RT: 10.49 min Scan# 2898

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

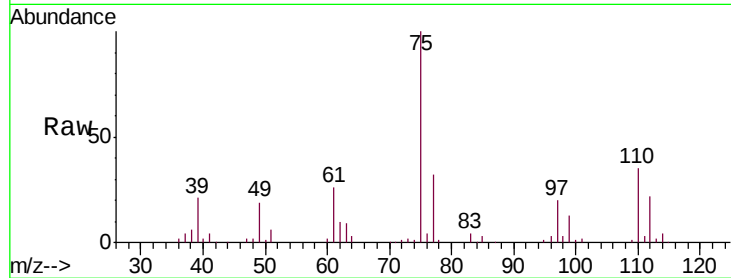
VSTD05057

Tgt Ion: 75 Resp: 101148

Ion Ratio Lower Upper

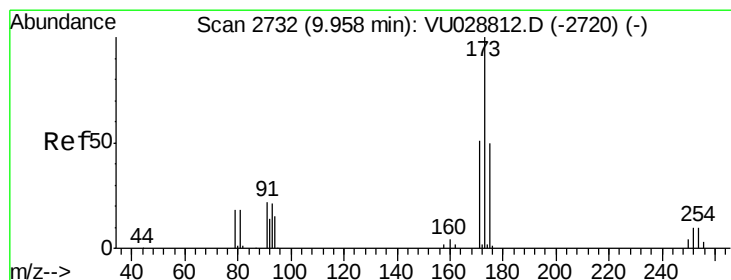
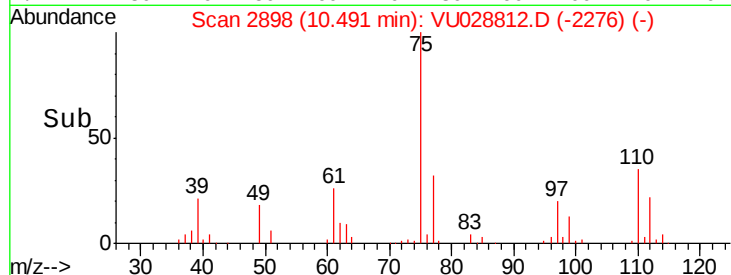
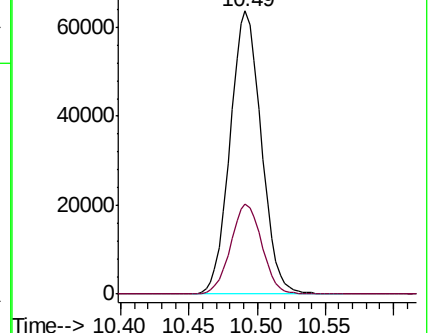
75 100

77 31.9 25.5 38.3



Abundance Ion 75.00 (74.70 to 75.70): VU028812.D (-2886) (-)

Ion 77.00 (76.70 to 77.70): VU028812.D (-2886) (-)



#61

Bromoform

Concen: 50.222 ug/L

RT: 9.96 min Scan# 2732

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

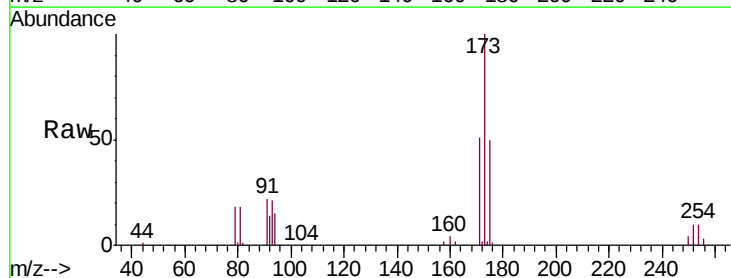
Tgt Ion: 173 Resp: 56211

Ion Ratio Lower Upper

173 100

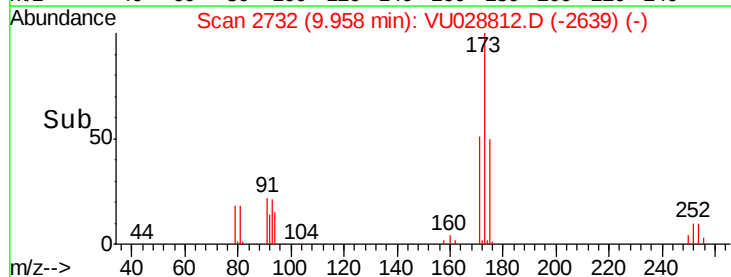
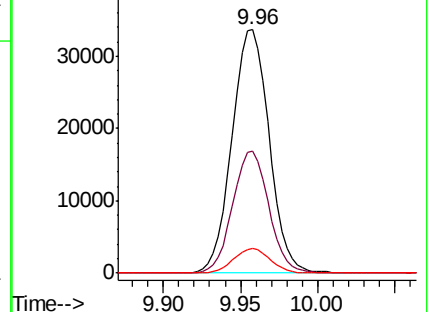
175 48.6 38.9 58.3

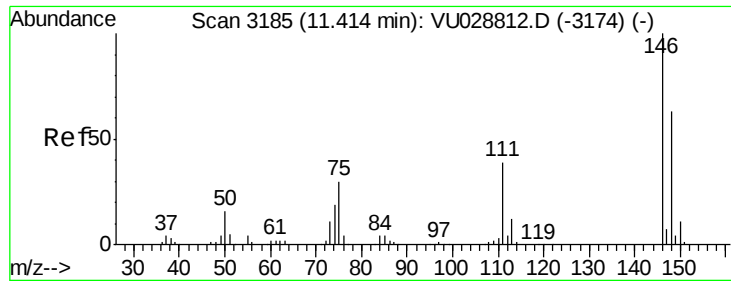
254 9.8 7.8 11.8



Abundance Ion 173.00 (172.70 to 173.70): VU028812.D (-2720) (-)

Ion 175.00 (174.70 to 175.70): VU028812.D (-2720) (-)





#62

1,3-Dichlorobenzene

Concen: 49.975 ug/L

RT: 11.41 min Scan# 3185

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05057

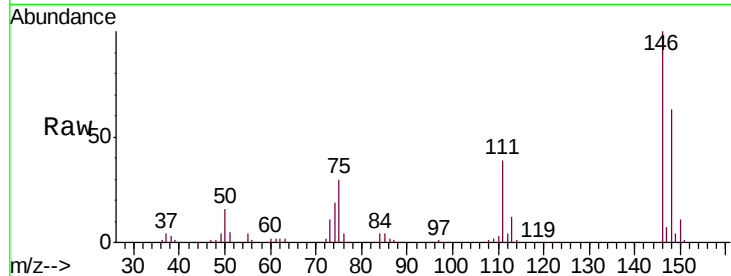
Tgt Ion:146 Resp: 143337

Ion Ratio Lower Upper

146 100

111 39.1 27.4 50.8

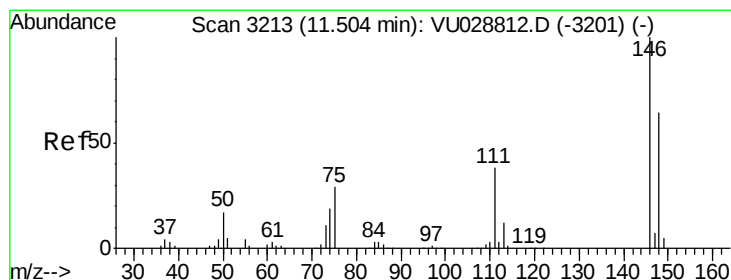
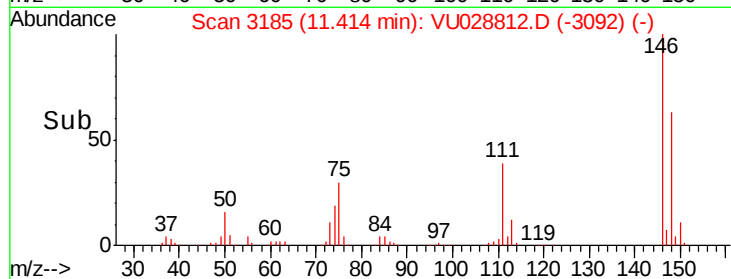
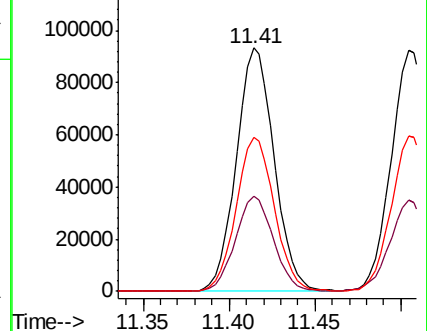
148 63.2 44.2 82.2



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 49.422 ug/L

RT: 11.50 min Scan# 3213

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

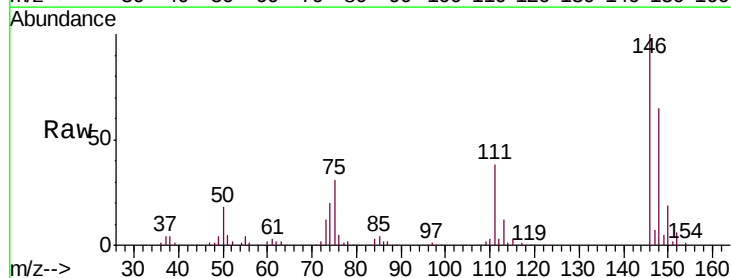
Tgt Ion:146 Resp: 146043

Ion Ratio Lower Upper

146 100

111 37.8 26.5 49.1

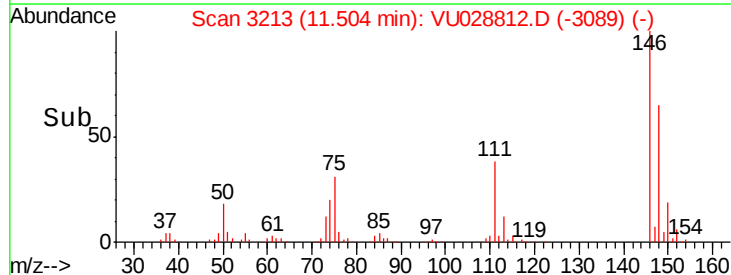
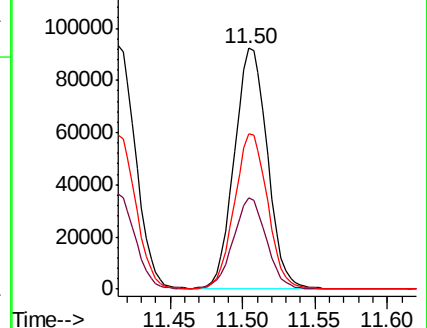
148 64.5 45.1 83.9

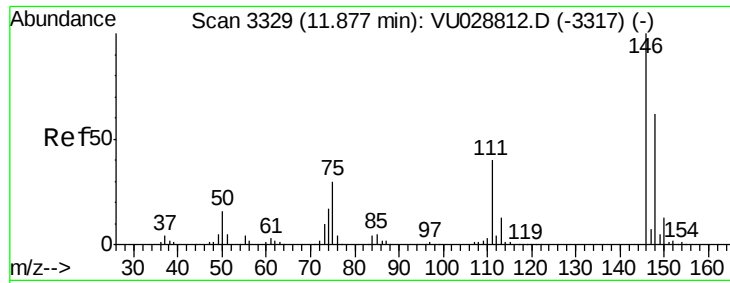


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

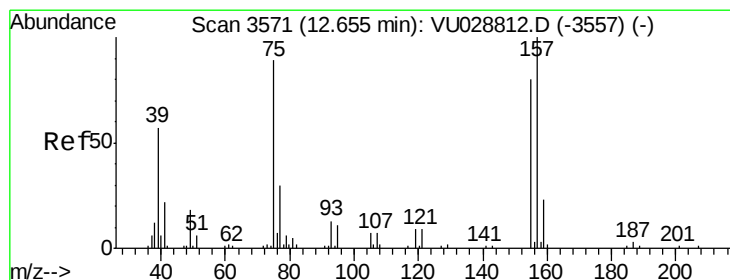
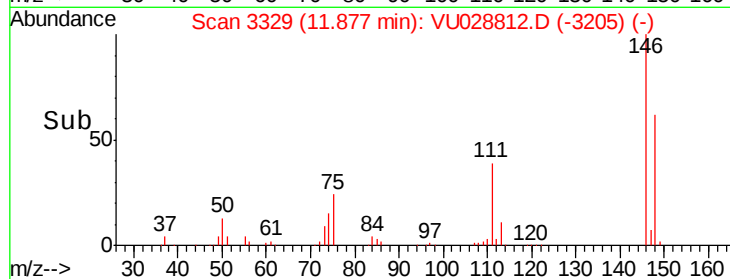
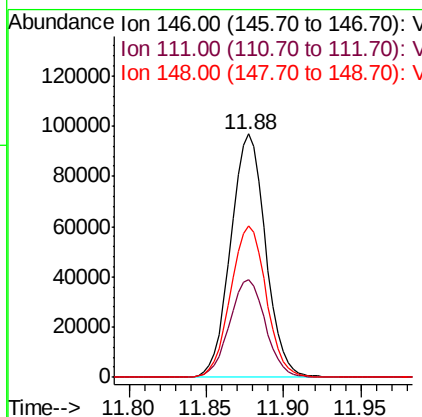
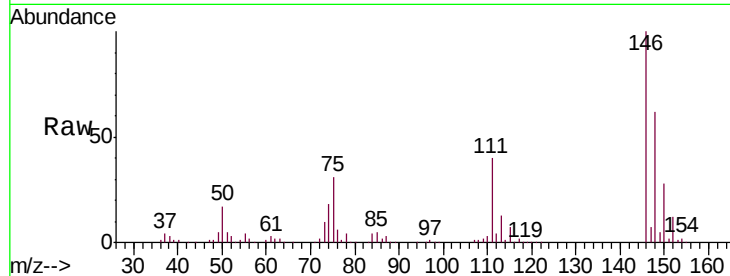




#65  
 1,2-Dichlorobenzene  
 Concen: 50.613 ug/L  
 RT: 11.88 min Scan# 3329  
 Delta R.T. 0.00 min  
 Lab File: VU028812.D  
 Acq: 20 Dec 2018 10:10

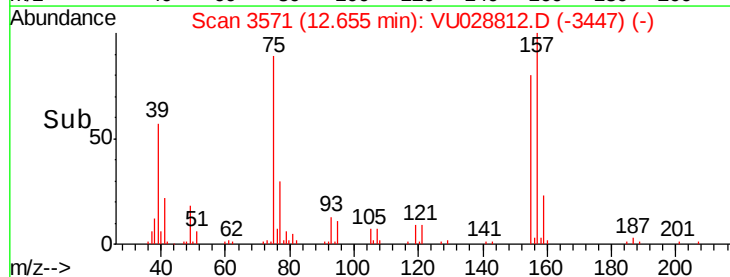
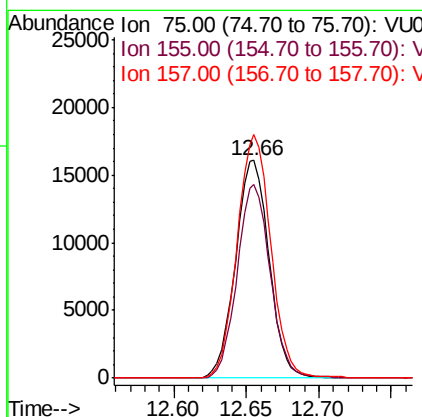
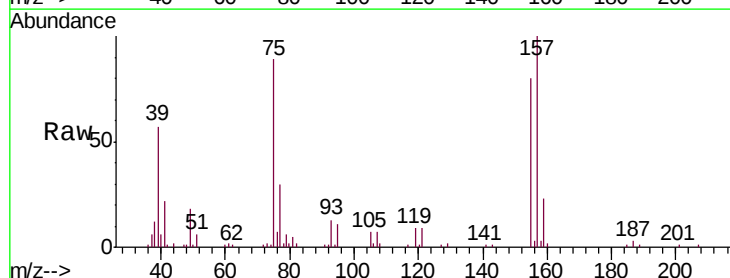
Instrument :  
 MSVOA\_U  
 ClientSampled :  
 VSTD05057

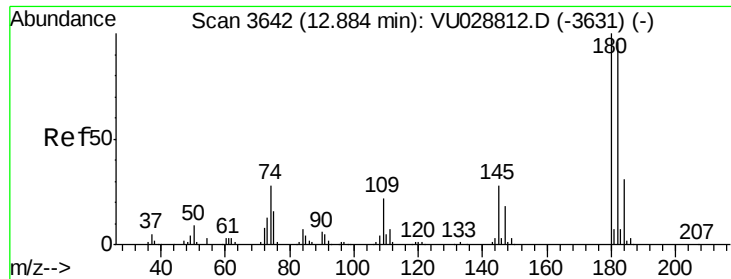
Tgt Ion: 146 Resp: 151432  
 Ion Ratio Lower Upper  
 146 100  
 111 40.1 32.1 48.1  
 148 62.1 49.7 74.5



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 50.030 ug/L  
 RT: 12.66 min Scan# 3571  
 Delta R.T. 0.00 min  
 Lab File: VU028812.D  
 Acq: 20 Dec 2018 10:10

Tgt Ion: 75 Resp: 25820  
 Ion Ratio Lower Upper  
 75 100  
 155 89.3 71.4 107.2  
 157 112.0 89.6 134.4

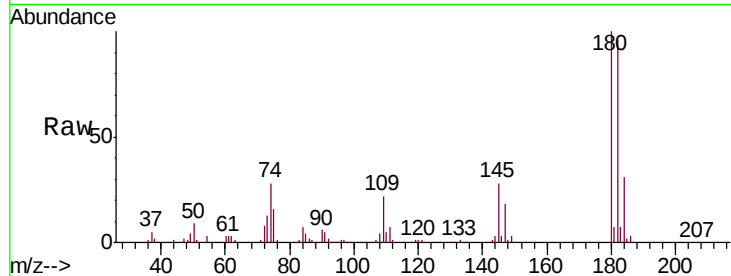




#67  
 1,3,5-Trichlorobenzene  
 Concen: 50.737 ug/L  
 RT: 12.88 min Scan# 3642  
 Delta R.T. 0.00 min  
 Lab File: VU028812.D  
 Acq: 20 Dec 2018 10:10

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05057

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.5  | 76.4  | 114.6 |
| 184     | 30.7  | 24.6  | 36.8  |
| 145     | 27.6  | 22.1  | 33.1  |



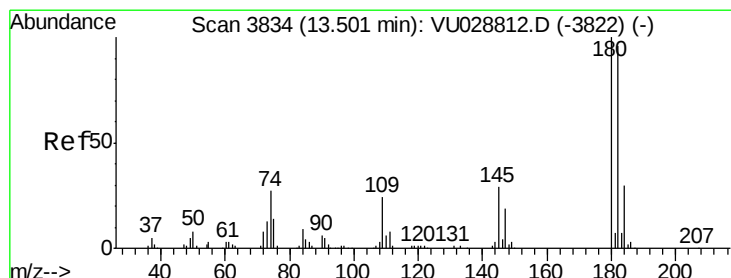
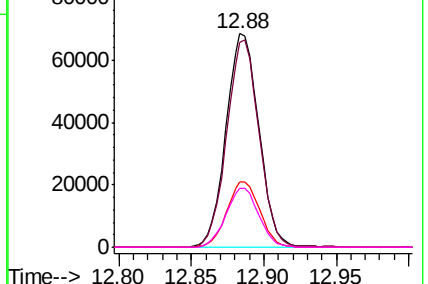
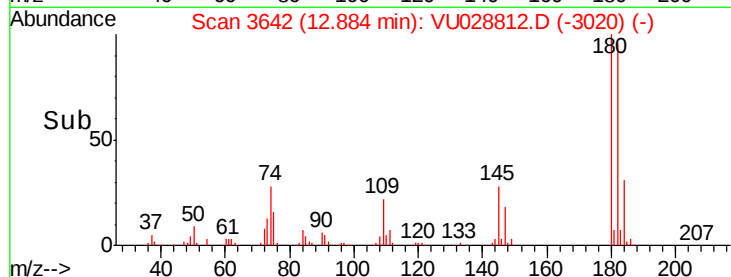
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

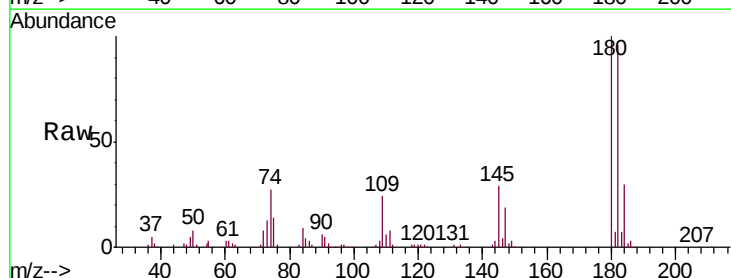
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 51.130 ug/L  
 RT: 13.50 min Scan# 3834  
 Delta R.T. 0.00 min  
 Lab File: VU028812.D  
 Acq: 20 Dec 2018 10:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.7  | 77.4  | 116.0 |
| 145     | 29.4  | 23.5  | 35.3  |

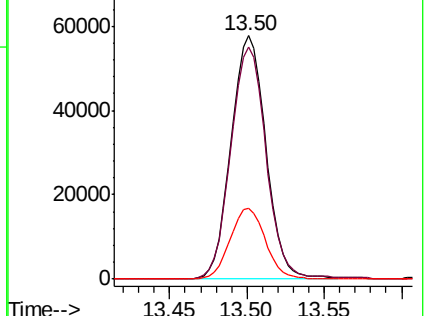
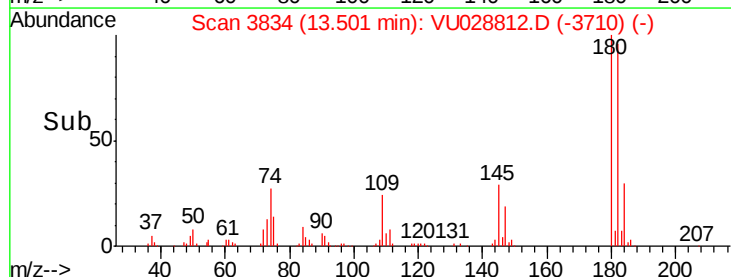


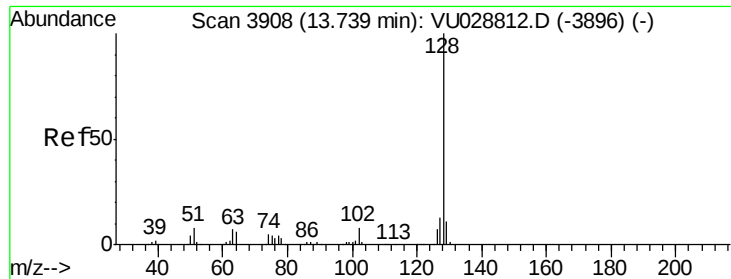
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V





#69

Naphthalene

Concen: 51.318 ug/L

RT: 13.74 min Scan# 3908

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05057

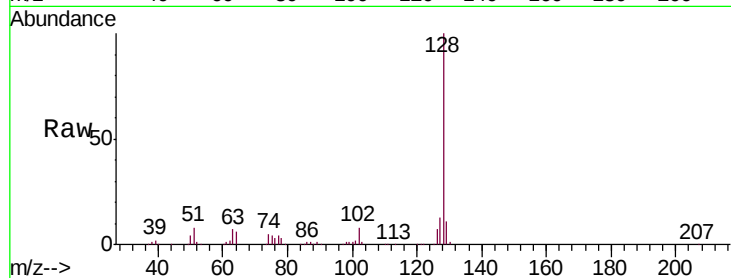
Tgt Ion:128 Resp: 315516

Ion Ratio Lower Upper

128 100

127 13.1 10.5 15.7

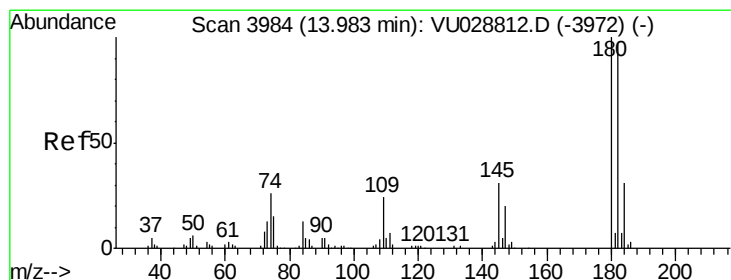
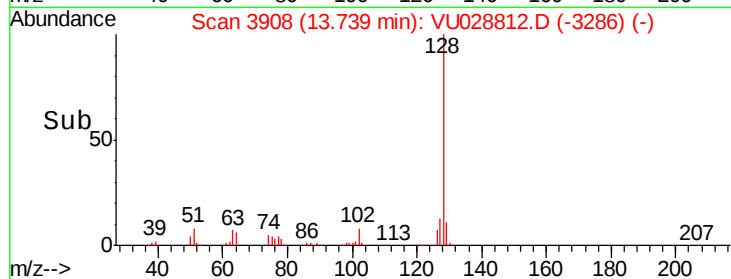
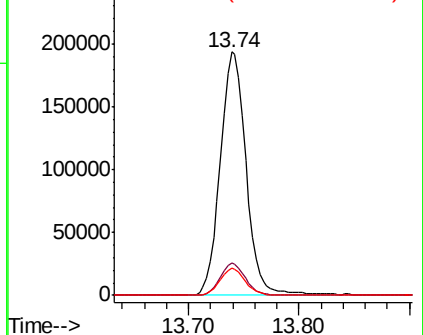
129 10.9 8.7 13.1



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



#70

1,2,3-Trichlorobenzene

Concen: 50.660 ug/L

RT: 13.98 min Scan# 3984

Delta R.T. 0.00 min

Lab File: VU028812.D

Acq: 20 Dec 2018 10:10

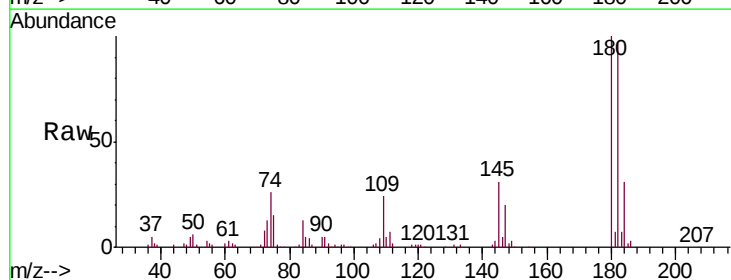
Tgt Ion:180 Resp: 96737

Ion Ratio Lower Upper

180 100

182 94.8 75.8 113.8

145 30.6 24.5 36.7



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

