

Data File : VU026819.D  
Acq On : 17 Sep 2018 12:50  
Operator : MD/SY  
Sample : VSTD00549  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00549

Quant Time: Sep 18 00:58:05 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM091718WMA.M  
Quant Title : VOC Analysis  
QLast Update : Tue Sep 18 00:50:30 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 218080   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 215193   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 92090    | 50.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |       |     |       |      |      |      |
|--------------------------------|-------|-----|-------|------|------|------|
| 4) Vinyl Chloride-d3           | 1.40  | 65  | 8817  | 5.47 | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.68  | 69  | 7647  | 5.54 | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.27  | 63  | 16542 | 5.42 | ug/L | 0.00 |
| 21) 2-Butanone-d5              | 4.18  | 46  | 4096  | 3.83 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.65  | 84  | 16782 | 5.61 | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.31  | 65  | 10287 | 5.46 | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.34  | 84  | 28246 | 4.68 | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.33  | 67  | 9916  | 5.10 | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.57  | 98  | 22304 | 4.09 | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.85  | 79  | 3902  | 4.50 | ug/L | 0.00 |
| 47) 2-Hexanone-d5              | 8.31  | 63  | 4795  | 6.28 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43 | 84  | 13518 | 4.99 | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.86 | 152 | 10161 | 5.30 | ug/L | 0.00 |

#### Target Compounds

|                                |      |     |       |             | Qvalue |
|--------------------------------|------|-----|-------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.21 | 85  | 11285 | 5.475 ug/L  | 95     |
| 3) Chloromethane               | 1.33 | 50  | 11611 | 5.523 ug/L  | 98     |
| 5) Vinyl chloride              | 1.40 | 62  | 11075 | 5.413 ug/L  | 97     |
| 6) Bromomethane                | 1.63 | 94  | 4835  | 4.785 ug/L  | 95     |
| 8) Chloroethane                | 1.70 | 64  | 7024  | 5.478 ug/L  | 100    |
| 9) Trichlorofluoromethane      | 1.89 | 101 | 13839 | 5.444 ug/L  | 98     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.29 | 101 | 8459  | 5.618 ug/L  | 97     |
| 12) 1,1-Dichloroethene         | 2.29 | 96  | 7584  | 5.363 ug/L  | 93     |
| 13) Acetone                    | 2.32 | 43  | 12769 | 12.135 ug/L | 98     |
| 14) Carbon disulfide           | 2.48 | 76  | 25990 | 5.325 ug/L  | 99     |
| 15) Methyl Acetate             | 2.62 | 43  | 9393  | 5.152 ug/L  | 99     |
| 16) Methylene chloride         | 2.70 | 84  | 9841  | 5.474 ug/L  | 98     |
| 17) trans-1,2-Dichloroethene   | 2.98 | 96  | 7751  | 4.976 ug/L  | 95     |
| 18) Methyl tert-butyl Ether    | 3.00 | 73  | 19698 | 4.325 ug/L  | 97     |
| 19) 1,1-Dichloroethane         | 3.45 | 63  | 16094 | 5.357 ug/L  | 97     |
| 20) cis-1,2-Dichloroethene     | 4.23 | 96  | 8099  | 4.728 ug/L  | 98     |
| 22) 2-Butanone                 | 4.27 | 43  | 11941 | 9.202 ug/L  | 93     |
| 23) Bromochloromethane         | 4.55 | 128 | 4881  | 5.277 ug/L  | 94     |
| 25) Chloroform                 | 4.68 | 83  | 16102 | 5.292 ug/L  | 98     |
| 27) 1,2-Dichloroethane         | 5.41 | 62  | 12313 | 5.186 ug/L  | 100    |
| 29) Cyclohexane                | 5.00 | 56  | 9464  | 3.788 ug/L  | 99     |
| 30) 1,1,1-Trichloroethane      | 4.92 | 97  | 12782 | 4.993 ug/L  | 98     |
| 31) Carbon tetrachloride       | 5.13 | 117 | 11344 | 4.945 ug/L  | 97     |
| 33) Benzene                    | 5.39 | 78  | 30430 | 4.561 ug/L  | 100    |
| 34) Trichloroethene            | 6.19 | 95  | 7839  | 4.896 ug/L  | 96     |
| 35) Methylcyclohexane          | 6.42 | 83  | 10269 | 3.935 ug/L  | 95     |
| 37) 1,2-Dichloropropane        | 6.44 | 63  | 8998  | 4.910 ug/L  | 98     |
| 38) Bromodichloromethane       | 6.76 | 83  | 11722 | 5.157 ug/L  | 99     |
| 39) cis-1,3-Dichloropropene    | 7.27 | 75  | 9865  | 3.810 ug/L  | 90     |
| 40) 4-Methyl-2-pentanone       | 7.46 | 43  | 16224 | 7.450 ug/L  | 96     |

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Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00549

Quant Time: Sep 18 00:58:05 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM091718WMA.M  
Quant Title : VOC Analysis  
QLast Update : Tue Sep 18 00:50:30 2018  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| 42) Toluene                    | 7.64  | 91   | 27606    | 4.089 | ug/L   | 98       |
| 44) trans-1,3-Dichloropropene  | 7.88  | 75   | 10239    | 4.224 | ug/L   | 100      |
| 45) 1,1,2-Trichloroethane      | 8.07  | 97   | 8471     | 5.070 | ug/L   | 97       |
| 46) Tetrachloroethene          | 8.23  | 164  | 6933     | 4.885 | ug/L   | 93       |
| 48) 2-Hexanone                 | 8.37  | 43   | 12131    | 6.906 | ug/L   | 95       |
| 49) Dibromochloromethane       | 8.48  | 129  | 8815     | 4.661 | ug/L   | 99       |
| 50) 1,2-Dibromoethane          | 8.59  | 107  | 8079     | 4.638 | ug/L # | 99       |
| 51) Chlorobenzene              | 9.12  | 112  | 22362    | 4.881 | ug/L   | 99       |
| 52) Ethylbenzene               | 9.25  | 91   | 27476    | 3.885 | ug/L   | 97       |
| 53) m,p-Xylene                 | 9.38  | 106  | 9630     | 3.542 | ug/L   | 99       |
| 54) o-xylene                   | 9.78  | 106  | 9327     | 3.521 | ug/L   | 89       |
| 55) Styrene                    | 9.80  | 104  | 15234    | 3.331 | ug/L   | 98       |
| 56) Isopropylbenzene           | 10.17 | 105  | 23168    | 3.424 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 13713    | 4.879 | ug/L   | 98       |
| 59) 1,2,3-Trichloropropane     | 10.49 | 75   | 10267    | 4.677 | ug/L   | 99       |
| 61) Bromoform                  | 9.96  | 173  | 6635     | 5.479 | ug/L   | 99       |
| 62) 1,3-Dichlorobenzene        | 11.42 | 146  | 13182    | 4.696 | ug/L   | 98       |
| 63) 1,4-Dichlorobenzene        | 11.51 | 146  | 15661    | 5.066 | ug/L   | 98       |
| 65) 1,2-Dichlorobenzene        | 11.88 | 146  | 15200    | 4.890 | ug/L   | 98       |
| 66) 1,2-Dibromo-3-chloropropan | 12.66 | 75   | 2291     | 4.858 | ug/L # | 79       |
| 67) 1,3,5-Trichlorobenzene     | 12.89 | 180  | 10381    | 4.779 | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.50 | 180  | 8179     | 4.369 | ug/L   | 95       |
| 69) Naphthalene                | 13.75 | 128  | 17493    | 3.172 | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.99 | 180  | 8392     | 4.071 | ug/L   | 95       |

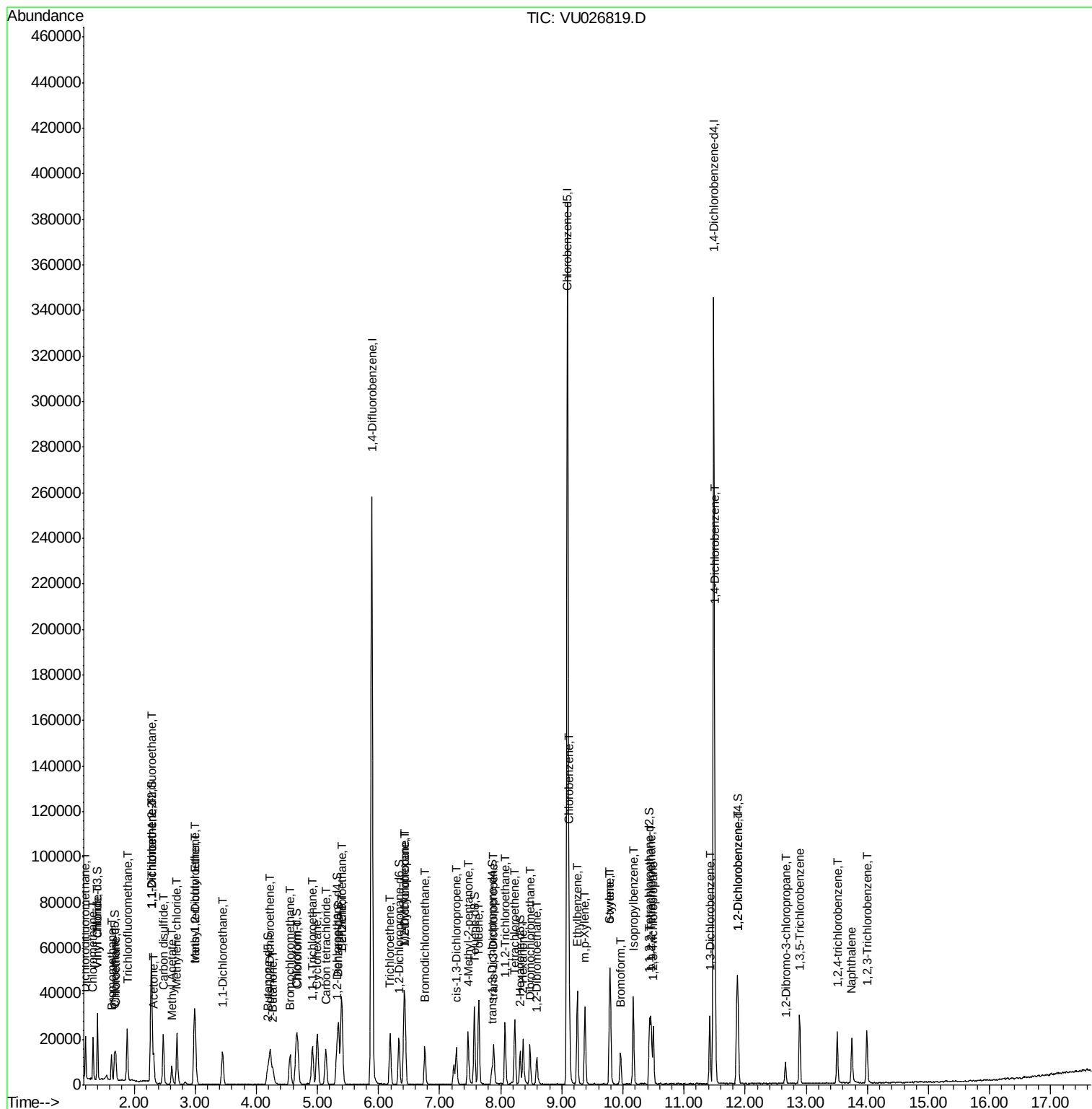
(#) = qualifier out of range (m) = manual integration (+) = signals summed

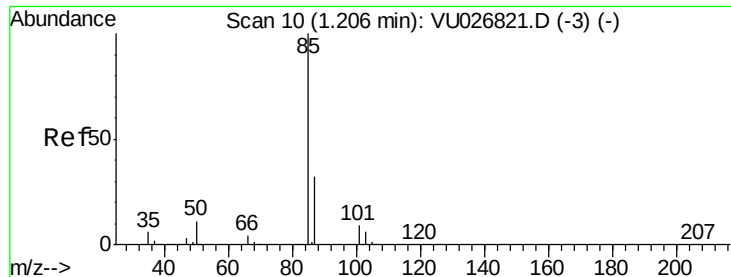
Data File : VU026819.D

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Acq On       : 17 Sep 2018   12:50
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ALS Vial     : 2      Sample Multiplier: 1
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**Instrument :**  
MSVOA\_U  
**ClientSampleId :**  
VSTD00549

Quant Time: Sep 18 00:58:05 2018  
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Quant Title : VOC Analysis  
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#2

Dichlorodifluoromethane

Concen: 5.475 ug/L

RT: 1.21 min Scan# 10

Delta R.T. -0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

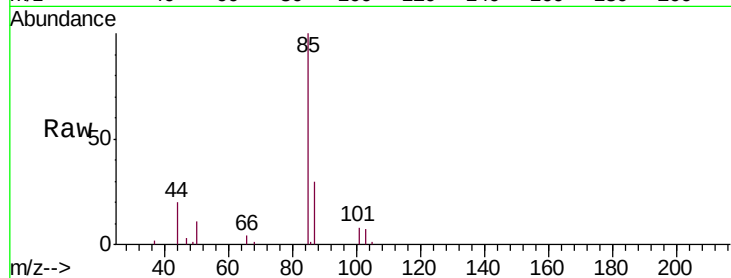
VSTD00549

Tgt Ion: 85 Resp: 11285

Ion Ratio Lower Upper

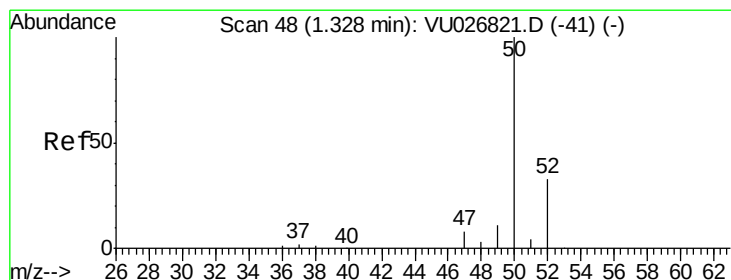
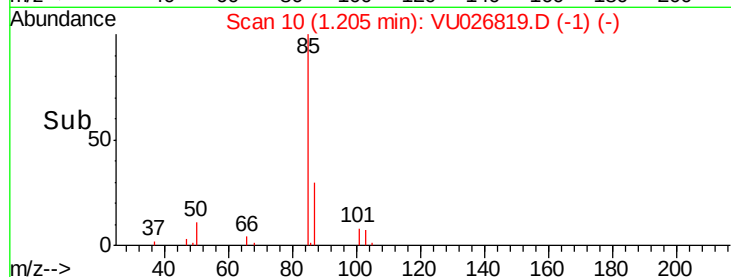
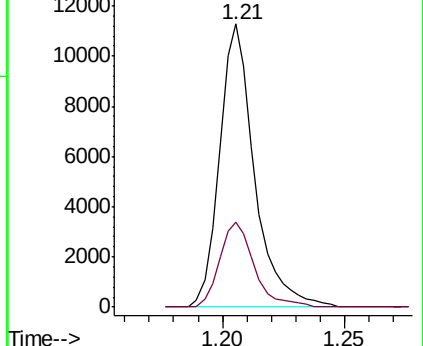
85 100

87 29.6 25.8 38.8



Abundance Ion 85.00 (84.70 to 85.70): VU0

Ion 87.00 (86.70 to 87.70): VU0



#3

Chloromethane

Concen: 5.523 ug/L

RT: 1.33 min Scan# 48

Delta R.T. -0.00 min

Lab File: VU026819.D

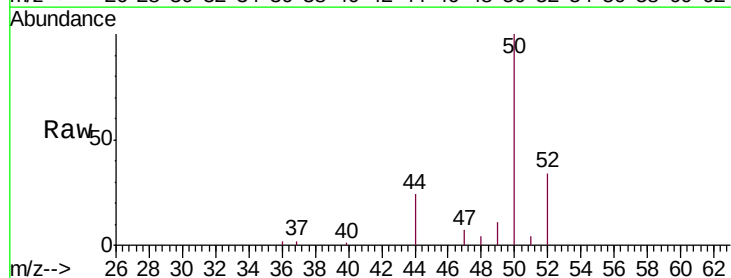
Acq: 17 Sep 2018 12:50

Tgt Ion: 50 Resp: 11611

Ion Ratio Lower Upper

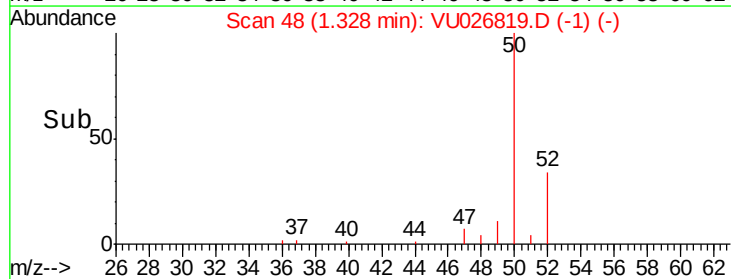
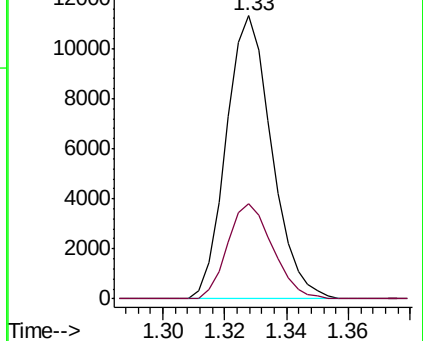
50 100

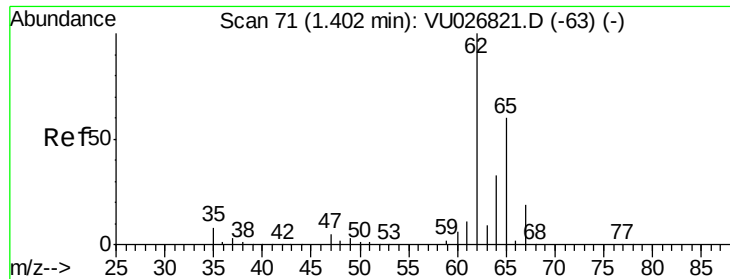
52 33.8 22.8 42.4



Abundance Ion 50.00 (49.70 to 50.70): VU0

Ion 52.00 (51.70 to 52.70): VU0





#5

Vinyl chloride

Concen: 5.413 ug/L

RT: 1.40 min Scan# 71

Delta R.T. -0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

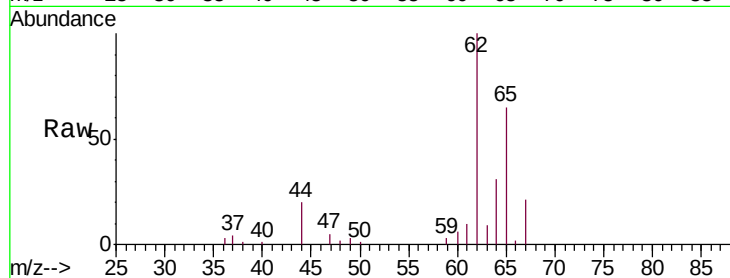
VSTD00549

Tgt Ion: 62 Resp: 11075

Ion Ratio Lower Upper

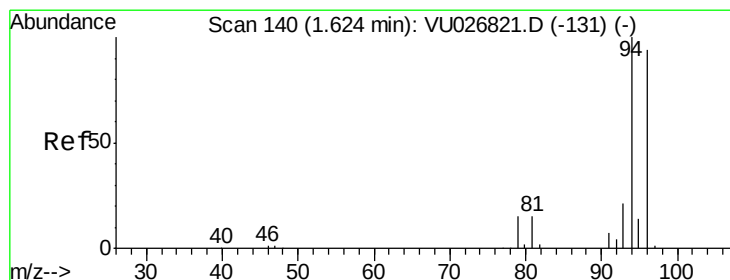
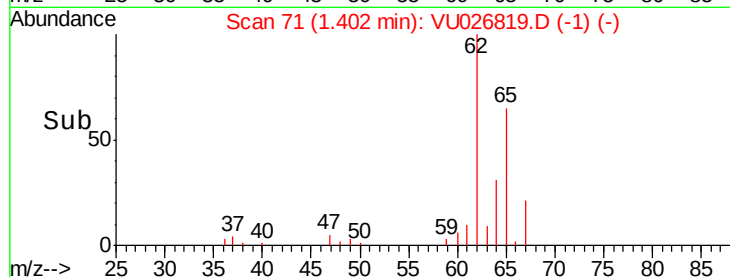
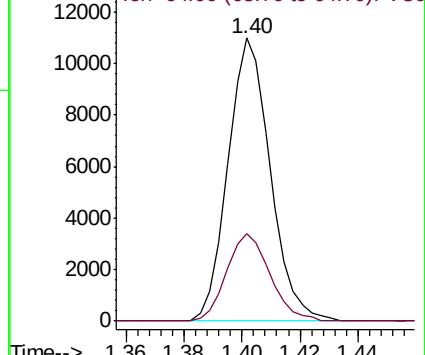
62 100

64 31.0 22.7 42.3



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.00 (63.70 to 64.70): VU0



#6

Bromomethane

Concen: 4.785 ug/L

RT: 1.63 min Scan# 142

Delta R.T. 0.01 min

Lab File: VU026819.D

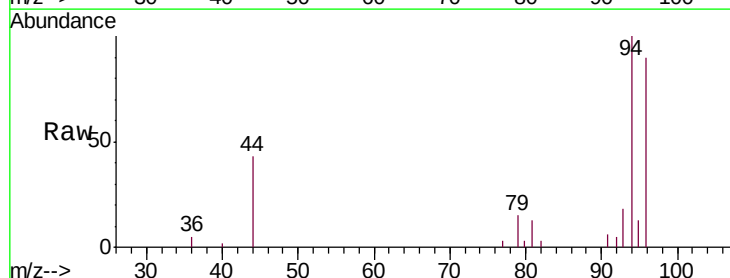
Acq: 17 Sep 2018 12:50

Tgt Ion: 94 Resp: 4835

Ion Ratio Lower Upper

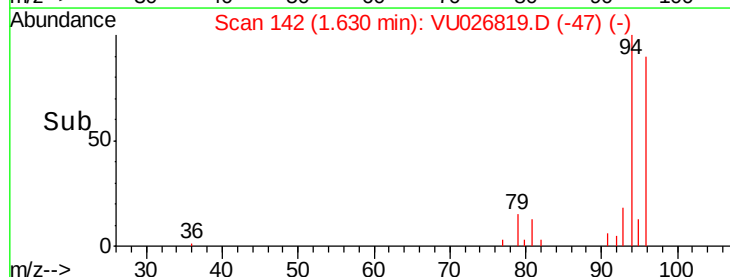
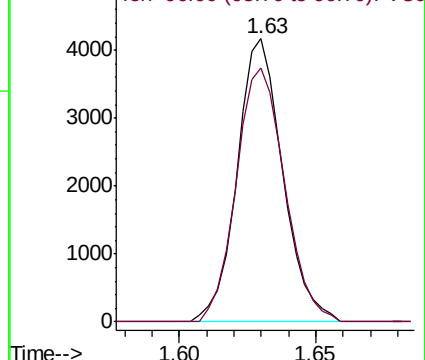
94 100

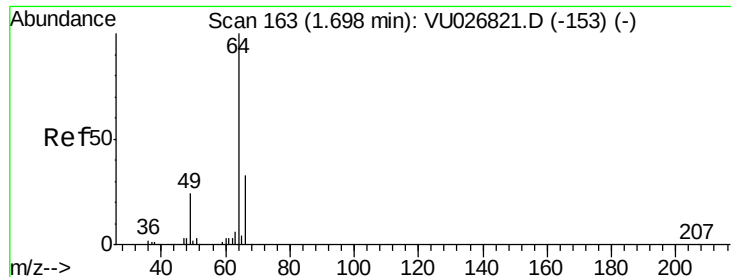
96 89.7 66.0 122.6



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0





#8

Chloroethane

Concen: 5.478 ug/L

RT: 1.70 min Scan# 164

Delta R.T. 0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

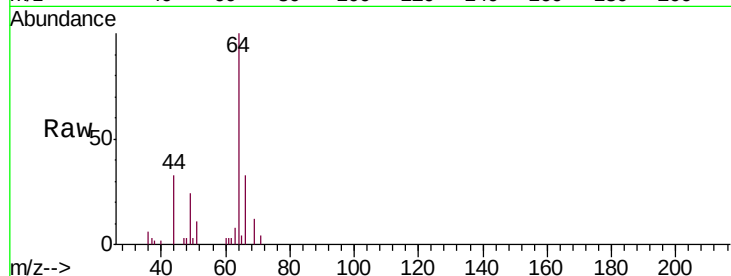
VSTD00549

Tgt Ion: 64 Resp: 7024

Ion Ratio Lower Upper

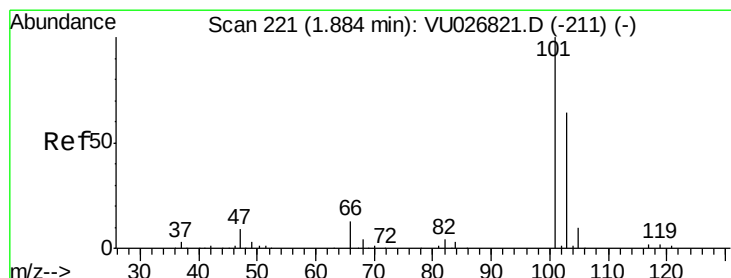
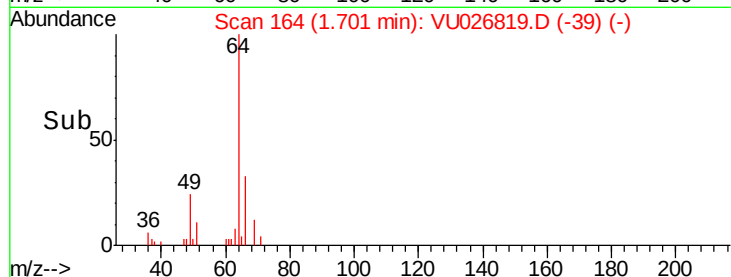
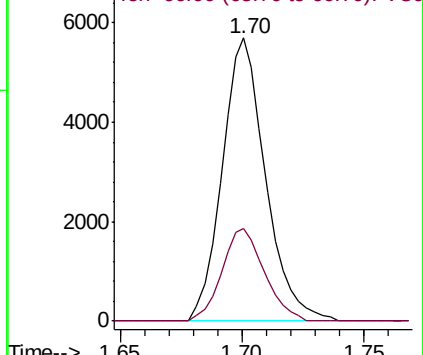
64 100

66 32.9 23.0 42.8



Abundance Ion 64.00 (63.70 to 64.70): VU0

Ion 66.00 (65.70 to 66.70): VU0



#9

Trichlorofluoromethane

Concen: 5.444 ug/L

RT: 1.89 min Scan# 222

Delta R.T. 0.00 min

Lab File: VU026819.D

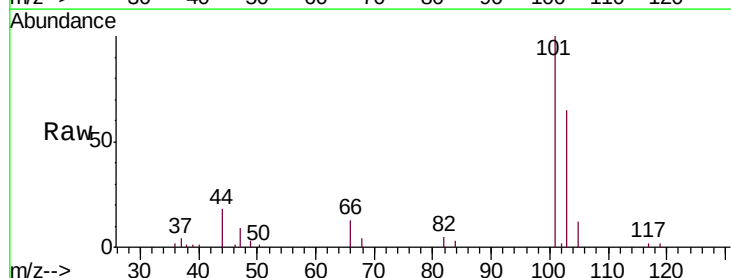
Acq: 17 Sep 2018 12:50

Tgt Ion: 101 Resp: 13839

Ion Ratio Lower Upper

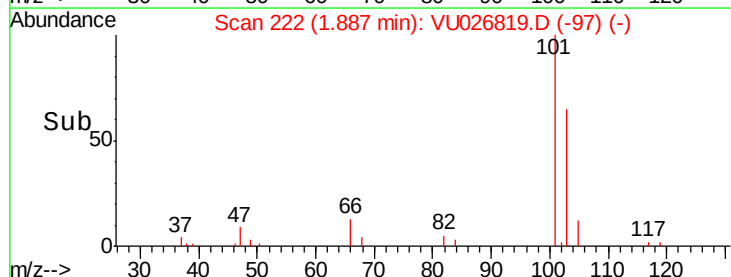
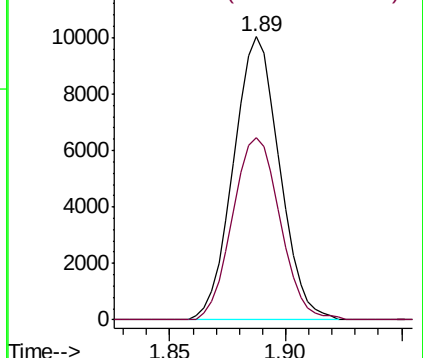
101 100

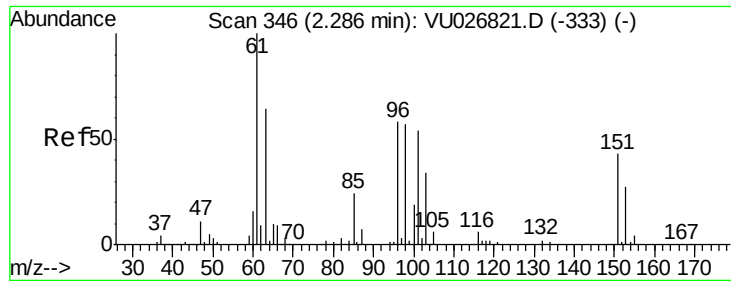
103 66.5 51.9 77.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V





#10

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

Concen: 5.618 ug/L

RT: 2.29 min Scan# 347

Delta R.T. 0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

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ClientSampleId :

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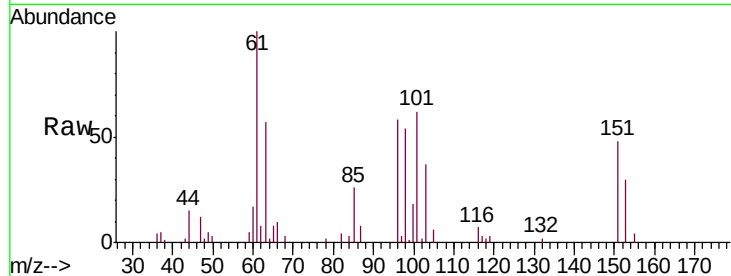
Tgt Ion:101 Resp: 8459

Ion Ratio Lower Upper

101 100

85 44.7 34.6 52.0

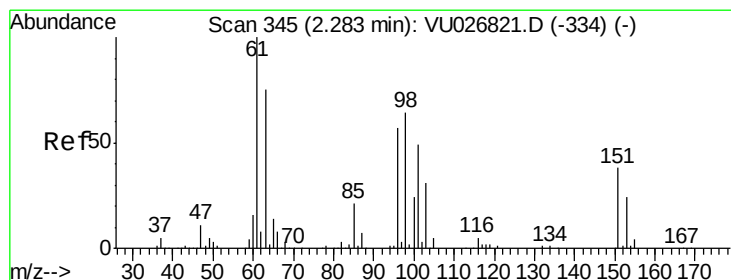
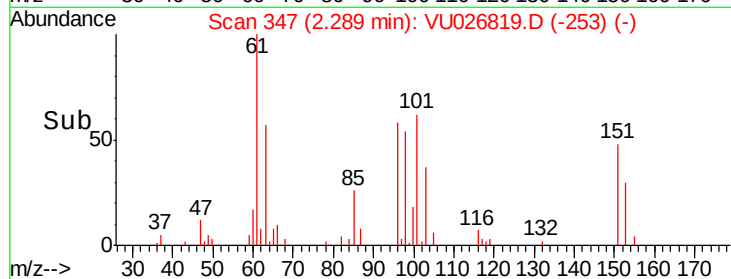
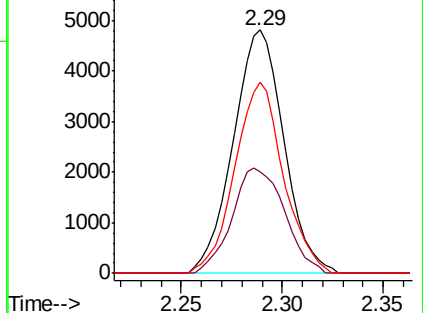
151 75.3 63.0 94.4



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: 5.363 ug/L

RT: 2.29 min Scan# 346

Delta R.T. 0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

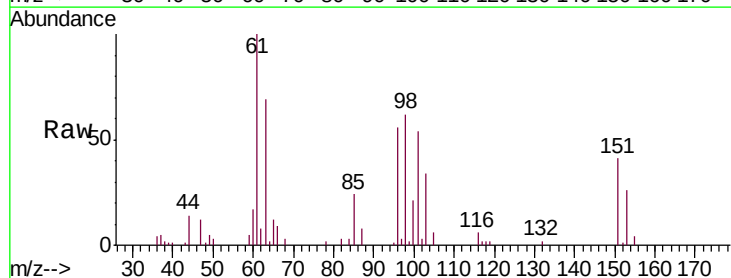
Tgt Ion: 96 Resp: 7584

Ion Ratio Lower Upper

96 100

61 179.9 124.0 230.4

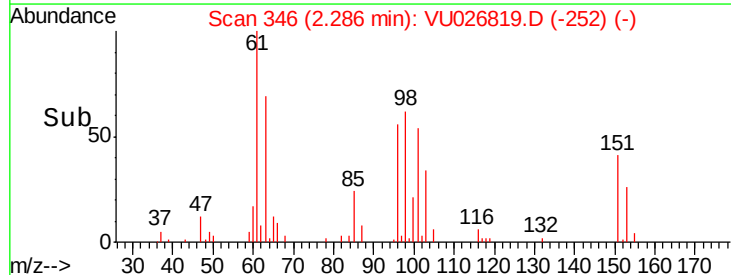
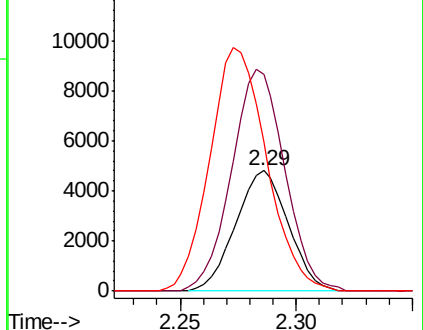
63 123.8 97.7 181.5

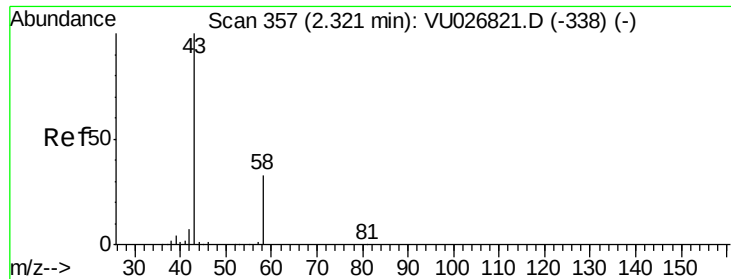


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 12.135 ug/L

RT: 2.32 min Scan# 357

Delta R.T. -0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

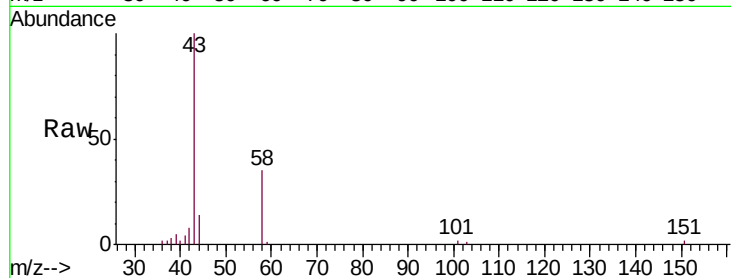
VSTD00549

Tgt Ion: 43 Resp: 12769

Ion Ratio Lower Upper

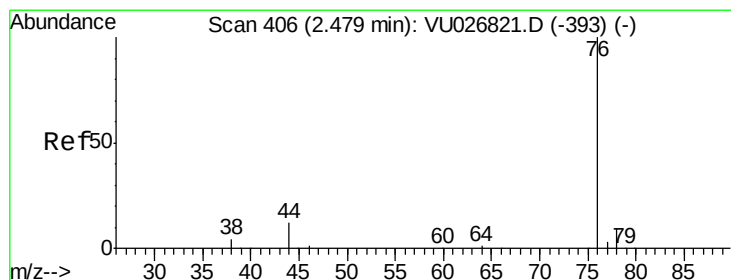
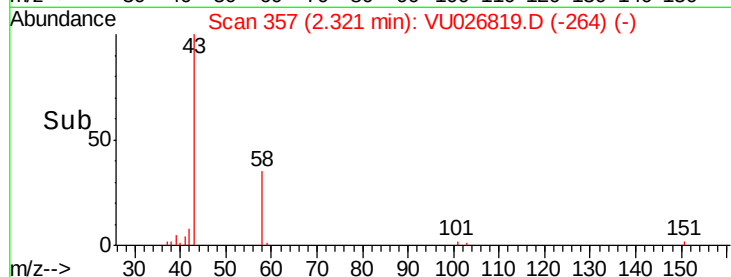
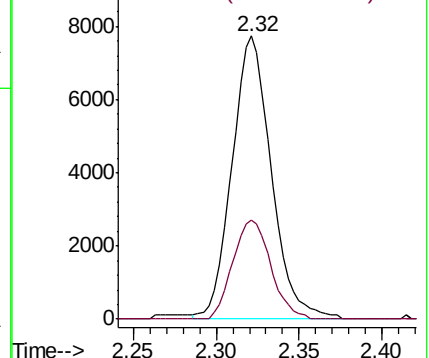
43 100

58 33.6 0.0 64.6



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0



#14

Carbon disulfide

Concen: 5.325 ug/L

RT: 2.48 min Scan# 406

Delta R.T. -0.00 min

Lab File: VU026819.D

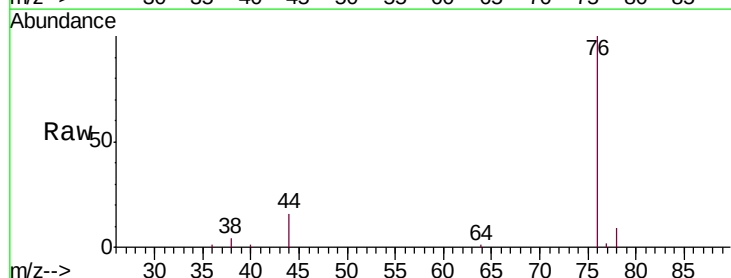
Acq: 17 Sep 2018 12:50

Tgt Ion: 76 Resp: 25990

Ion Ratio Lower Upper

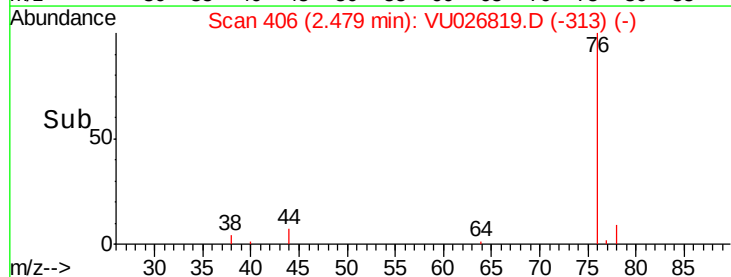
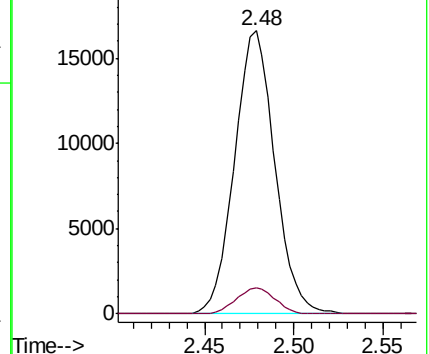
76 100

78 9.2 7.1 10.7

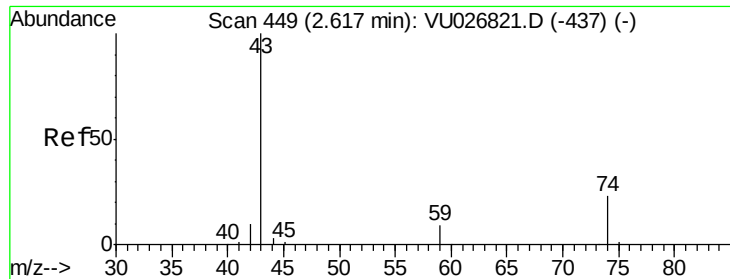


Abundance Ion 76.00 (75.70 to 76.70): VU0

Ion 78.00 (77.70 to 78.70): VU0



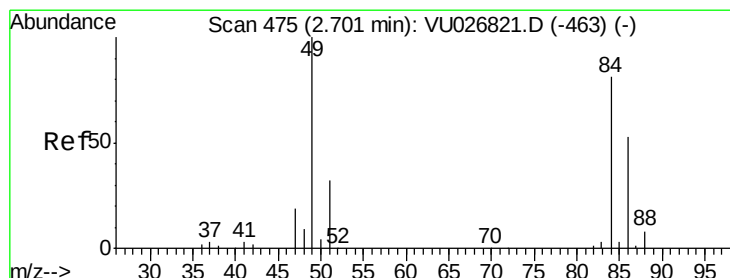
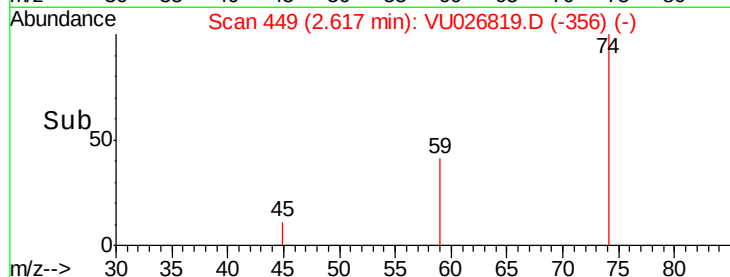
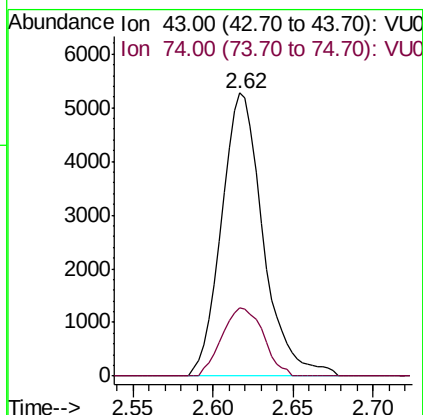
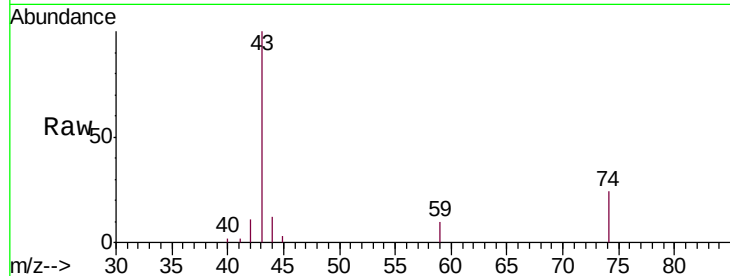




#15  
Methyl Acetate  
Concen: 5.152 ug/L  
RT: 2.62 min Scan# 449  
Delta R.T. -0.00 min  
Lab File: VU026819.D  
Acq: 17 Sep 2018 12:50

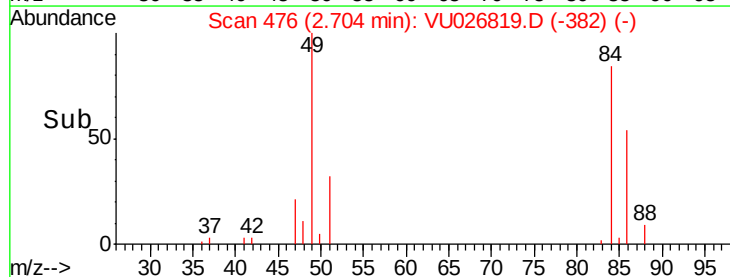
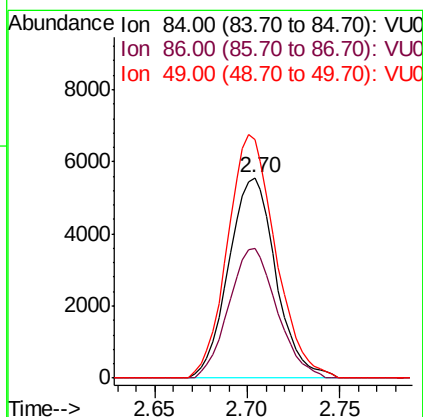
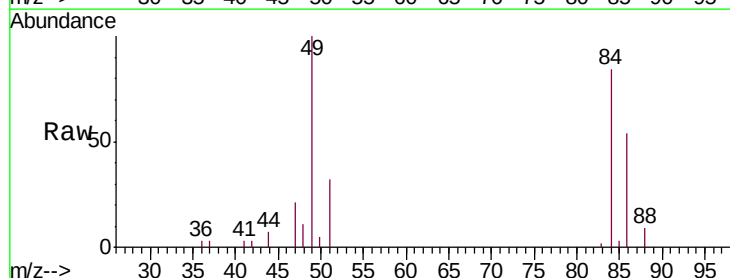
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00549

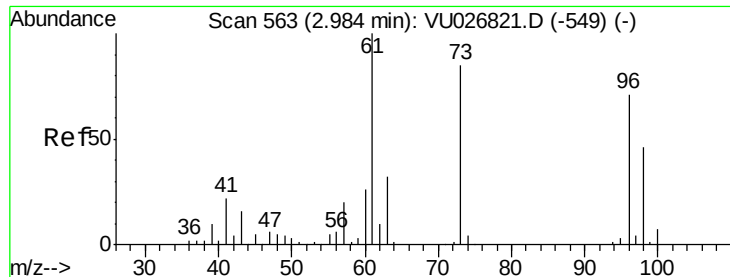
Tgt Ion: 43 Resp: 9393  
Ion Ratio Lower Upper  
43 100  
74 23.8 18.7 28.1



#16  
Methylene chloride  
Concen: 5.474 ug/L  
RT: 2.70 min Scan# 476  
Delta R.T. 0.00 min  
Lab File: VU026819.D  
Acq: 17 Sep 2018 12:50

Tgt Ion: 84 Resp: 9841  
Ion Ratio Lower Upper  
84 100  
86 64.6 45.3 84.1  
49 119.3 86.2 160.2





#17

trans-1,2-Dichloroethene

Concen: 4.976 ug/L

RT: 2.98 min Scan# 563

Delta R.T. -0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00549

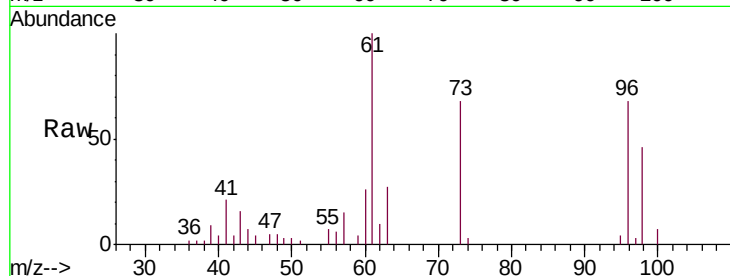
Tgt Ion: 96 Resp: 7751

Ion Ratio Lower Upper

96 100

61 147.2 98.7 183.3

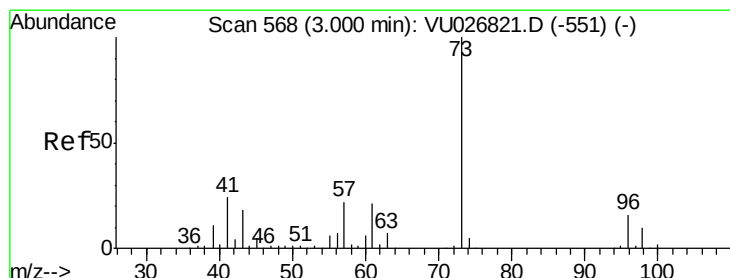
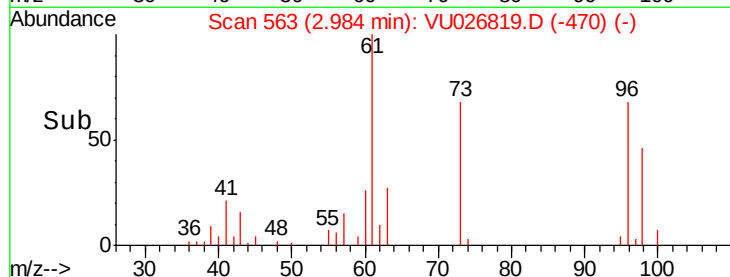
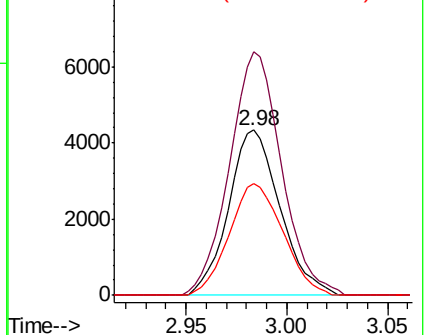
98 67.6 45.2 84.0



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: 4.325 ug/L

RT: 3.00 min Scan# 568

Delta R.T. -0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

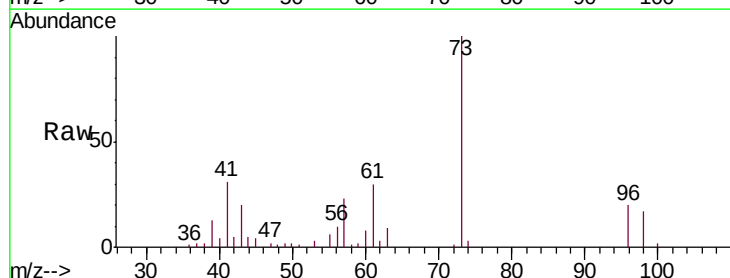
Tgt Ion: 73 Resp: 19698

Ion Ratio Lower Upper

73 100

43 21.2 15.3 22.9

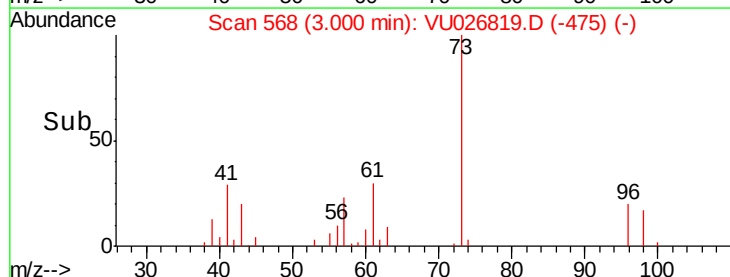
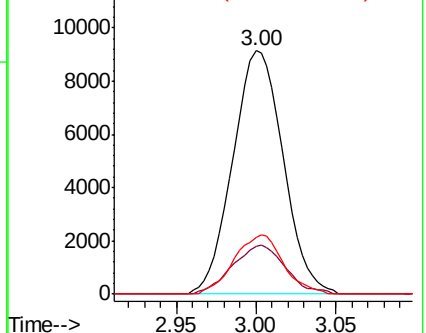
57 23.7 18.1 27.1

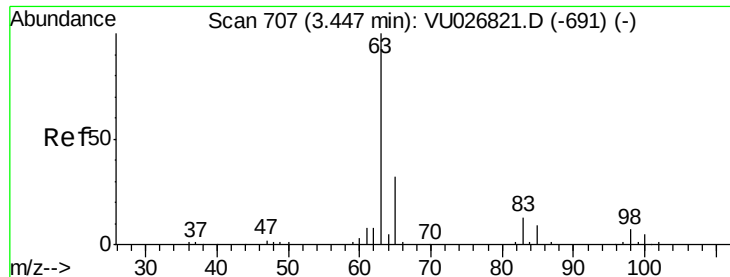


Abundance Ion 73.00 (72.70 to 73.70): VU0

Ion 43.00 (42.70 to 43.70): VU0

Ion 57.00 (56.70 to 57.70): VU0

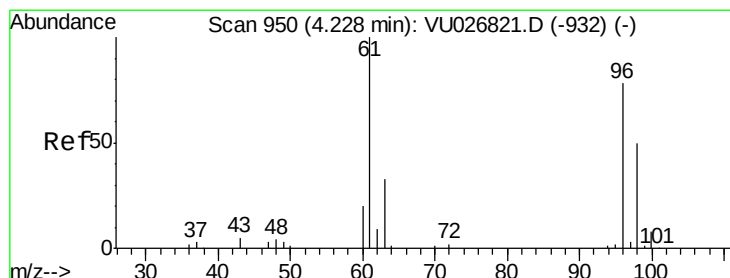
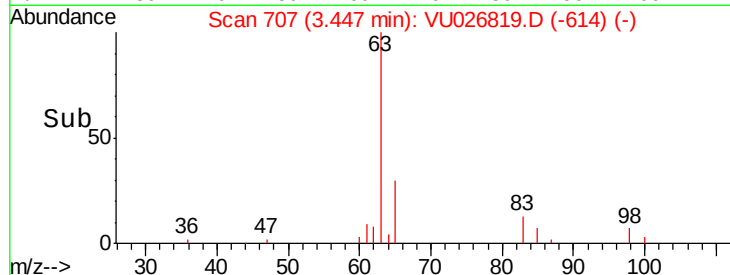
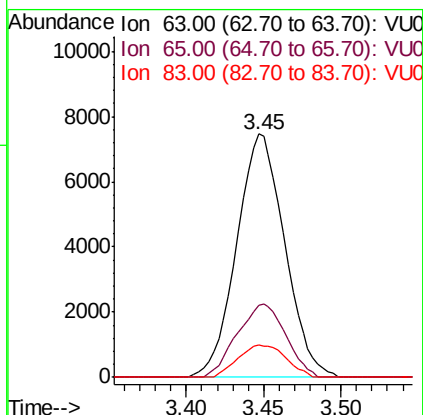
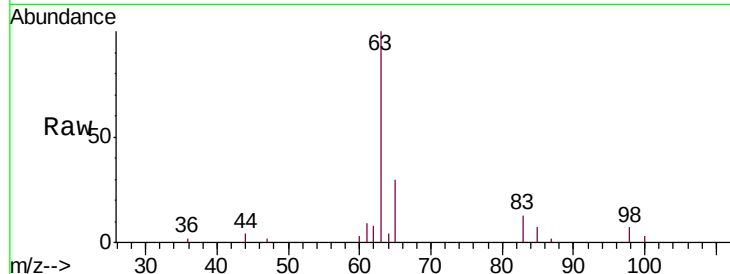




#19  
 1,1-Dichloroethane  
 Concen: 5.357 ug/L  
 RT: 3.45 min Scan# 707  
 Delta R.T. -0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

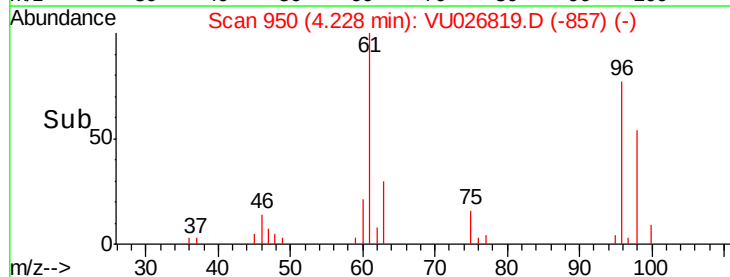
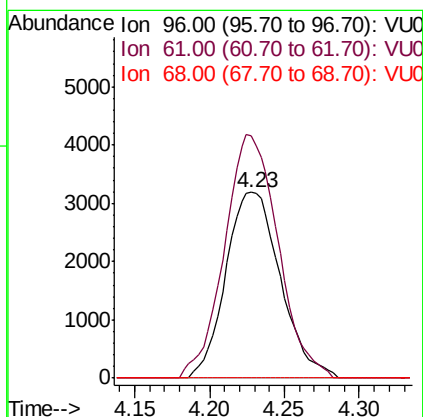
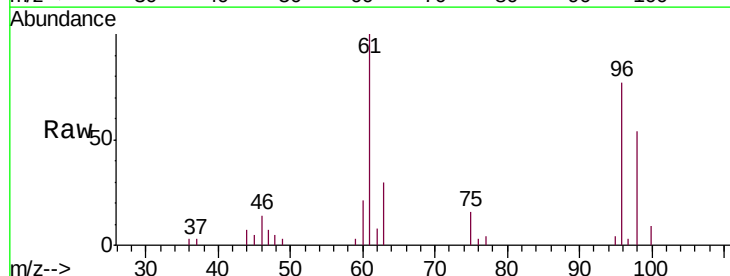
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00549

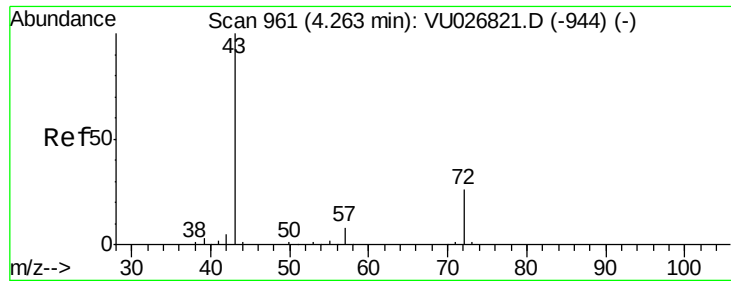
Tgt Ion: 63 Resp: 16094  
 Ion Ratio Lower Upper  
 63 100  
 65 29.6 22.1 41.1  
 83 13.5 9.3 17.3



#20  
 cis-1,2-Dichloroethene  
 Concen: 4.728 ug/L  
 RT: 4.23 min Scan# 950  
 Delta R.T. -0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

Tgt Ion: 96 Resp: 8099  
 Ion Ratio Lower Upper  
 96 100  
 61 130.7 90.2 167.4  
 68 0.0 0.0 0.0





#22

2-Butanone

Concen: 9.202 ug/L

RT: 4.27 min Scan# 963

Delta R.T. 0.01 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

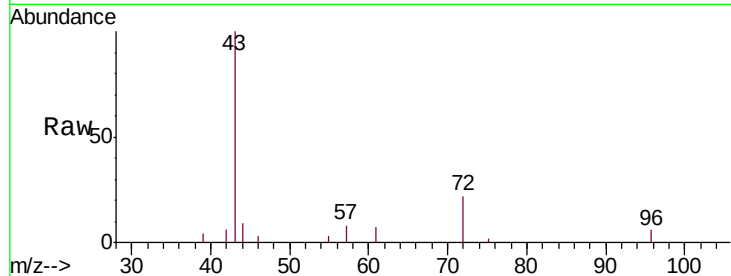
VSTD00549

Tgt Ion: 43 Resp: 11941

Ion Ratio Lower Upper

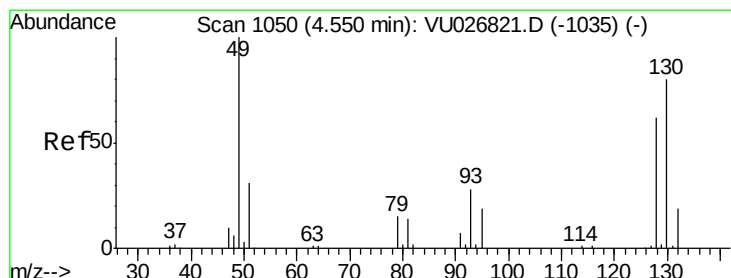
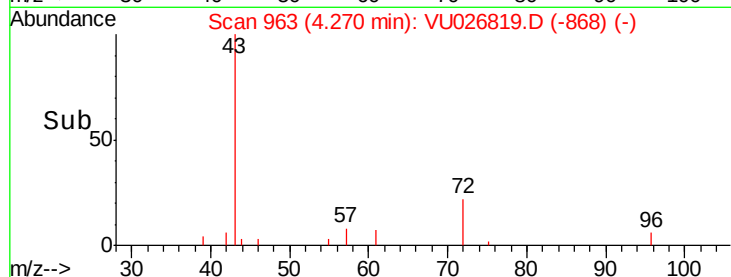
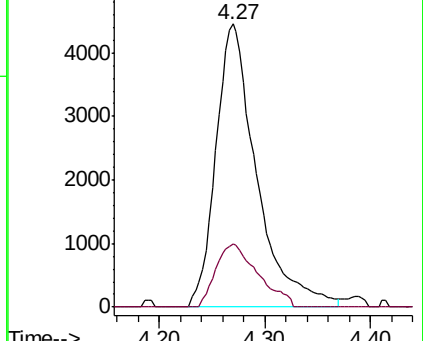
43 100

72 23.1 13.3 39.9



Abundance Ion 43.00 (42.70 to 43.70): VU026819.D (-963) (-)

Ion 72.00 (71.70 to 72.70): VU026819.D (-963) (-)



#23

Bromochloromethane

Concen: 5.277 ug/L

RT: 4.55 min Scan# 1051

Delta R.T. 0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Tgt Ion: 128 Resp: 4881

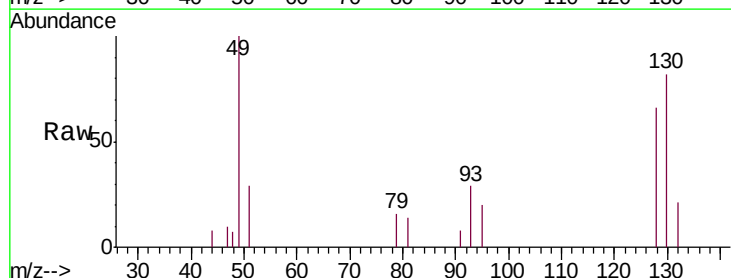
Ion Ratio Lower Upper

128 100

49 150.7 113.0 209.8

130 124.1 89.7 166.5

51 44.3 39.7 59.5

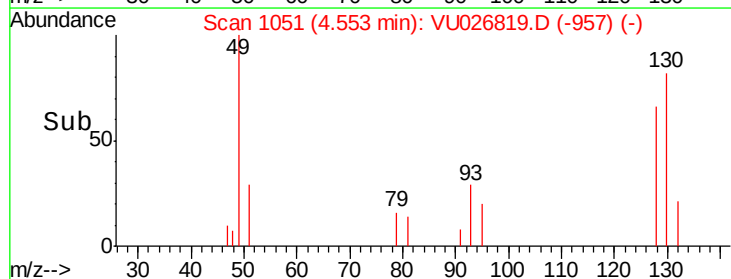
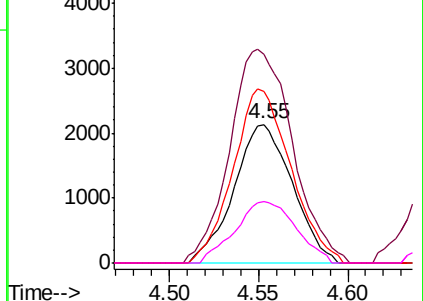


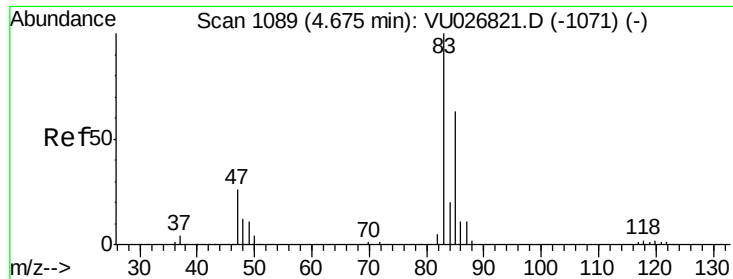
Abundance Ion 128.00 (127.70 to 128.70): VU026819.D (-1051) (-)

Ion 49.00 (48.70 to 49.70): VU026819.D (-1051) (-)

Ion 130.00 (129.70 to 130.70): VU026819.D (-1051) (-)

Ion 51.00 (50.70 to 51.70): VU026819.D (-1051) (-)

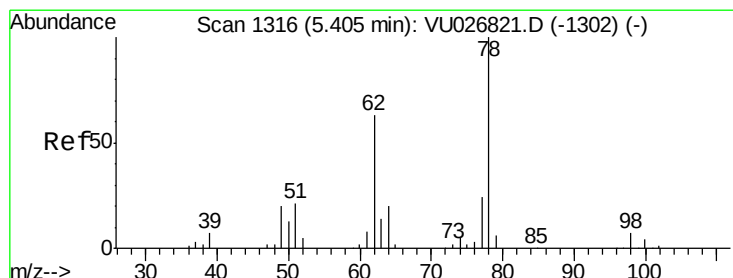
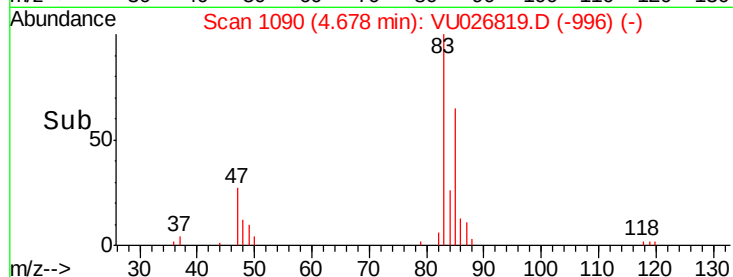
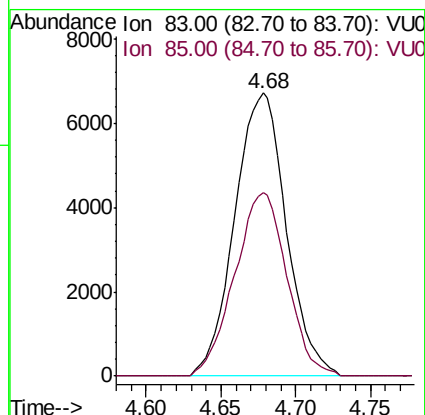
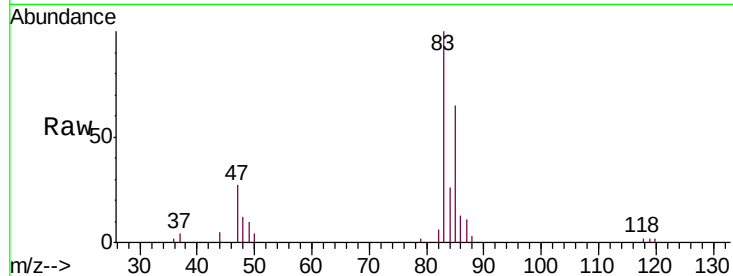




#25  
Chloroform  
Concen: 5.292 ug/L  
RT: 4.68 min Scan# 1090  
Delta R.T. 0.00 min  
Lab File: VU026819.D  
Acq: 17 Sep 2018 12:50

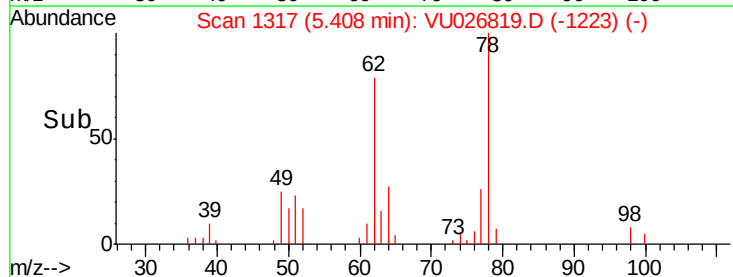
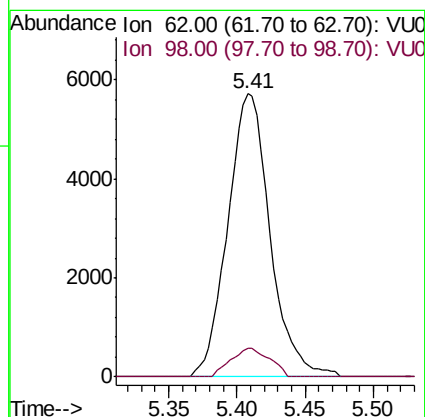
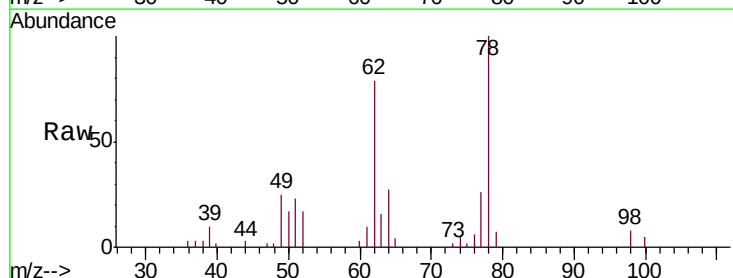
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00549

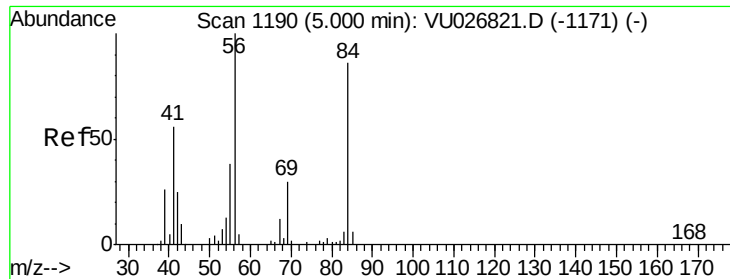
Tgt Ion: 83 Resp: 16102  
Ion Ratio Lower Upper  
83 100  
85 64.7 44.4 82.5



#27  
1,2-Dichloroethane  
Concen: 5.186 ug/L  
RT: 5.41 min Scan# 1317  
Delta R.T. 0.00 min  
Lab File: VU026819.D  
Acq: 17 Sep 2018 12:50

Tgt Ion: 62 Resp: 12313  
Ion Ratio Lower Upper  
62 100  
98 10.3 8.2 12.4

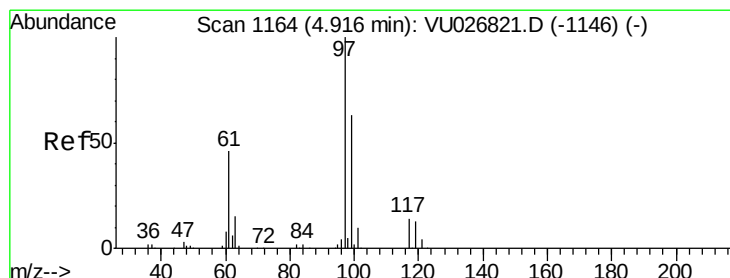
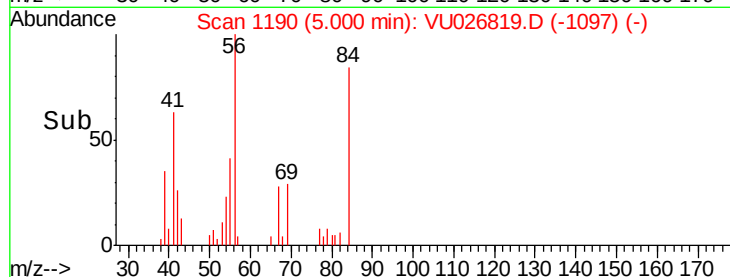
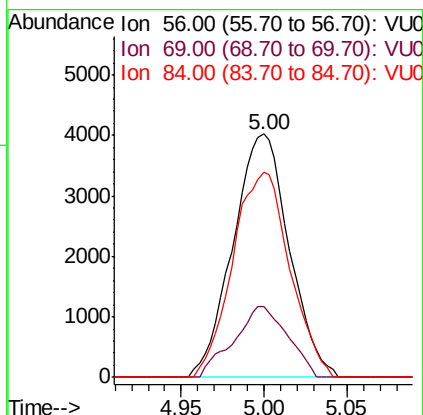
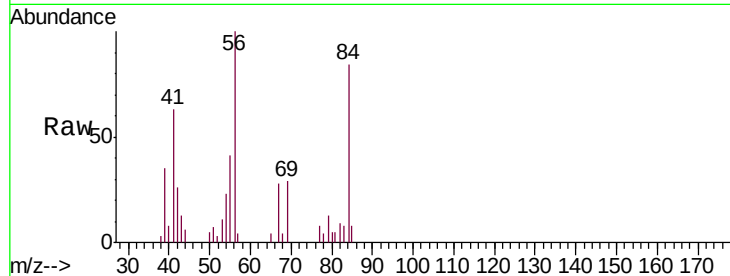




#29  
Cyclohexane  
Concen: 3.788 ug/L  
RT: 5.00 min Scan# 1190  
Delta R.T. -0.00 min  
Lab File: VU026819.D  
Acq: 17 Sep 2018 12:50

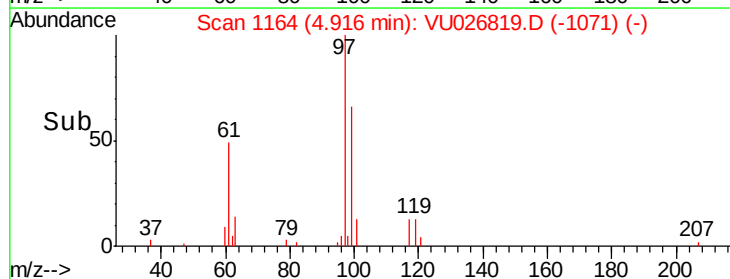
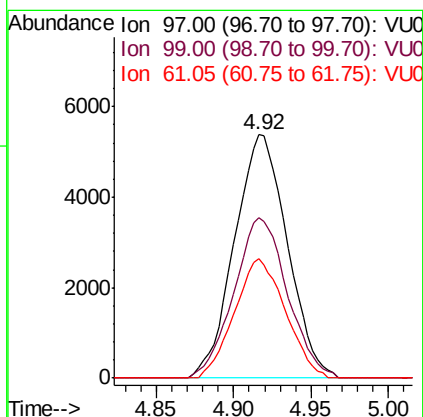
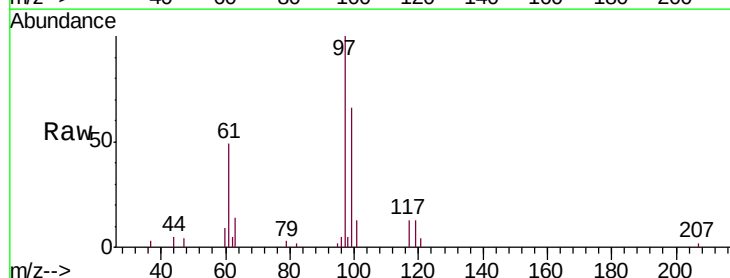
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00549

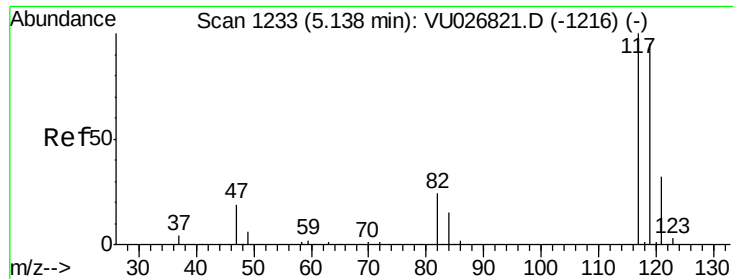
Tgt Ion: 56 Resp: 9464  
Ion Ratio Lower Upper  
56 100  
69 28.1 23.7 35.5  
84 85.5 69.0 103.4



#30  
1,1,1-Trichloroethane  
Concen: 4.993 ug/L  
RT: 4.92 min Scan# 1164  
Delta R.T. -0.00 min  
Lab File: VU026819.D  
Acq: 17 Sep 2018 12:50

Tgt Ion: 97 Resp: 12782  
Ion Ratio Lower Upper  
97 100  
99 66.7 51.8 77.8  
61 47.2 36.6 54.8

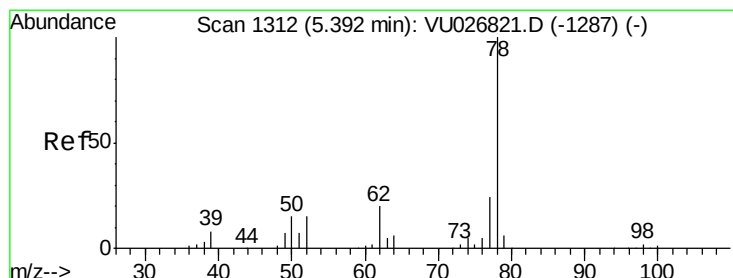
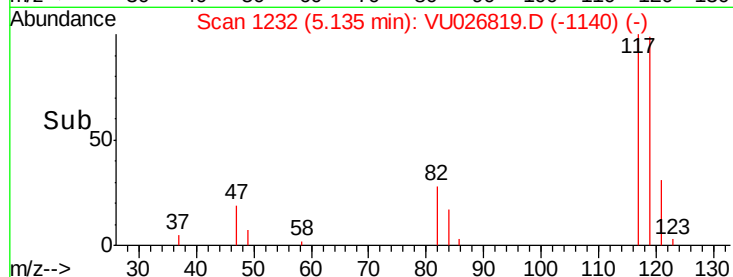
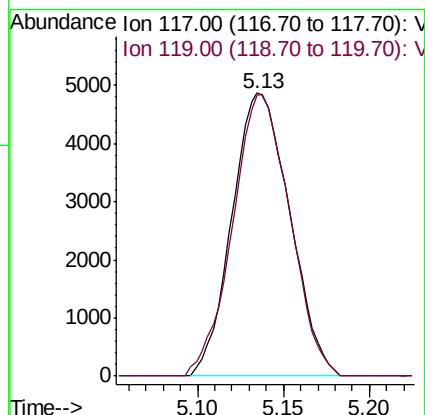
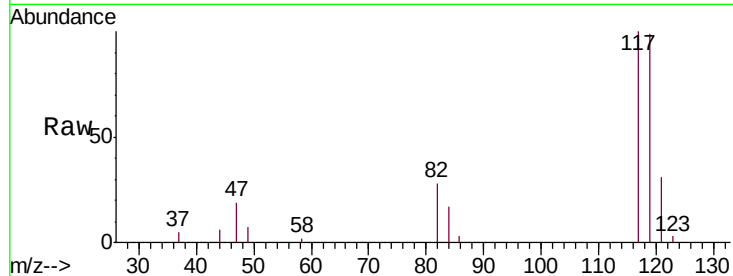




#31  
Carbon tetrachloride  
Concen: 4.945 ug/L  
RT: 5.13 min Scan# 1232  
Delta R.T. -0.00 min  
Lab File: VU026819.D  
Acq: 17 Sep 2018 12:50

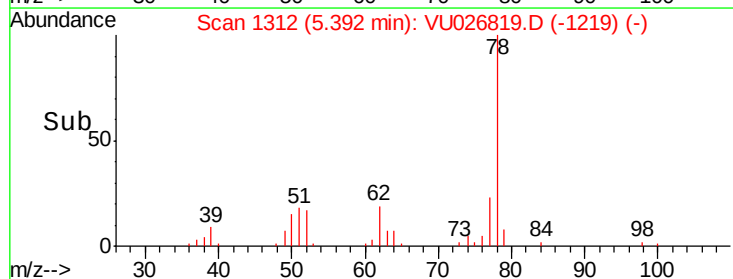
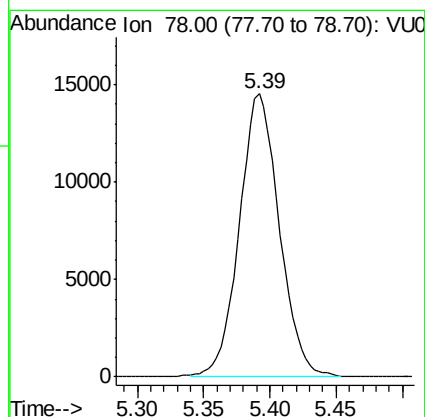
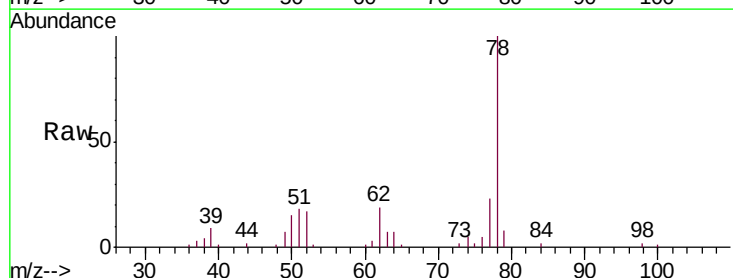
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00549

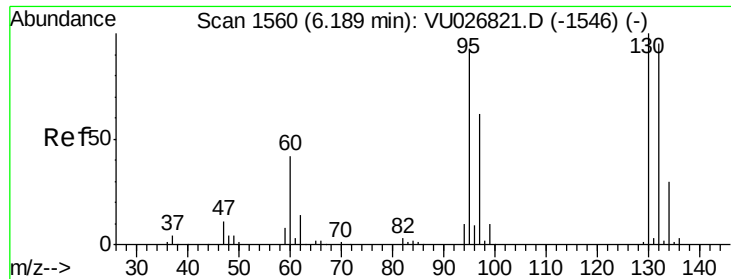
Tgt Ion:117 Resp: 11344  
Ion Ratio Lower Upper  
117 100  
119 98.3 76.3 114.5



#33  
Benzene  
Concen: 4.561 ug/L  
RT: 5.39 min Scan# 1312  
Delta R.T. -0.00 min  
Lab File: VU026819.D  
Acq: 17 Sep 2018 12:50

Tgt Ion: 78 Resp: 30430





#34

Trichloroethene

Concen: 4.896 ug/L

RT: 6.19 min Scan# 1560

Delta R.T. -0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00549

Tgt Ion: 95 Resp: 7839

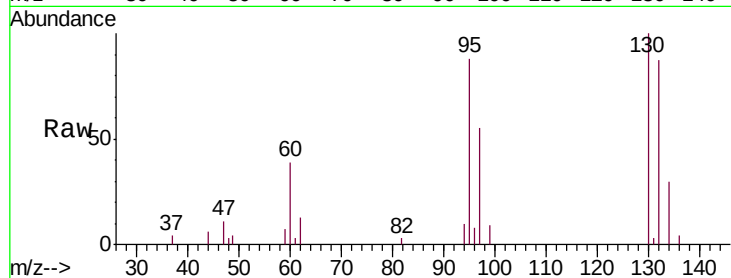
Ion Ratio Lower Upper

95 100

97 62.9 46.3 85.9

132 99.8 71.7 133.1

130 114.1 75.3 139.8

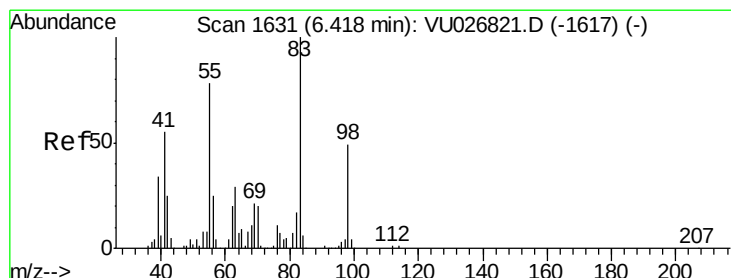
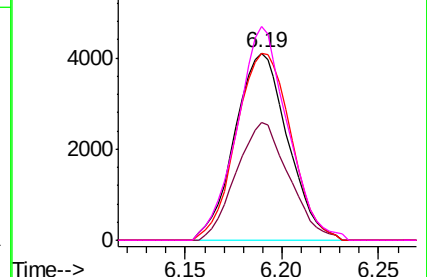
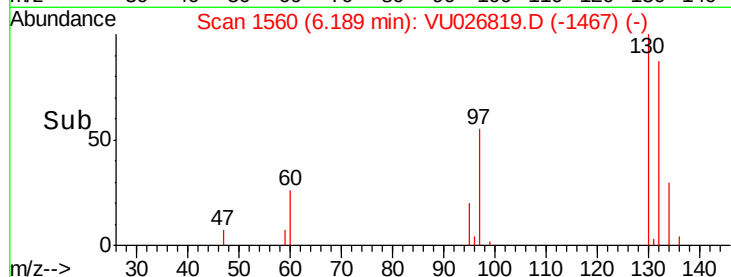


Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 97.00 (96.70 to 97.70): VU0

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V



#35

Methylcyclohexane

Concen: 3.935 ug/L

RT: 6.42 min Scan# 1631

Delta R.T. -0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

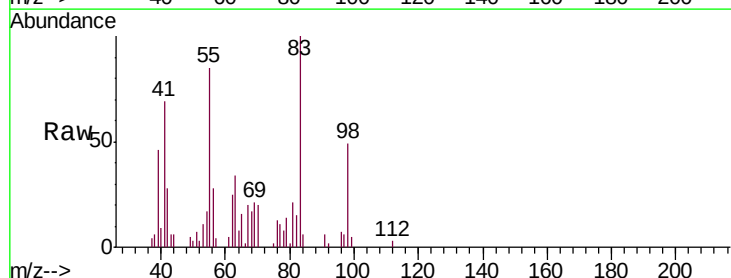
Tgt Ion: 83 Resp: 10269

Ion Ratio Lower Upper

83 100

55 82.0 61.7 92.5

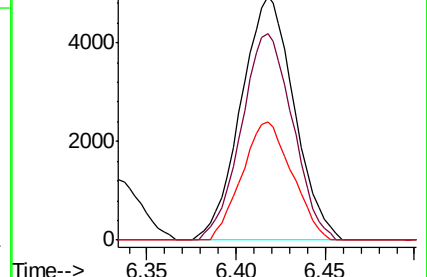
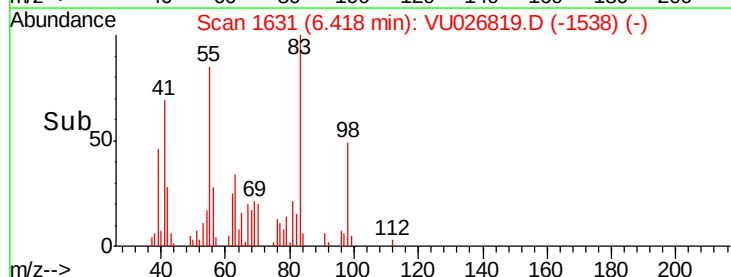
98 45.7 38.3 57.5



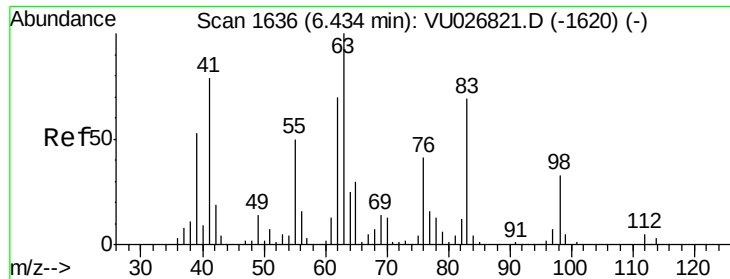
Abundance Ion 83.00 (82.70 to 83.70): VU0

Ion 55.00 (54.70 to 55.70): VU0

Ion 98.00 (97.70 to 98.70): VU0



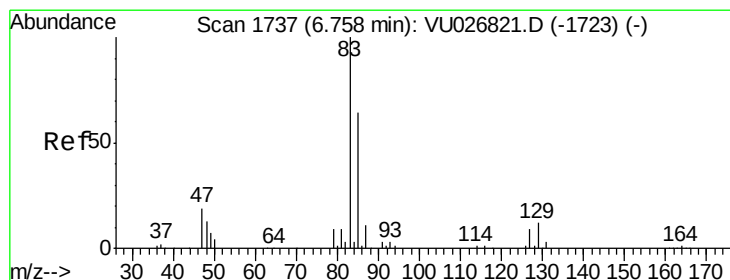
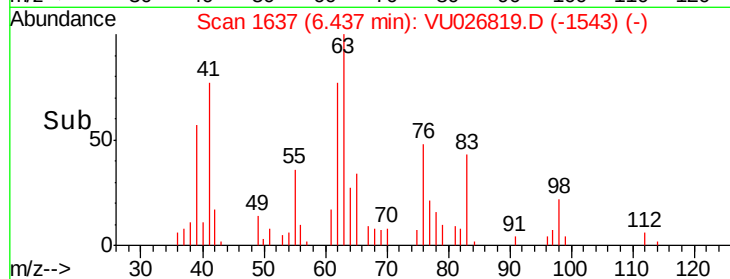
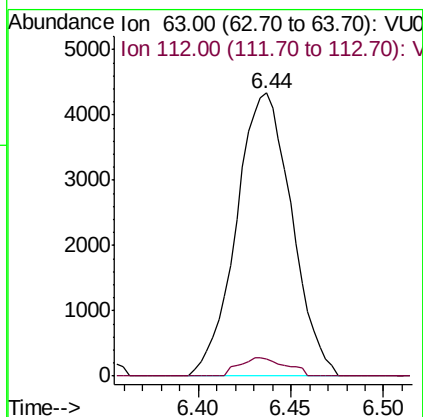
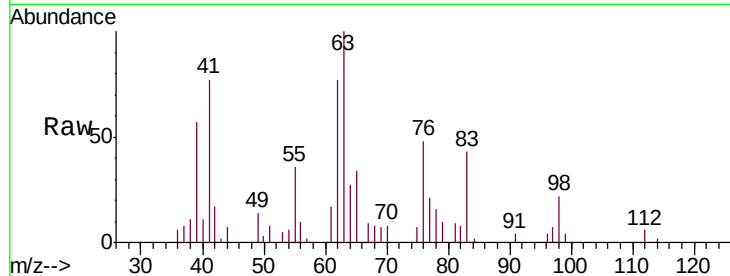




#37  
 1,2-Dichloropropane  
 Concen: 4.910 ug/L  
 RT: 6.44 min Scan# 1637  
 Delta R.T. 0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

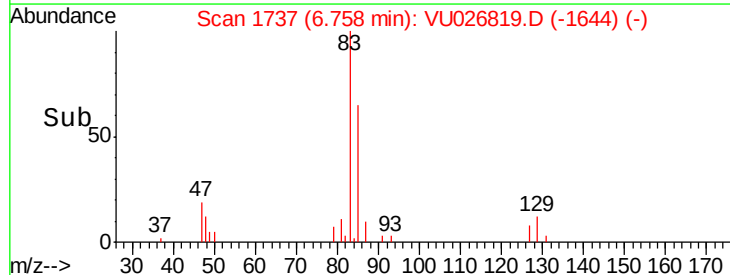
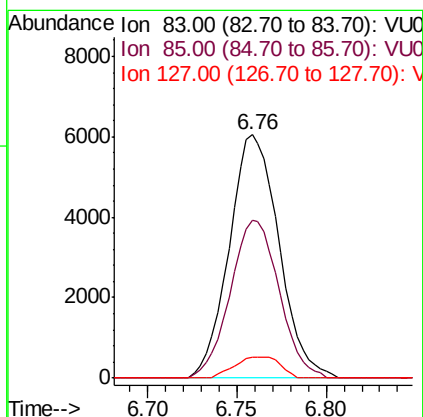
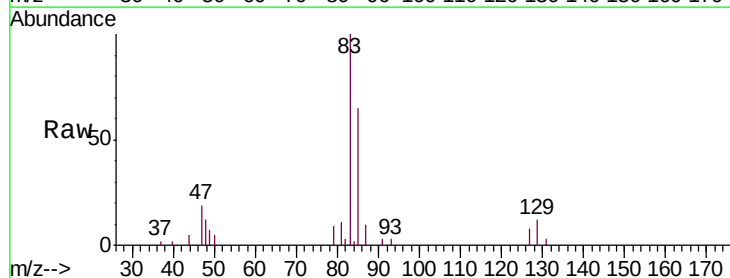
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00549

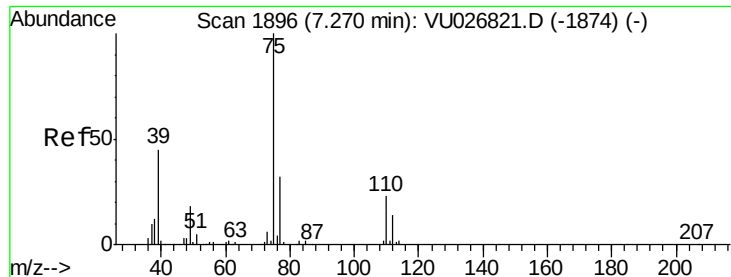
Tgt Ion: 63 Resp: 8998  
 Ion Ratio Lower Upper  
 63 100  
 112 5.2 3.7 5.5



#38  
 Bromodichloromethane  
 Concen: 5.157 ug/L  
 RT: 6.76 min Scan# 1737  
 Delta R.T. -0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

Tgt Ion: 83 Resp: 11722  
 Ion Ratio Lower Upper  
 83 100  
 85 64.6 44.5 82.7  
 127 8.4 6.9 10.3



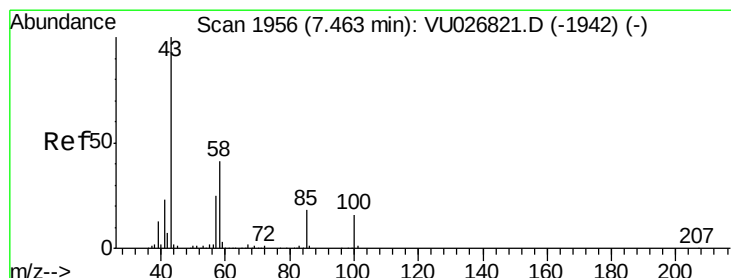
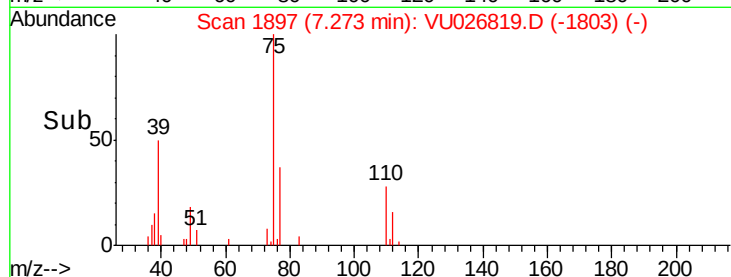
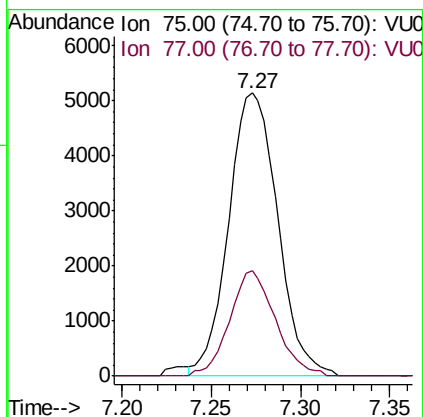
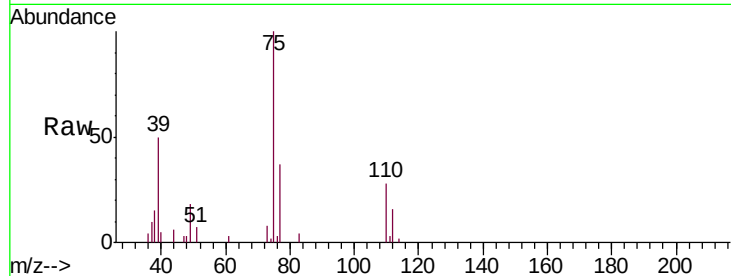


#39

cis-1,3-Dichloropropene  
 Concen: 3.810 ug/L  
 RT: 7.27 min Scan# 1897  
 Delta R.T. 0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00549

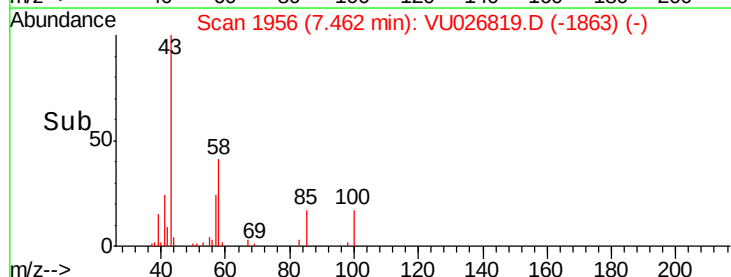
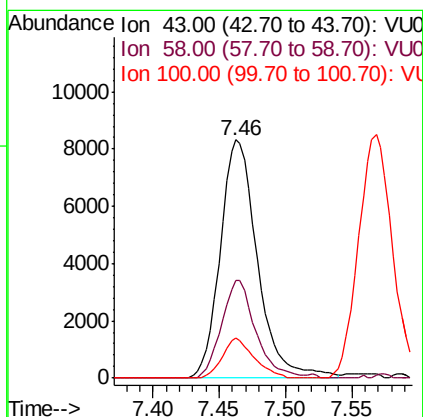
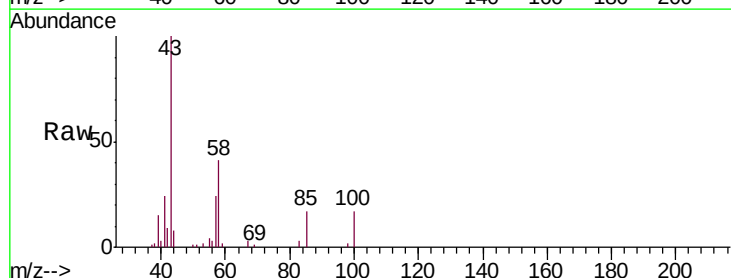
Tgt Ion: 75 Resp: 9865  
 Ion Ratio Lower Upper  
 75 100  
 77 37.3 22.1 41.1

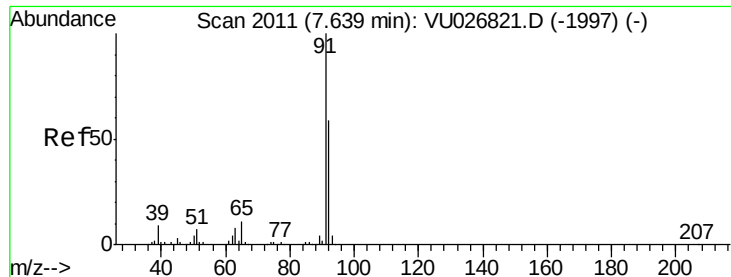


#40

4-Methyl-2-pentanone  
 Concen: 7.450 ug/L  
 RT: 7.46 min Scan# 1956  
 Delta R.T. -0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

Tgt Ion: 43 Resp: 16224  
 Ion Ratio Lower Upper  
 43 100  
 58 37.6 32.0 48.0  
 100 14.2 12.6 19.0





#42

Toluene

Concen: 4.089 ug/L

RT: 7.64 min Scan# 2011

Delta R.T. -0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

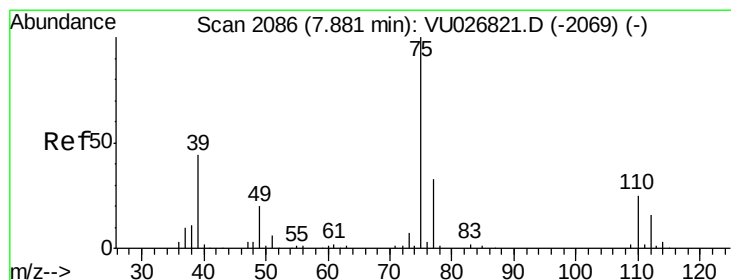
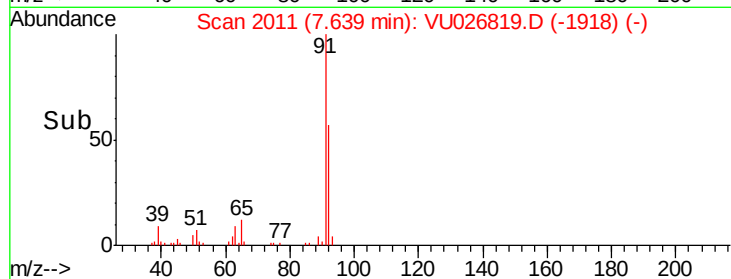
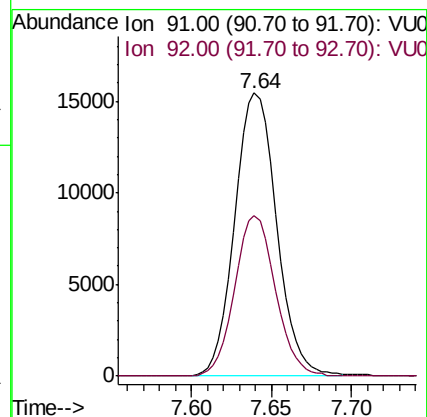
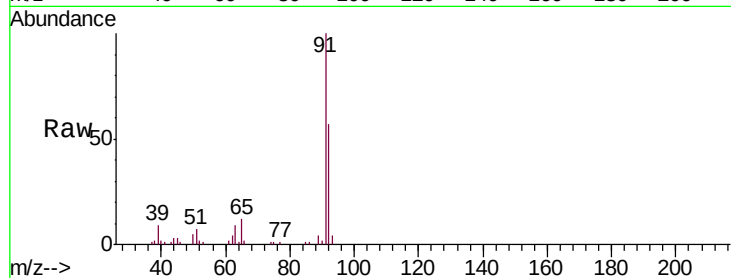
VSTD00549

Tgt Ion: 91 Resp: 27606

Ion Ratio Lower Upper

91 100

92 56.6 40.9 76.0



#44

trans-1,3-Dichloropropene

Concen: 4.224 ug/L

RT: 7.88 min Scan# 2087

Delta R.T. 0.00 min

Lab File: VU026819.D

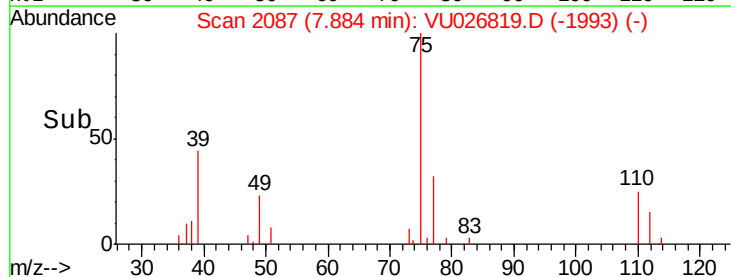
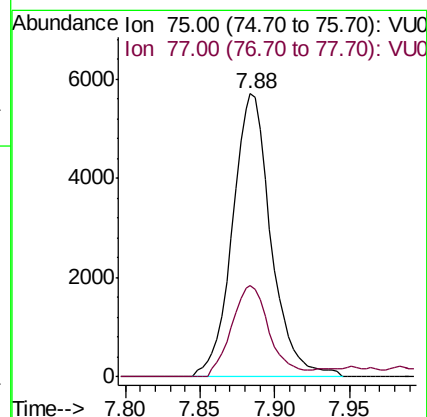
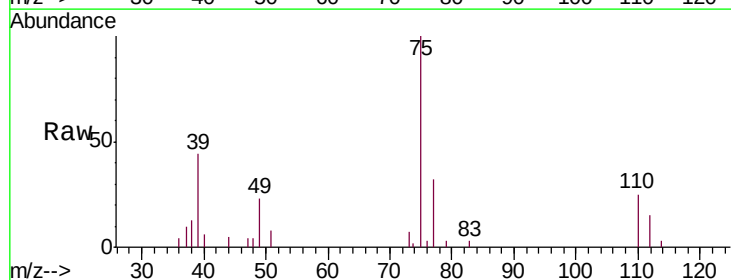
Acq: 17 Sep 2018 12:50

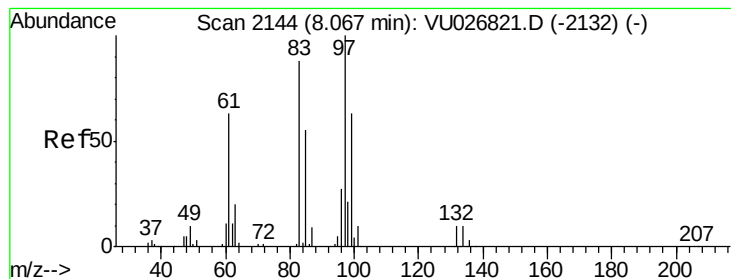
Tgt Ion: 75 Resp: 10239

Ion Ratio Lower Upper

75 100

77 32.5 22.8 42.4





#45

1,1,2-Trichloroethane

Concen: 5.070 ug/L

RT: 8.07 min Scan# 2145

Delta R.T. 0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00549

Tgt Ion: 97 Resp: 8471

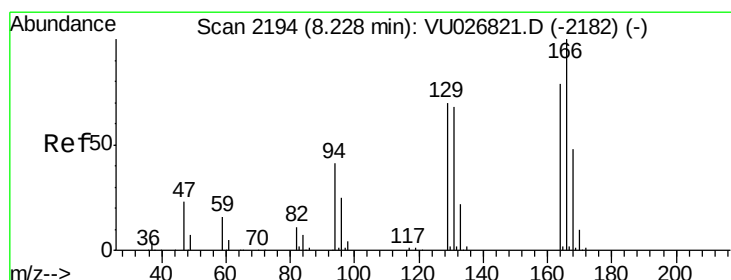
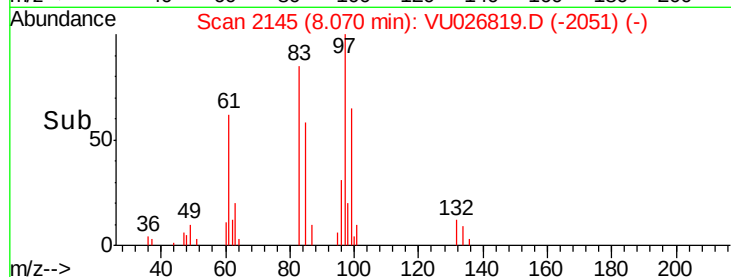
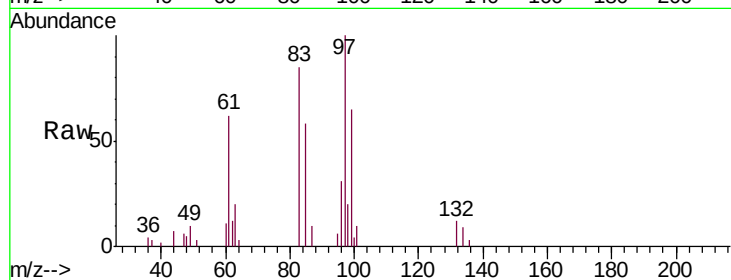
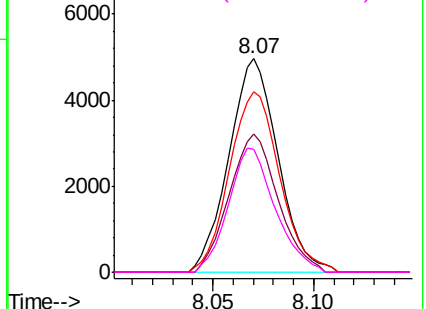
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 99  | 64.6  | 44.3  | 82.3  |
| 83  | 84.6  | 61.5  | 114.1 |
| 85  | 57.5  | 38.6  | 71.6  |

Abundance Ion 97.00 (96.70 to 97.70): VU0

Ion 99.00 (98.70 to 99.70): VU0

Ion 83.00 (82.70 to 83.70): VU0

Ion 85.00 (84.70 to 85.70): VU0



#46

Tetrachloroethene

Concen: 4.885 ug/L

RT: 8.23 min Scan# 2195

Delta R.T. 0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Tgt Ion: 164 Resp: 6933

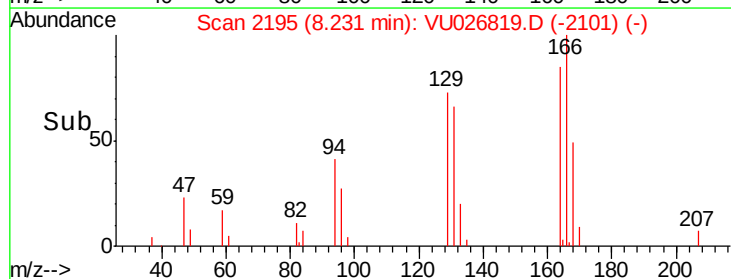
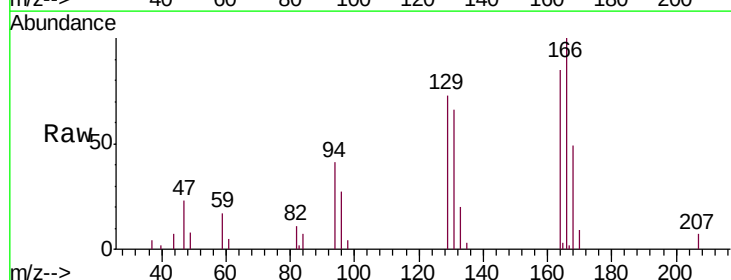
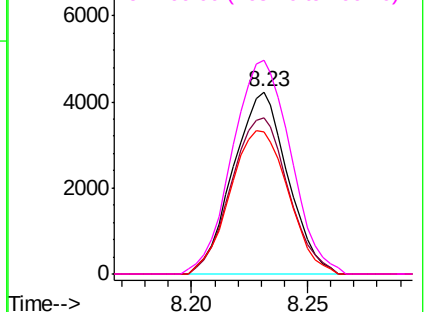
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 129 | 85.8  | 62.2  | 115.4 |
| 131 | 77.8  | 60.5  | 112.5 |
| 166 | 117.2 | 89.0  | 165.2 |

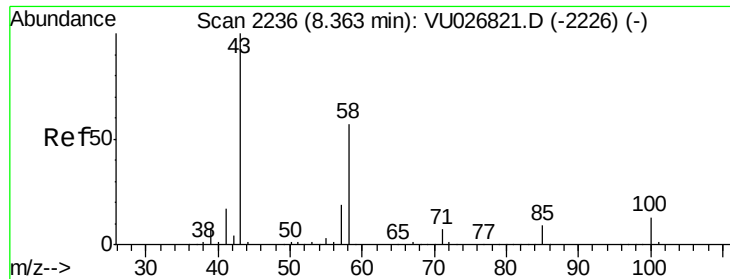
Abundance Ion 164.00 (163.70 to 164.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V

Ion 166.00 (165.70 to 166.70): V

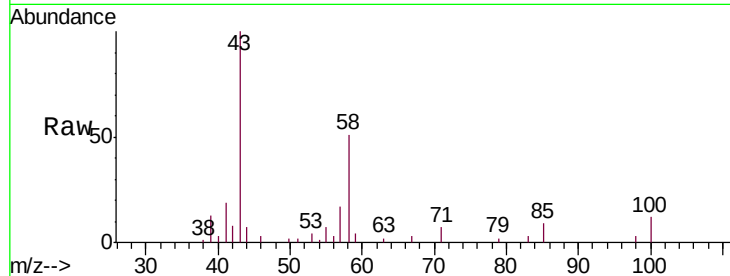




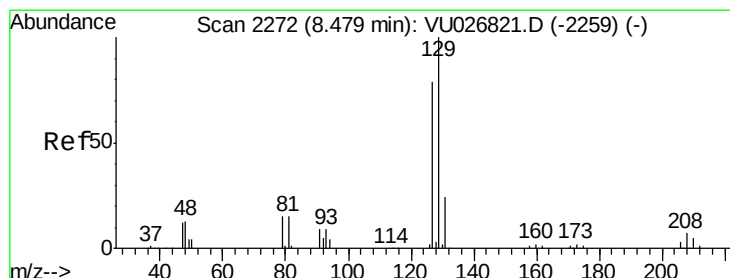
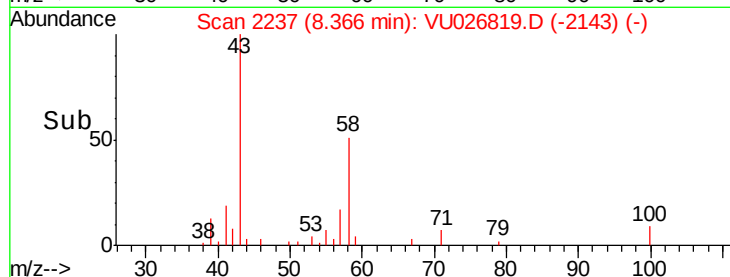
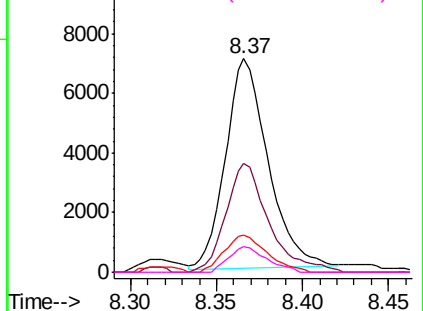
#48  
2-Hexanone  
Concen: 6.906 ug/L  
RT: 8.37 min Scan# 2237  
Delta R.T. 0.00 min  
Lab File: VU026819.D  
Acq: 17 Sep 2018 12:50

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00549

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 12131 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 58       | 52.5  | 44.9  | 67.3  |
| 57       | 17.8  | 15.4  | 23.2  |
| 100      | 10.8  | 10.2  | 15.4  |

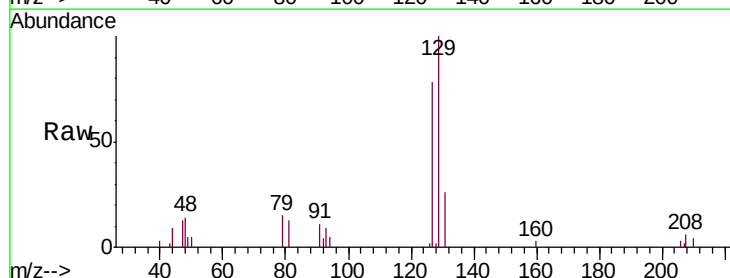


Abundance Ion 43.00 (42.70 to 43.70): VU0  
Ion 58.00 (57.70 to 58.70): VU0  
Ion 57.00 (56.70 to 57.70): VU0  
Ion 100.00 (99.70 to 100.70): VU0

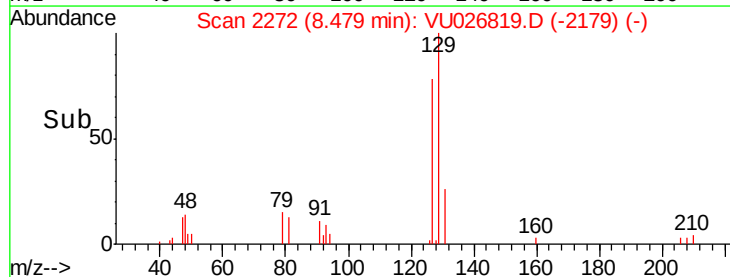
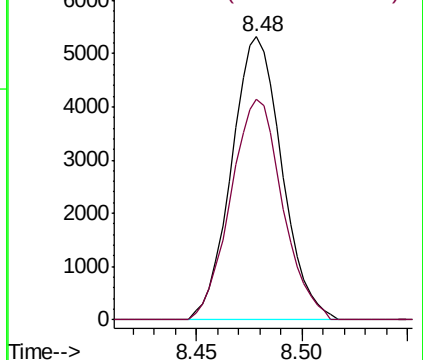


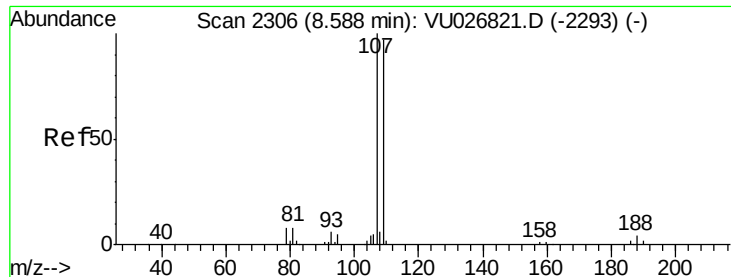
#49  
Dibromochloromethane  
Concen: 4.661 ug/L  
RT: 8.48 min Scan# 2272  
Delta R.T. -0.00 min  
Lab File: VU026819.D  
Acq: 17 Sep 2018 12:50

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 129   | Resp: | 8815  |
| Ion      | Ratio | Lower | Upper |
| 129      | 100   |       |       |
| 127      | 78.1  | 55.2  | 102.4 |



Abundance Ion 129.00 (128.70 to 129.70): V  
Ion 127.00 (126.70 to 127.70): V

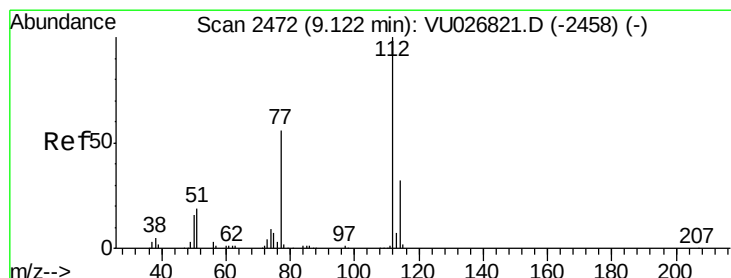
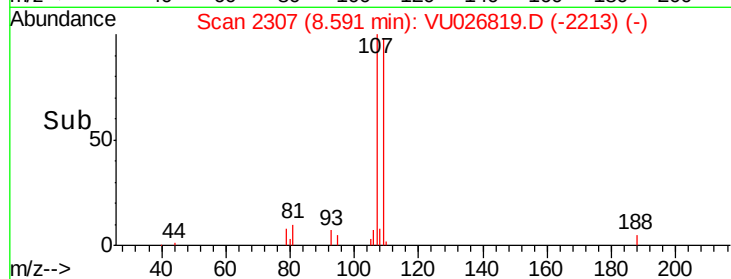
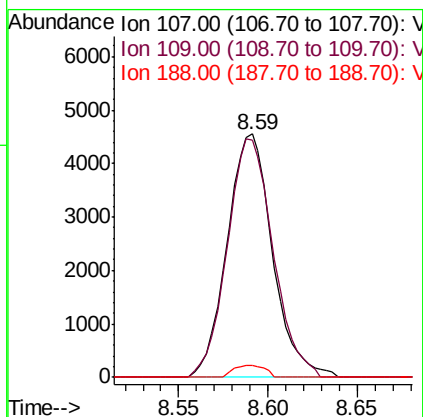
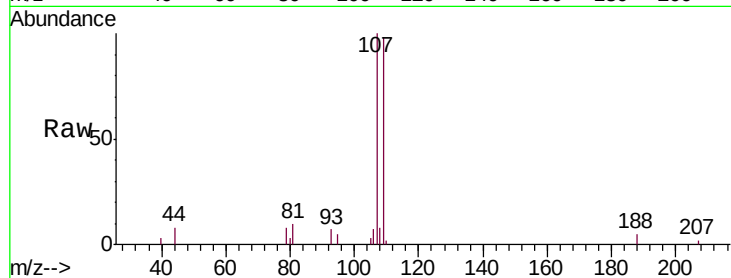




#50  
 1,2-Dibromoethane  
 Concen: 4.638 ug/L  
 RT: 8.59 min Scan# 2307  
 Delta R.T. 0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

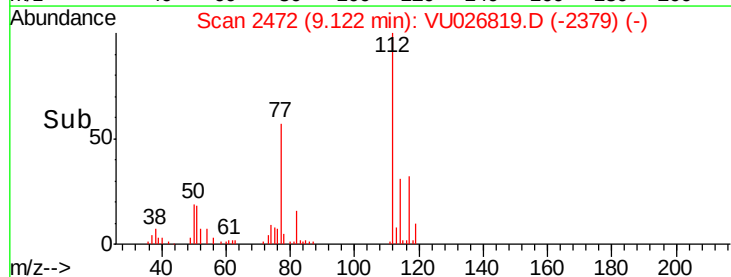
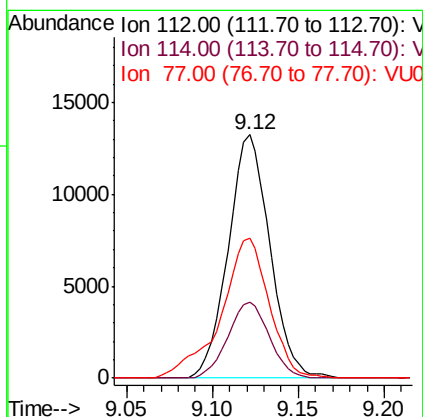
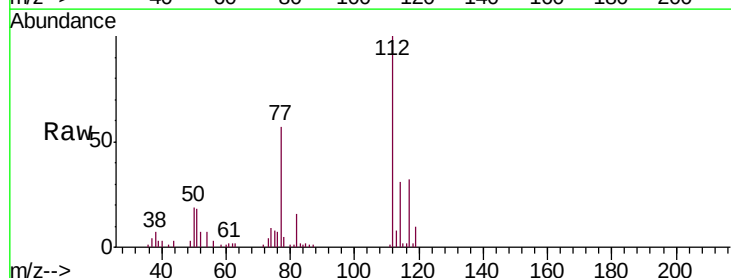
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00549

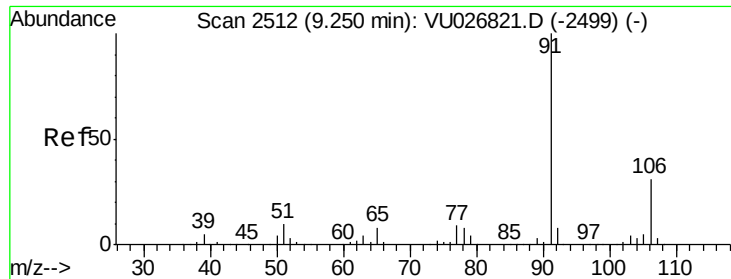
Tgt Ion:107 Resp: 8079  
 Ion Ratio Lower Upper  
 107 100  
 109 97.7 67.8 125.8  
 188 4.8 3.2 4.8#



#51  
 Chlorobenzene  
 Concen: 4.881 ug/L  
 RT: 9.12 min Scan# 2472  
 Delta R.T. -0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

Tgt Ion:112 Resp: 22362  
 Ion Ratio Lower Upper  
 112 100  
 114 31.0 22.3 41.5  
 77 57.4 45.1 67.7





#52

Ethylbenzene

Concen: 3.885 ug/L

RT: 9.25 min Scan# 2513

Delta R.T. 0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

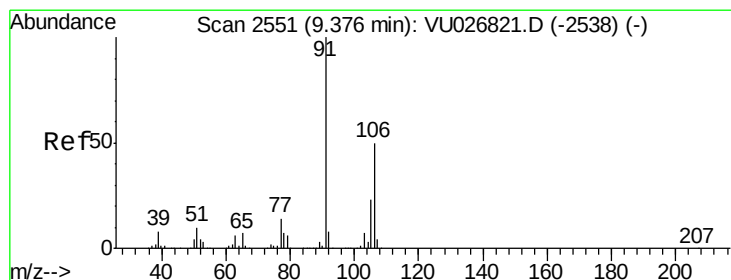
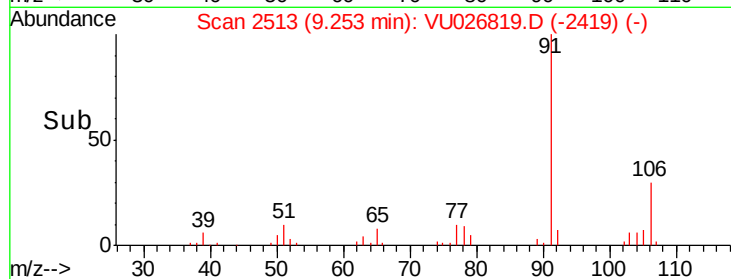
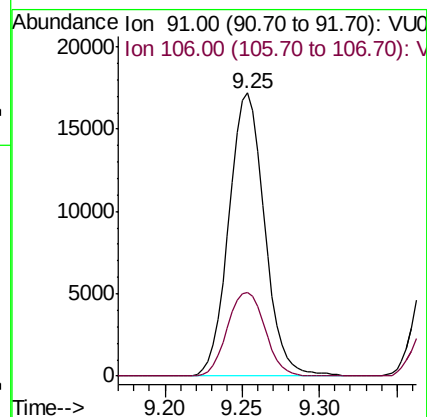
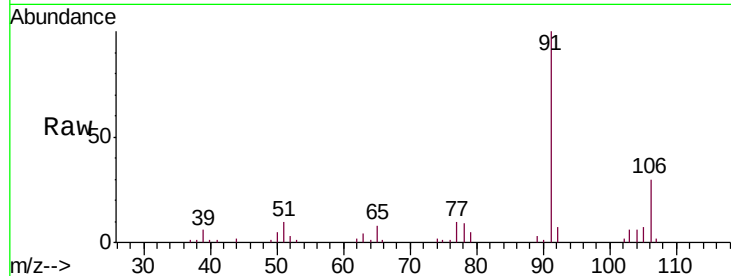
VSTD00549

Tgt Ion: 91 Resp: 27476

Ion Ratio Lower Upper

91 100

106 29.8 22.0 40.8



#53

m,p-Xylene

Concen: 3.542 ug/L

RT: 9.38 min Scan# 2552

Delta R.T. 0.00 min

Lab File: VU026819.D

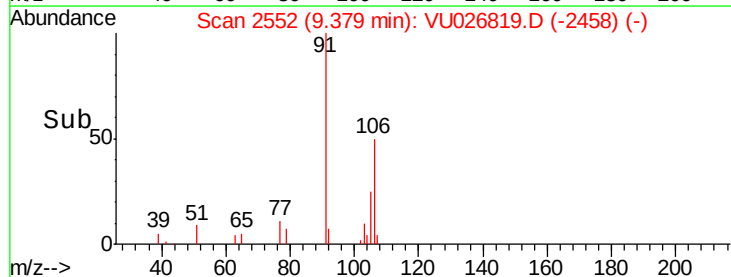
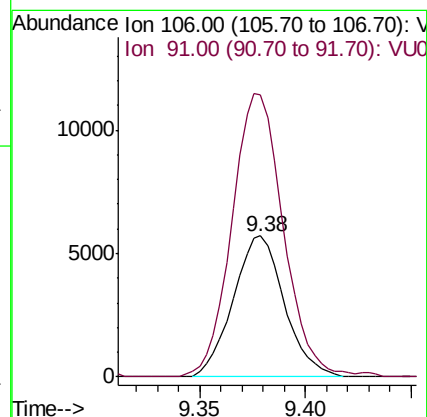
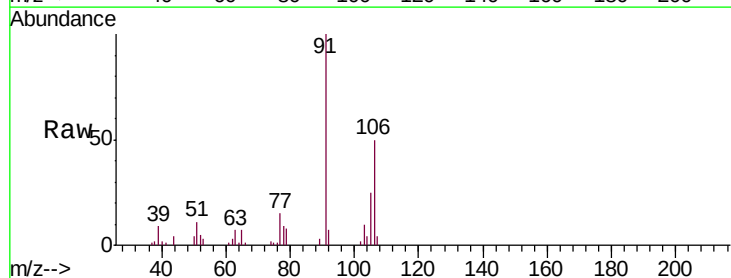
Acq: 17 Sep 2018 12:50

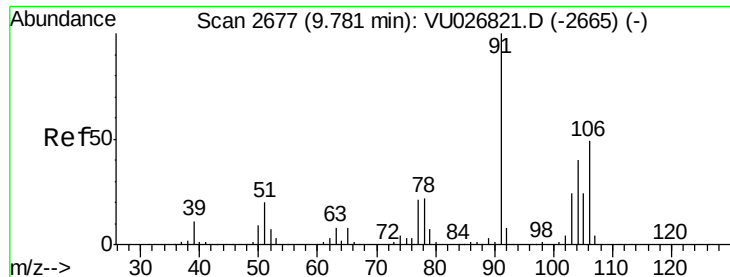
Tgt Ion: 106 Resp: 9630

Ion Ratio Lower Upper

106 100

91 199.7 139.2 258.6

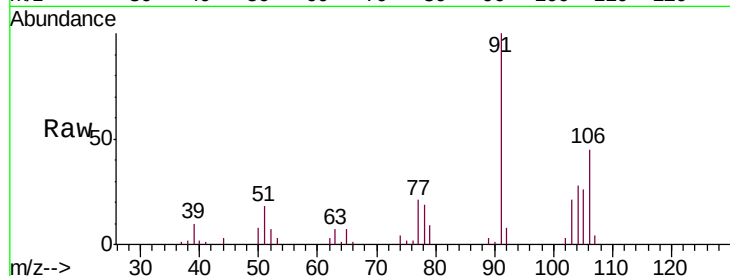




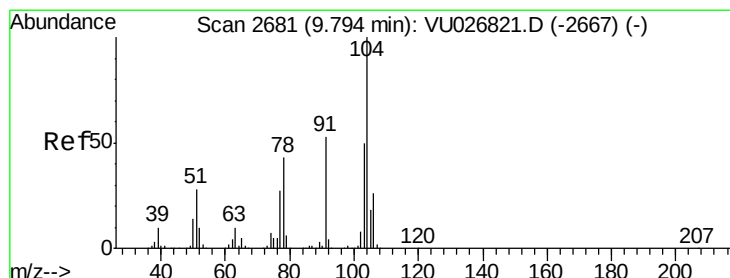
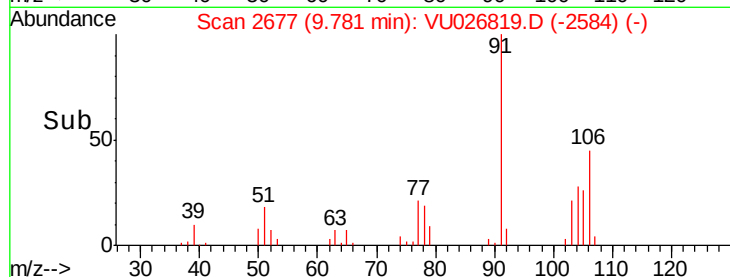
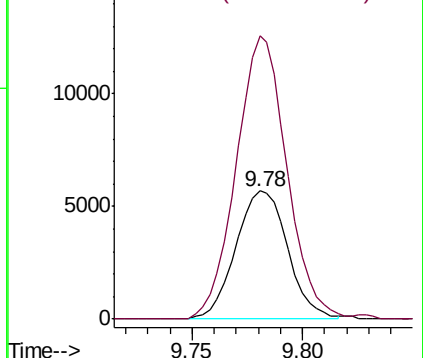
#54  
o-xylene  
Concen: 3.521 ug/L  
RT: 9.78 min Scan# 2677  
Delta R.T. -0.00 min  
Lab File: VU026819.D  
Acq: 17 Sep 2018 12:50

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00549

Tgt Ion:106 Resp: 9327  
Ion Ratio Lower Upper  
106 100  
91 220.8 143.1 265.9

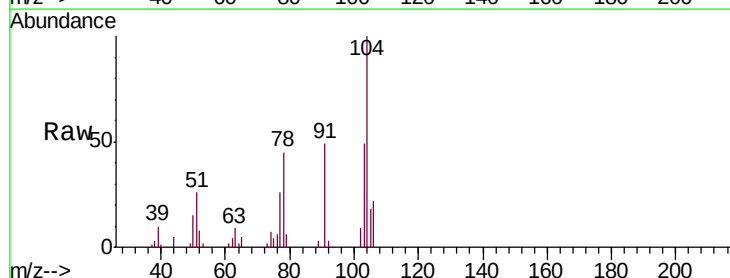


Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): VU0

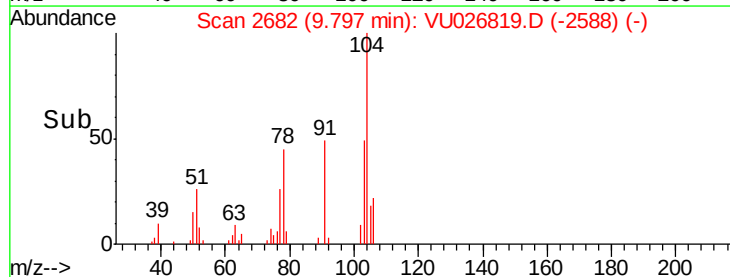
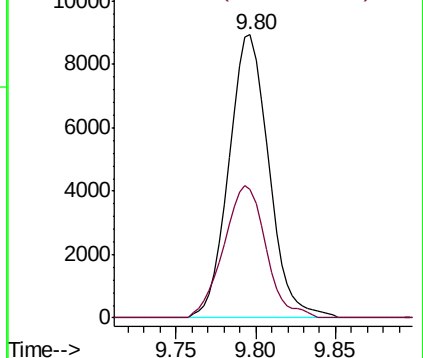


#55  
Styrene  
Concen: 3.331 ug/L  
RT: 9.80 min Scan# 2682  
Delta R.T. 0.00 min  
Lab File: VU026819.D  
Acq: 17 Sep 2018 12:50

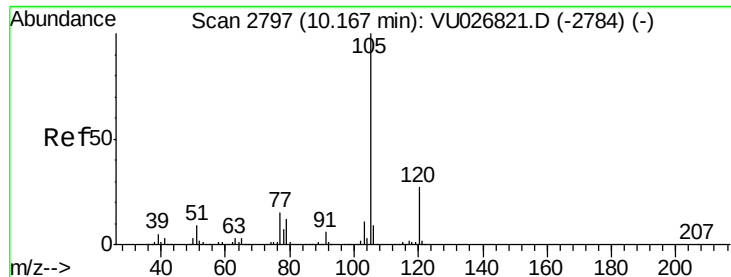
Tgt Ion:104 Resp: 15234  
Ion Ratio Lower Upper  
104 100  
78 45.2 30.5 56.7



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







#56

Isopropylbenzene

Concen: 3.424 ug/L

RT: 10.17 min Scan# 2798

Delta R.T. 0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00549

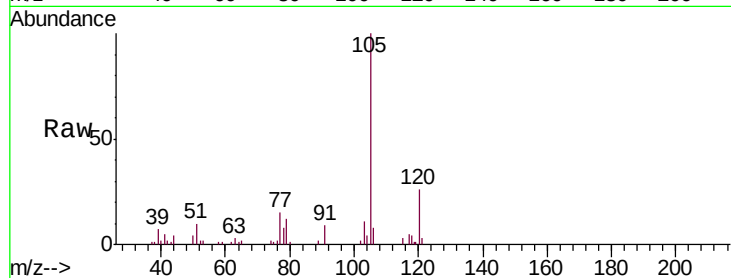
Tgt Ion: 105 Resp: 23168

Ion Ratio Lower Upper

105 100

120 26.5 21.4 32.2

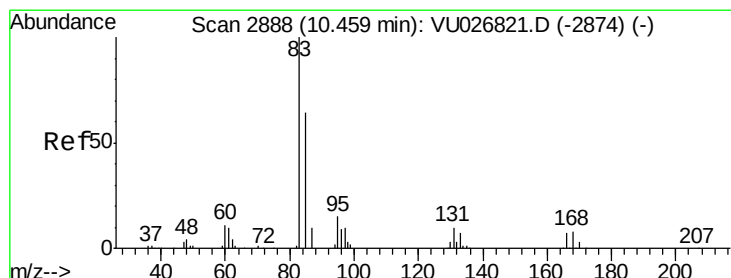
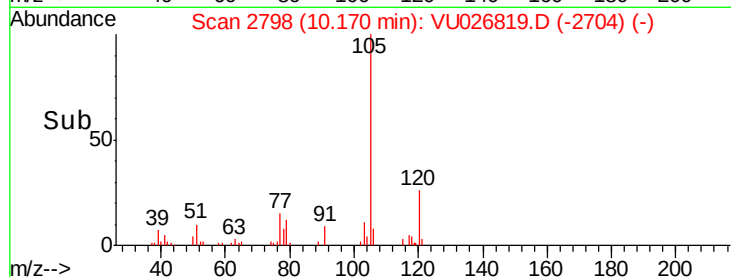
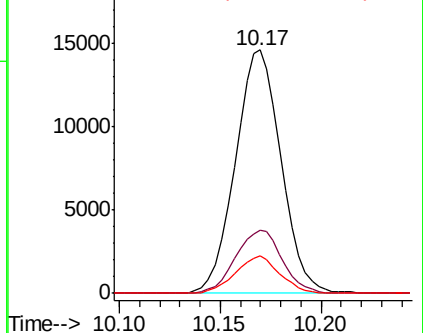
77 14.9 12.2 18.4



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): V



#58

1,1,2,2-Tetrachloroethane

Concen: 4.879 ug/L

RT: 10.46 min Scan# 2888

Delta R.T. -0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

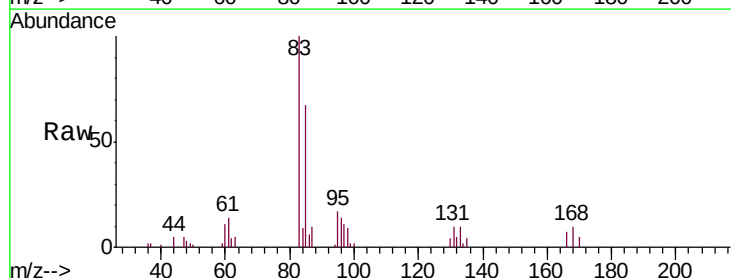
Tgt Ion: 83 Resp: 13713

Ion Ratio Lower Upper

83 100

85 66.8 45.4 84.2

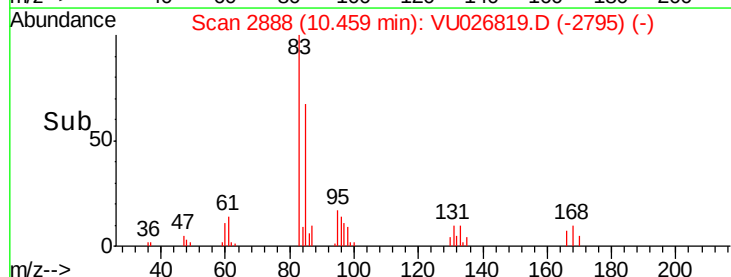
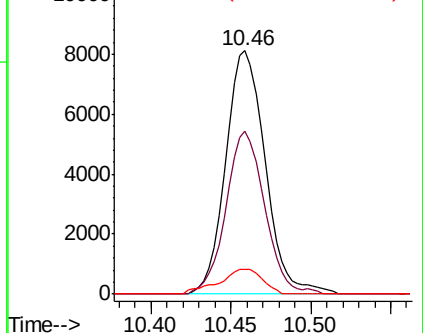
131 10.4 7.9 11.9

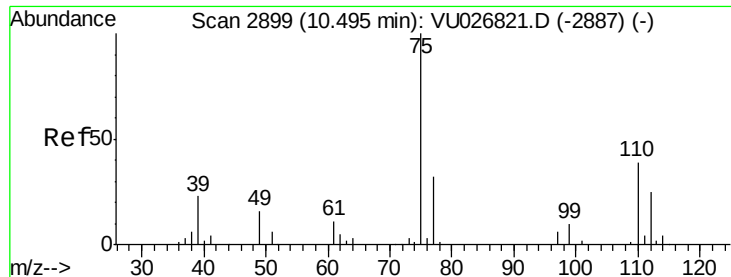


Abundance Ion 83.00 (82.70 to 83.70): V

Ion 85.00 (84.70 to 85.70): V

Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 4.677 ug/L

RT: 10.49 min Scan# 2899

Delta R.T. -0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

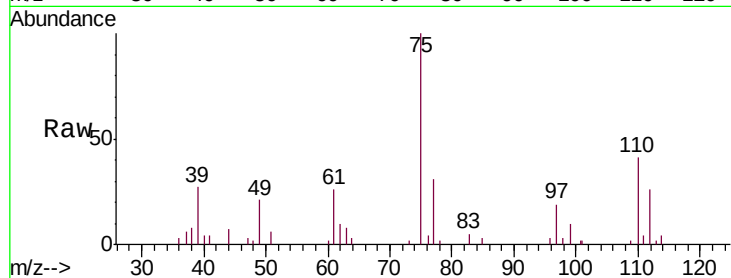
VSTD00549

Tgt Ion: 75 Resp: 10267

Ion Ratio Lower Upper

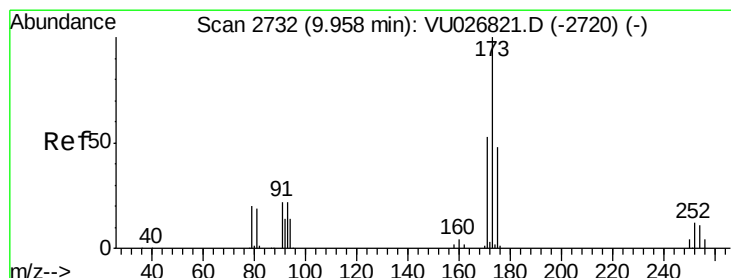
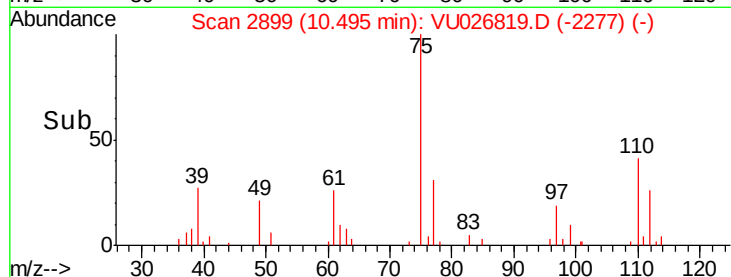
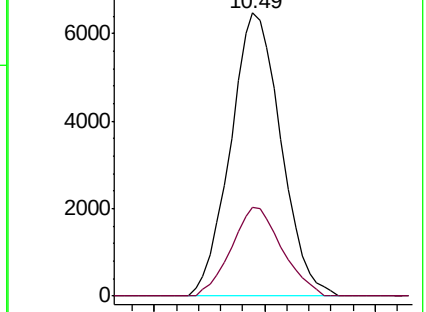
75 100

77 31.4 25.5 38.3



Abundance Ion 75.00 (74.70 to 75.70): VU026821.D (-2887) (-)

Ion 77.00 (76.70 to 77.70): VU026821.D (-2887) (-)



#61

Bromoform

Concen: 5.479 ug/L

RT: 9.96 min Scan# 2733

Delta R.T. 0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

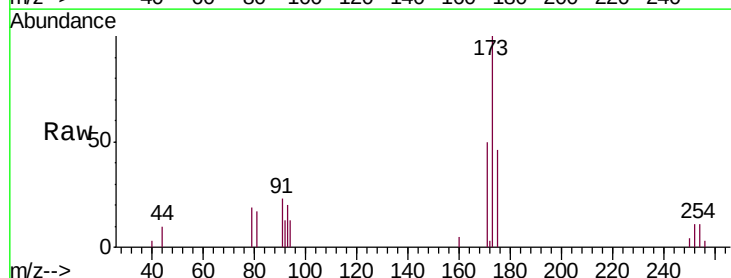
Tgt Ion: 173 Resp: 6635

Ion Ratio Lower Upper

173 100

175 47.9 38.6 57.8

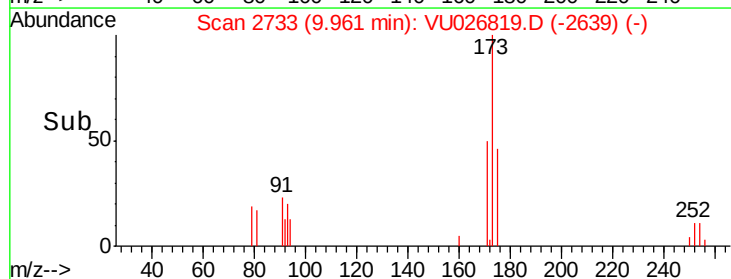
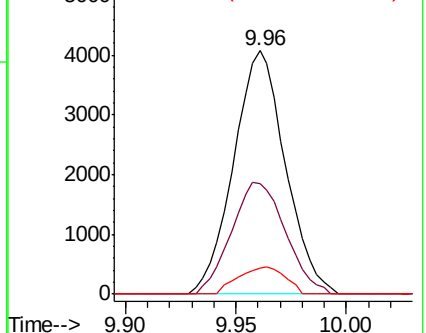
254 10.2 9.4 14.2

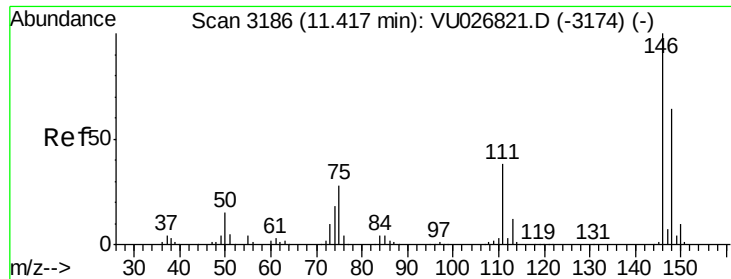


Abundance Ion 173.00 (172.70 to 173.70): VU026821.D (-2720) (-)

Ion 175.00 (174.70 to 175.70): VU026821.D (-2720) (-)

Ion 254.00 (253.70 to 254.70): VU026821.D (-2720) (-)

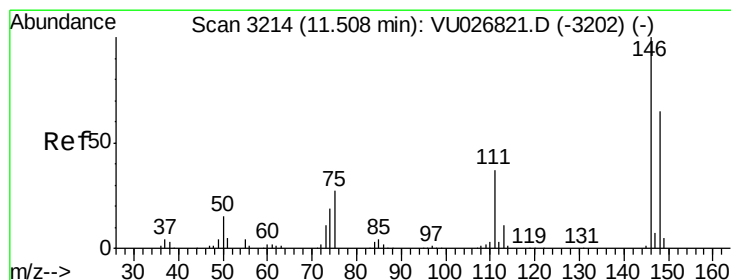
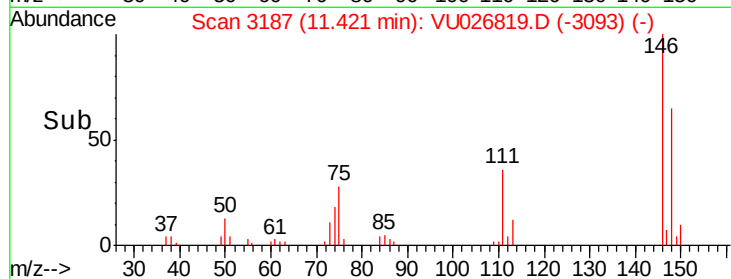
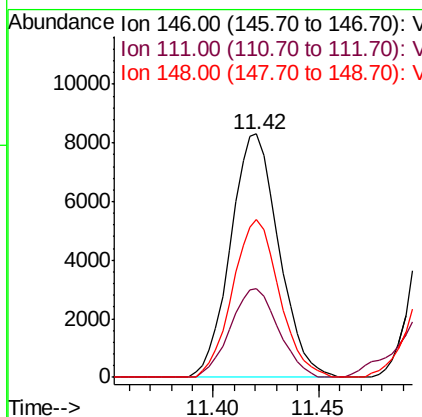
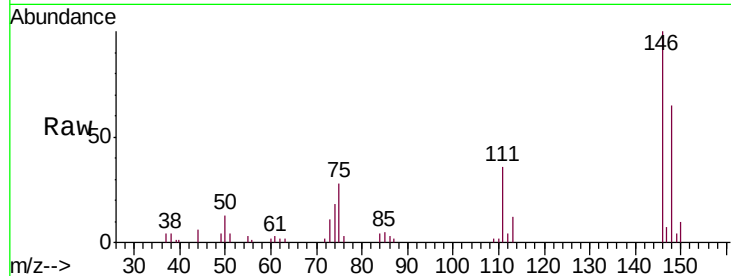




#62  
 1,3-Dichlorobenzene  
 Concen: 4.696 ug/L  
 RT: 11.42 min Scan# 3187  
 Delta R.T. 0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

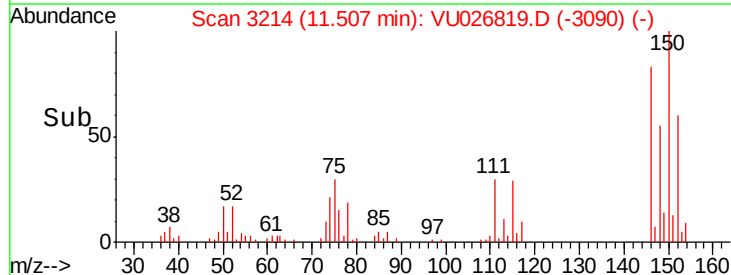
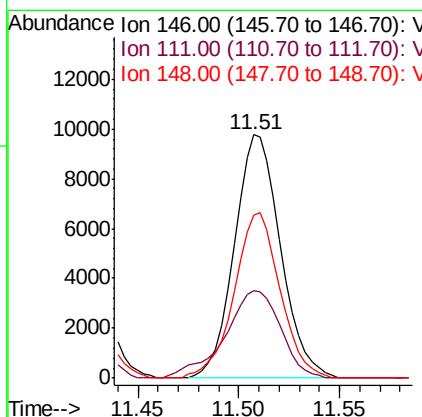
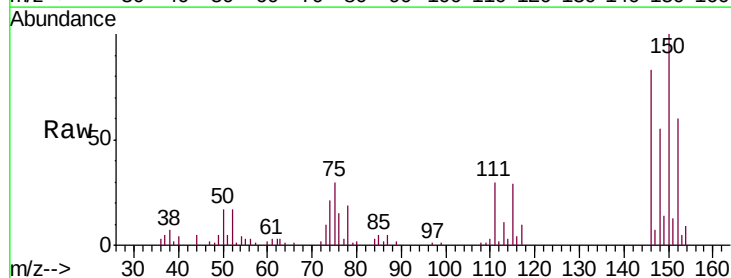
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00549

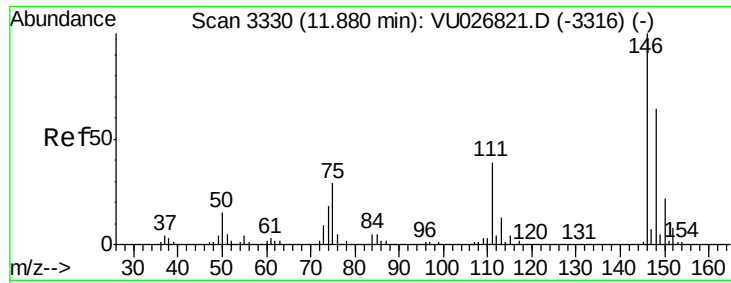
Tgt Ion:146 Resp: 13182  
 Ion Ratio Lower Upper  
 146 100  
 111 36.3 26.7 49.7  
 148 64.7 44.9 83.5



#63  
 1,4-Dichlorobenzene  
 Concen: 5.066 ug/L  
 RT: 11.51 min Scan# 3214  
 Delta R.T. -0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

Tgt Ion:146 Resp: 15661  
 Ion Ratio Lower Upper  
 146 100  
 111 35.8 26.0 48.2  
 148 67.1 45.8 85.2

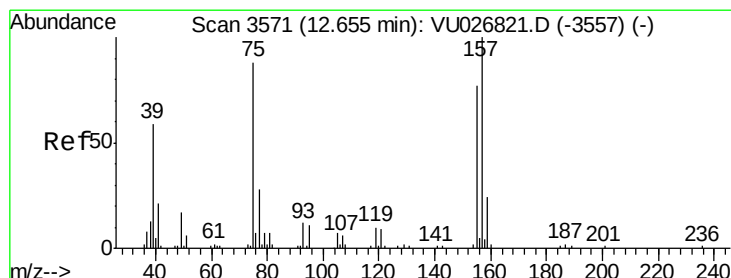
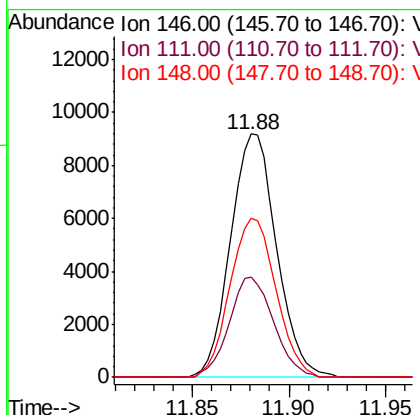
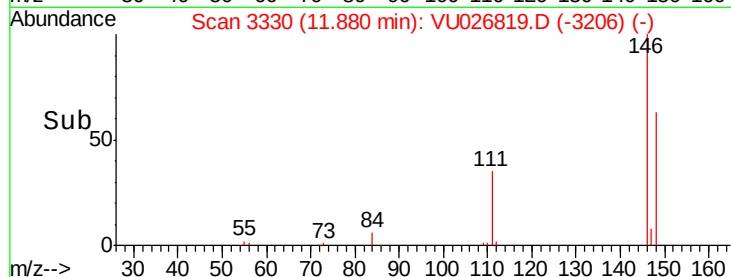
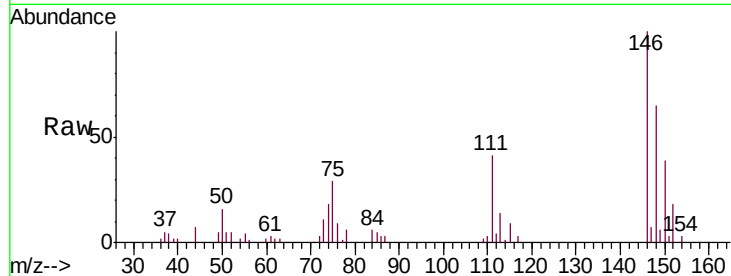




#65  
 1,2-Dichlorobenzene  
 Concen: 4.890 ug/L  
 RT: 11.88 min Scan# 3330  
 Delta R.T. -0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

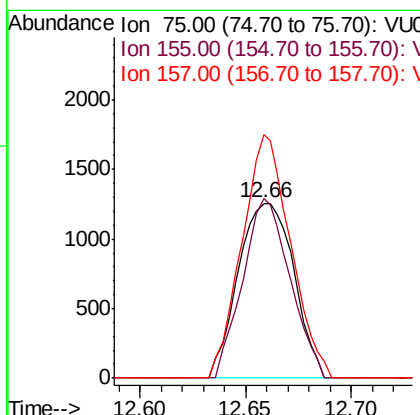
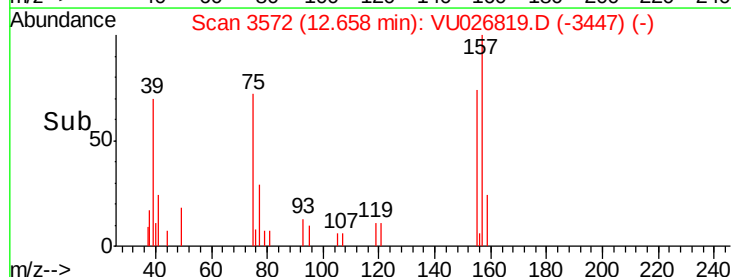
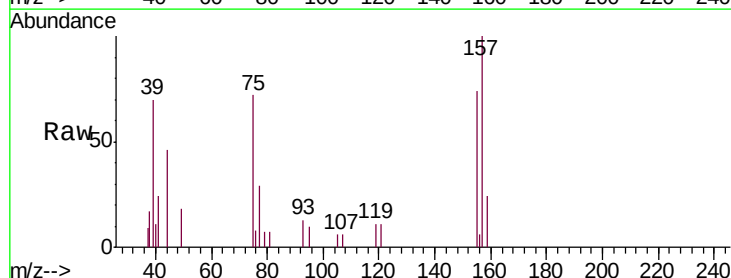
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00549

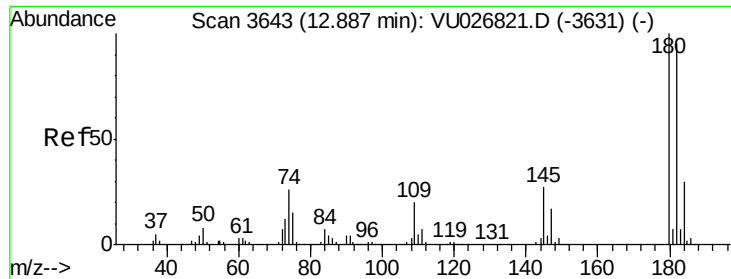
Tgt Ion: 146 Resp: 15200  
 Ion Ratio Lower Upper  
 146 100  
 111 41.0 31.4 47.0  
 148 65.4 51.4 77.2



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 4.858 ug/L  
 RT: 12.66 min Scan# 3572  
 Delta R.T. 0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

Tgt Ion: 75 Resp: 2291  
 Ion Ratio Lower Upper  
 75 100  
 155 102.4 69.5 104.3  
 157 139.3 90.5 135.7#

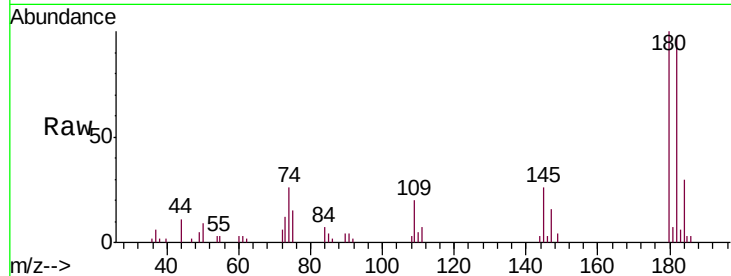




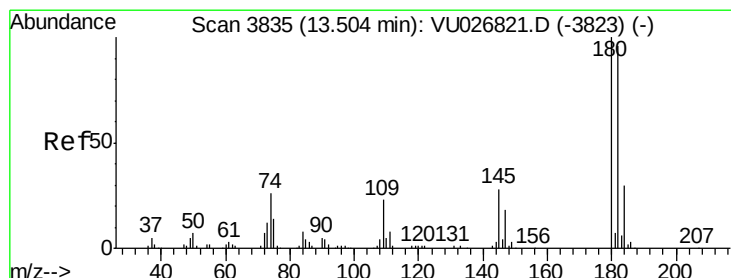
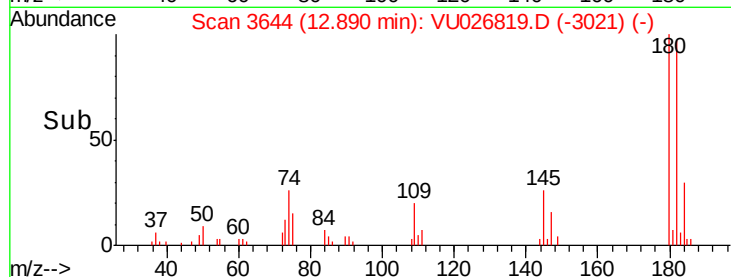
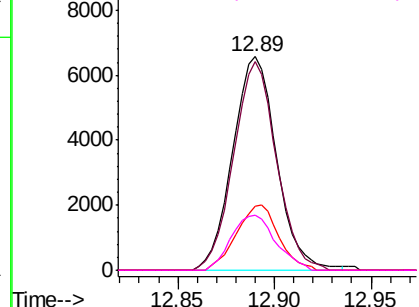
#67  
 1,3,5-Trichlorobenzene  
 Concen: 4.779 ug/L  
 RT: 12.89 min Scan# 3644  
 Delta R.T. 0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00549

Tgt Ion:180 Resp: 10381  
 Ion Ratio Lower Upper  
 180 100  
 182 95.0 76.7 115.1  
 184 29.2 24.2 36.4  
 145 26.1 21.8 32.6

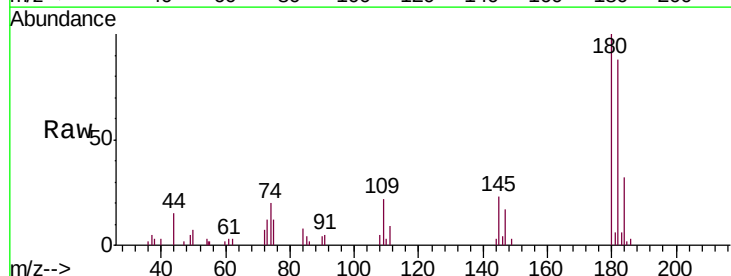


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

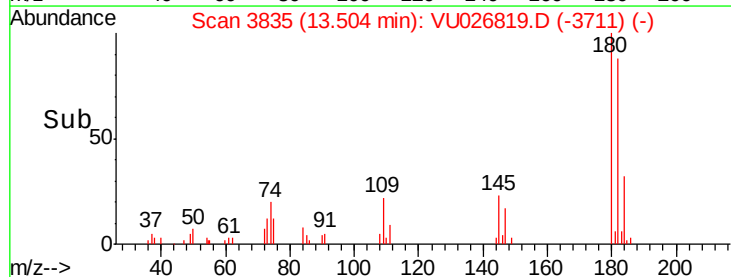
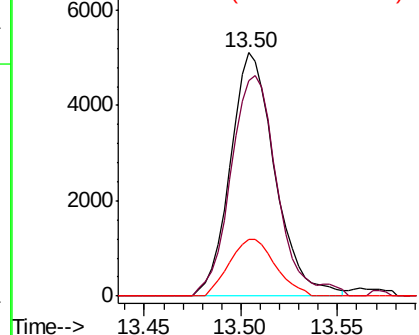


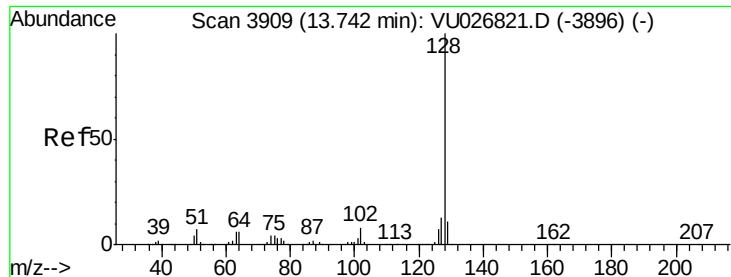
#68  
 1,2,4-trichlorobenzene  
 Concen: 4.369 ug/L  
 RT: 13.50 min Scan# 3835  
 Delta R.T. -0.00 min  
 Lab File: VU026819.D  
 Acq: 17 Sep 2018 12:50

Tgt Ion:180 Resp: 8179  
 Ion Ratio Lower Upper  
 180 100  
 182 92.1 76.8 115.2  
 145 24.2 22.2 33.2



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: 3.172 ug/L

RT: 13.75 min Scan# 3910

Delta R.T. 0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00549

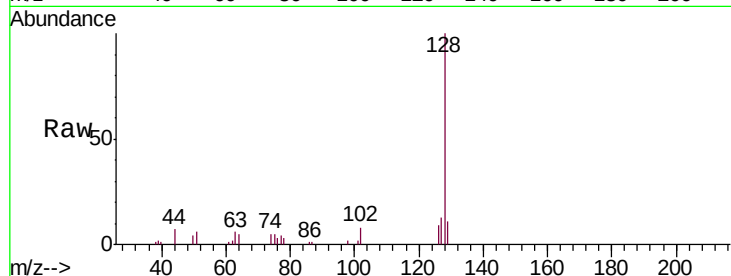
Tgt Ion:128 Resp: 17493

Ion Ratio Lower Upper

128 100

127 13.4 10.2 15.4

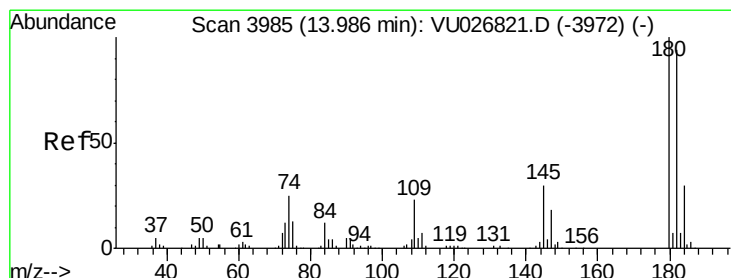
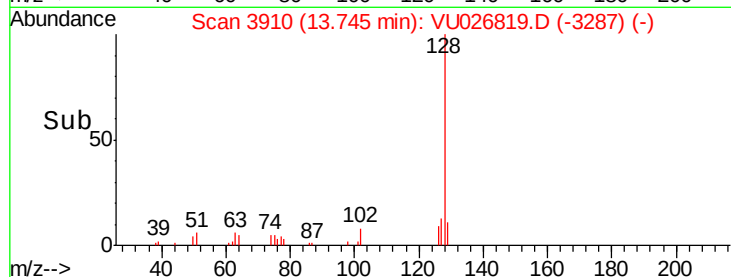
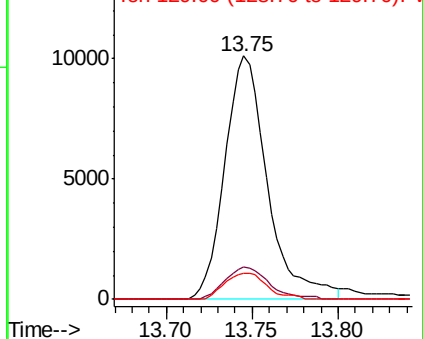
129 10.8 8.6 12.8



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



#70

1,2,3-Trichlorobenzene

Concen: 4.071 ug/L

RT: 13.99 min Scan# 3986

Delta R.T. 0.00 min

Lab File: VU026819.D

Acq: 17 Sep 2018 12:50

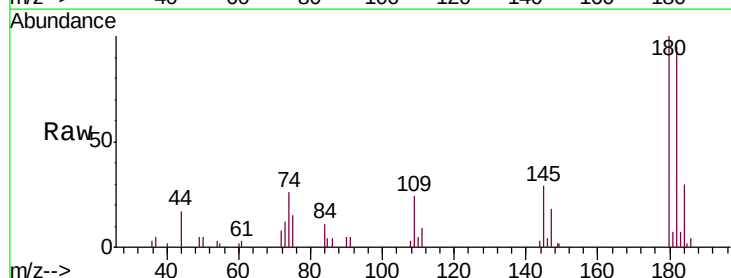
Tgt Ion:180 Resp: 8392

Ion Ratio Lower Upper

180 100

182 100.1 75.6 113.4

145 28.7 23.8 35.6



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

