

Data File : VU033860.D  
Acq On : 20 Aug 2019 18:12  
Operator : JC/SP  
Sample : VSTDCCC005EC  
Misc : 25.0mL/MSVOA\_U/WATER  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00515

Quant Time: Aug 21 05:47:03 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR082019WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Aug 21 05:39:59 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.86  | 114  | 181558   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.07  | 117  | 191951   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.47 | 152  | 102294   | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.39   | 65    | 65777    | 4.25     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 85.00%  |
| 7) Chloroethane-d5             | 1.67   | 69    | 61194    | 4.43     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 88.60%  |
| 11) 1,1-Dichloroethene-d2      | 2.26   | 63    | 141625   | 4.56     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 91.20%  |
| 20) 2-Butanone-d5              | 4.17   | 46    | 160979   | 52.48    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 104.96% |
| 24) Chloroform-d               | 4.62   | 84    | 119587   | 4.64     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 92.80%  |
| 26) 1,2-Dichloroethane-d4      | 5.29   | 65    | 64065    | 4.60     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 92.00%  |
| 32) Benzene-d6                 | 5.31   | 84    | 221545   | 4.61     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 92.20%  |
| 36) 1,2-Dichloropropane-d6     | 6.31   | 67    | 72194    | 4.61     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 92.20%  |
| 41) Toluene-d8                 | 7.55   | 98    | 216749   | 4.84     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 96.80%  |
| 43) trans-1,3-Dichloropropene- | 7.83   | 79    | 28022    | 4.65     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 93.00%  |
| 46) 2-Hexanone-d5              | 8.30   | 63    | 118955   | 55.40    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 110.80% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.41  | 84    | 69917    | 5.18     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 103.60% |
| 64) 1,2-Dichlorobenzene-d4     | 11.84  | 152   | 84749    | 4.77     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 95.40%  |

#### Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 78239  | 4.755 ug/L  | 98     |
| 3) Chloromethane               | 1.32 | 50  | 63850  | 3.997 ug/L  | 97     |
| 5) Vinyl chloride              | 1.40 | 62  | 83282  | 4.634 ug/L  | 99     |
| 6) Bromomethane                | 1.62 | 94  | 25055  | 2.129 ug/L  | 100    |
| 8) Chloroethane                | 1.69 | 64  | 52563  | 4.983 ug/L  | 99     |
| 9) Trichlorofluoromethane      | 1.87 | 101 | 112170 | 4.910 ug/L  | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27 | 101 | 63529  | 4.803 ug/L  | 99     |
| 12) 1,1-Dichloroethene         | 2.27 | 96  | 60778  | 4.840 ug/L  | 95     |
| 13) Acetone                    | 2.31 | 43  | 119158 | 50.814 ug/L | 98     |
| 14) Carbon disulfide           | 2.46 | 76  | 203701 | 4.720 ug/L  | 98     |
| 15) Methyl Acetate             | 2.60 | 43  | 31588  | 5.376 ug/L  | 100    |
| 16) Methylene chloride         | 2.68 | 84  | 69903  | 4.744 ug/L  | 98     |
| 17) Methyl tert-butyl Ether    | 2.98 | 73  | 158080 | 5.018 ug/L  | 99     |
| 18) trans-1,2-Dichloroethene   | 2.96 | 96  | 65539  | 4.737 ug/L  | 99     |
| 19) 1,1-Dichloroethane         | 3.42 | 63  | 97724  | 4.870 ug/L  | 99     |
| 21) 2-Butanone                 | 4.25 | 43  | 141286 | 56.187 ug/L | 98     |
| 22) cis-1,2-Dichloroethene     | 4.20 | 96  | 54301  | 4.990 ug/L  | 96     |

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MSVOA\_U  
ClientSampleId :  
VSTD00515

Quant Time: Aug 21 05:47:03 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR082019WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Aug 21 05:39:59 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane         | 4.52  | 128  | 25373    | 4.823  | ug/L   | 96       |
| 25) Chloroform                 | 4.65  | 83   | 102835   | 4.533  | ug/L   | 99       |
| 27) 1,2-Dichloroethane         | 5.38  | 62   | 63450    | 4.926  | ug/L   | 99       |
| 29) 1,1,1-Trichloroethane      | 4.89  | 97   | 83616    | 4.806  | ug/L   | 98       |
| 30) Cyclohexane                | 4.97  | 56   | 67623    | 4.602  | ug/L   | 97       |
| 31) Carbon tetrachloride       | 5.11  | 117  | 73521    | 4.687  | ug/L   | 98       |
| 33) Benzene                    | 5.36  | 78   | 206554   | 4.904  | ug/L   | 100      |
| 34) Trichloroethene            | 6.16  | 95   | 52490    | 4.645  | ug/L   | 94       |
| 35) Methylcyclohexane          | 6.39  | 83   | 74231    | 4.701  | ug/L   | 96       |
| 37) 1,2-Dichloropropane        | 6.41  | 63   | 55257    | 4.958  | ug/L   | 99       |
| 38) Bromodichloromethane       | 6.74  | 83   | 71243    | 4.963  | ug/L   | 98       |
| 39) cis-1,3-Dichloropropene    | 7.25  | 75   | 72066    | 4.893  | ug/L   | 99       |
| 40) 4-Methyl-2-pentanone       | 7.45  | 43   | 327517   | 55.486 | ug/L   | 99       |
| 42) Toluene                    | 7.62  | 91   | 222990   | 5.168  | ug/L   | 98       |
| 44) trans-1,3-Dichloropropene  | 7.86  | 75   | 60107    | 4.880  | ug/L   | 97       |
| 45) 1,1,2-Trichloroethane      | 8.05  | 97   | 41033    | 5.144  | ug/L   | 95       |
| 47) Tetrachloroethene          | 8.21  | 164  | 44745    | 4.827  | ug/L   | 98       |
| 48) 2-Hexanone                 | 8.35  | 43   | 250431   | 58.063 | ug/L   | 97       |
| 49) Dibromochloromethane       | 8.46  | 129  | 50525    | 5.073  | ug/L   | 88       |
| 50) 1,2-Dibromoethane          | 8.57  | 107  | 38439    | 5.042  | ug/L # | 97       |
| 51) Chlorobenzene              | 9.10  | 112  | 138088   | 4.839  | ug/L   | 99       |
| 52) Ethylbenzene               | 9.23  | 91   | 216265   | 5.008  | ug/L   | 99       |
| 53) m,p-Xylene                 | 9.36  | 106  | 80785    | 4.983  | ug/L   | 92       |
| 54) o-Xylene                   | 9.76  | 106  | 76946    | 4.950  | ug/L   | 97       |
| 55) Styrene                    | 9.77  | 104  | 137864   | 5.117  | ug/L   | 99       |
| 56) Isopropylbenzene           | 10.15 | 105  | 202054   | 5.023  | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.44 | 83   | 54174    | 5.410  | ug/L   | 99       |
| 59) 1,2,3-Trichloropropane     | 10.48 | 75   | 38677    | 5.296  | ug/L   | 96       |
| 61) Bromoform                  | 9.94  | 173  | 28367    | 5.020  | ug/L   | 99       |
| 62) 1,3-Dichlorobenzene        | 11.40 | 146  | 112199   | 4.937  | ug/L   | 96       |
| 63) 1,4-Dichlorobenzene        | 11.49 | 146  | 115347   | 4.936  | ug/L   | 98       |
| 65) 1,2-Dichlorobenzene        | 11.86 | 146  | 108194   | 4.920  | ug/L   | 97       |
| 66) 1,2-Dibromo-3-chloropropan | 12.64 | 75   | 8531     | 5.484  | ug/L   | 96       |
| 67) 1,3,5-Trichlorobenzene     | 12.87 | 180  | 84199    | 4.881  | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.49 | 180  | 62372    | 4.968  | ug/L   | 96       |
| 69) Naphthalene                | 13.73 | 128  | 93703    | 5.139  | ug/L   | 98       |
| 70) 1,2,3-Trichlorobenzene     | 13.97 | 180  | 61073    | 5.118  | ug/L   | 98       |

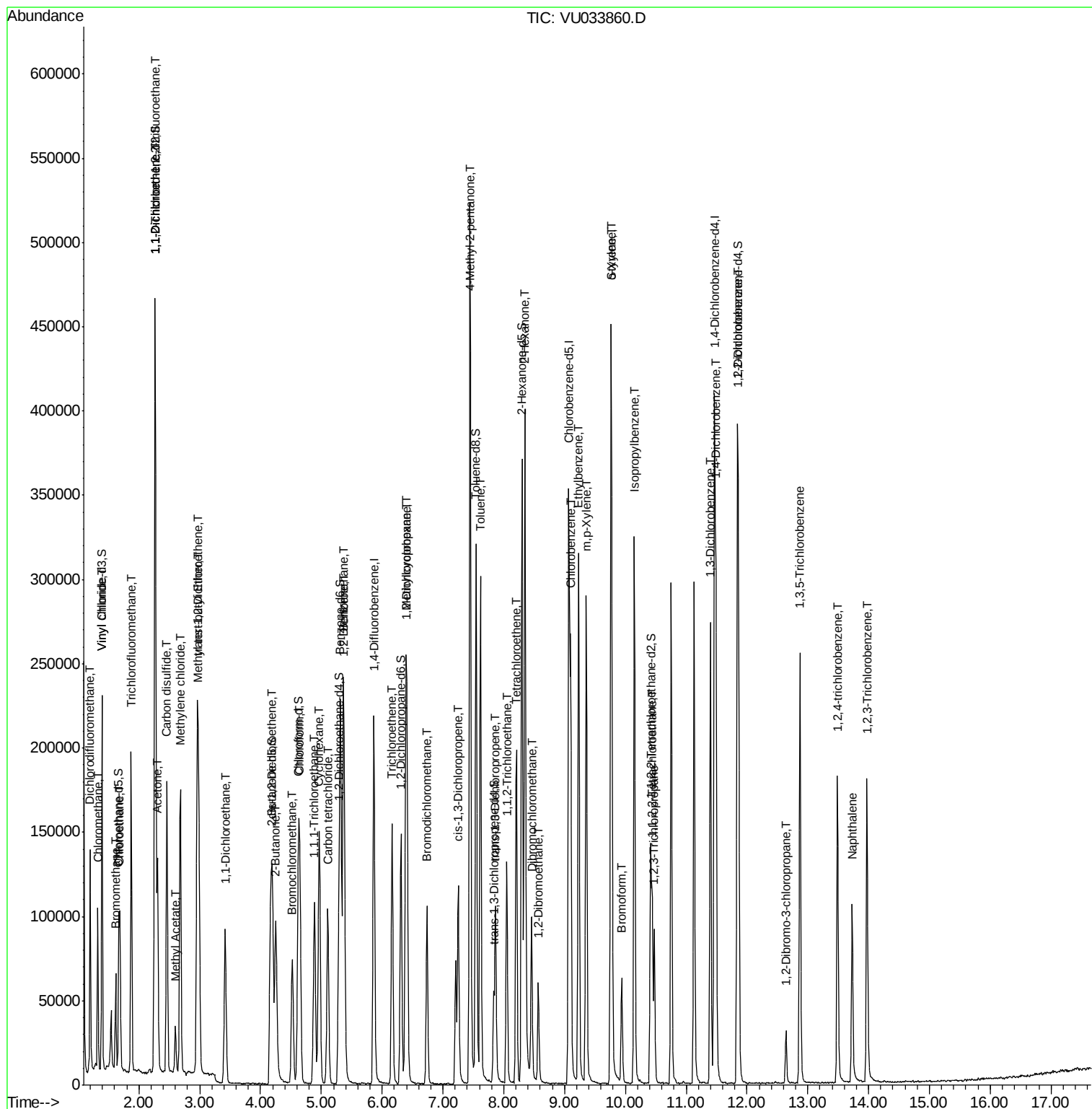
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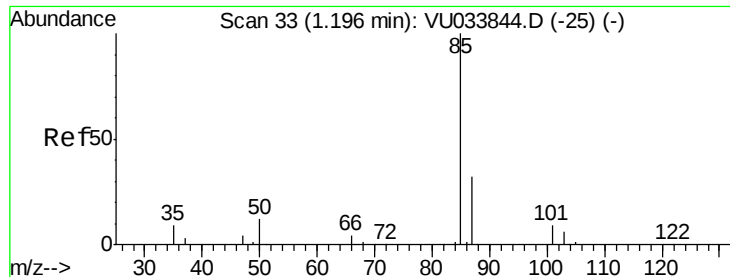
Data File : VU033860.D

```
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ALS Vial     : 22      Sample Multiplier: 1
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**ClientSampleId :**  
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QLast Update : Wed Aug 21 05:39:59 2019  
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 4.755 ug/L

RT: 1.20 min Scan# 34

Delta R.T. 0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

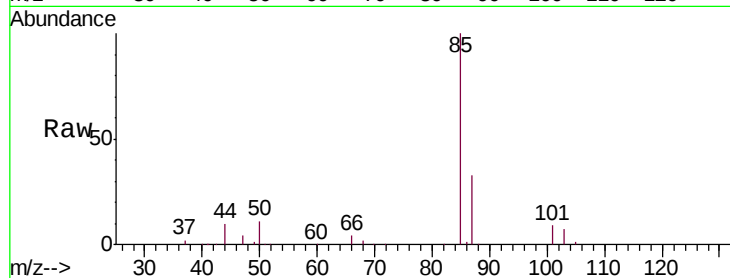
VSTD00515

Tgt Ion: 85 Resp: 78239

Ion Ratio Lower Upper

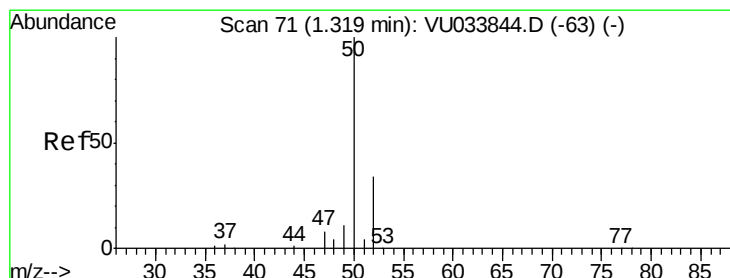
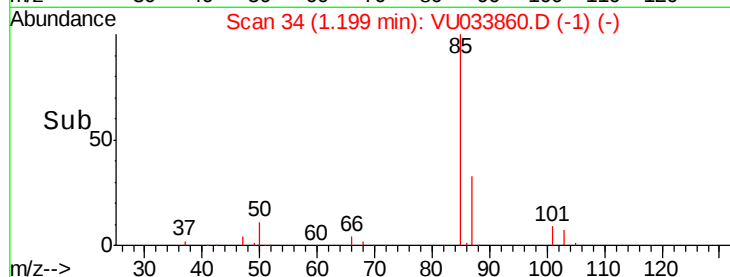
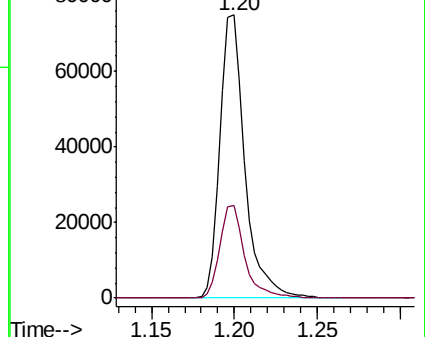
85 100

87 32.7 25.5 38.3



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

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



#3

Chloromethane

Concen: 3.997 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VU033860.D

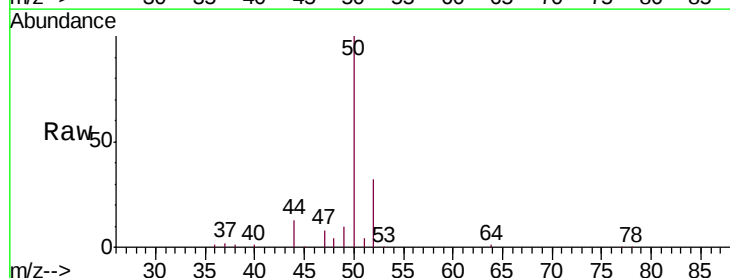
Acq: 20 Aug 2019 18:12

Tgt Ion: 50 Resp: 63850

Ion Ratio Lower Upper

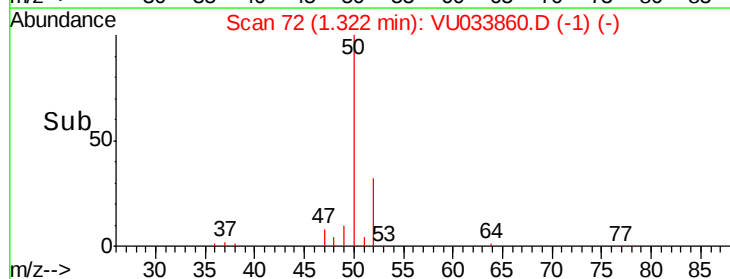
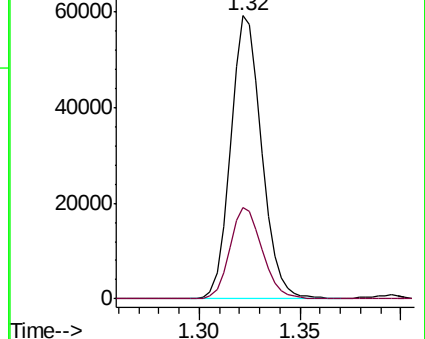
50 100

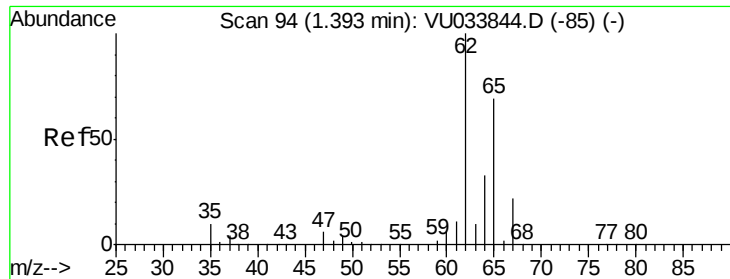
52 32.5 23.8 44.2



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

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





#5

Vinyl chloride

Concen: 4.634 ug/L

RT: 1.40 min Scan# 95

Delta R.T. 0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

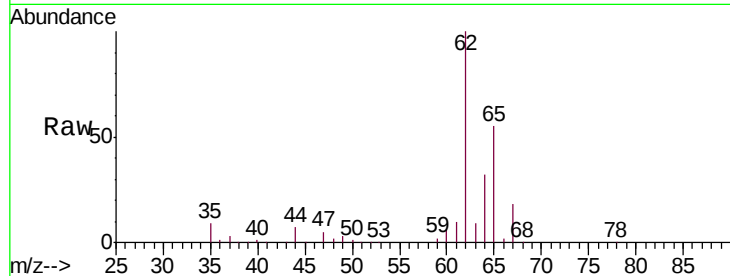
VSTD00515

Tgt Ion: 62 Resp: 83282

Ion Ratio Lower Upper

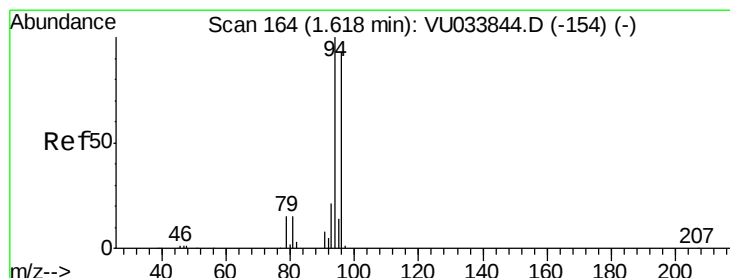
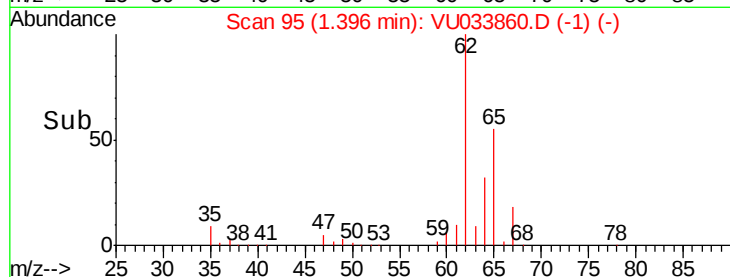
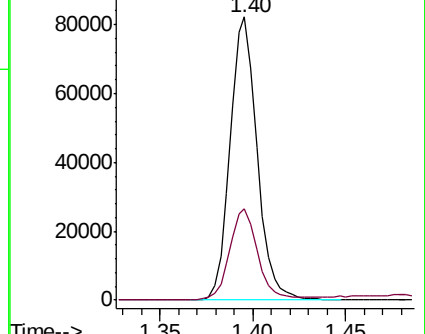
62 100

64 32.2 23.1 42.9



Abundance Ion 62.00 (61.70 to 62.70): VU033844.D (-85) (-)

Ion 64.10 (63.80 to 64.80): VU033860.D (-71) (-)



#6

Bromomethane

Concen: 2.129 ug/L

RT: 1.62 min Scan# 164

Delta R.T. -0.00 min

Lab File: VU033860.D

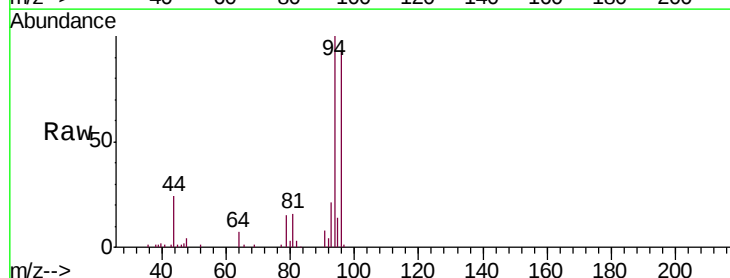
Acq: 20 Aug 2019 18:12

Tgt Ion: 94 Resp: 25055

Ion Ratio Lower Upper

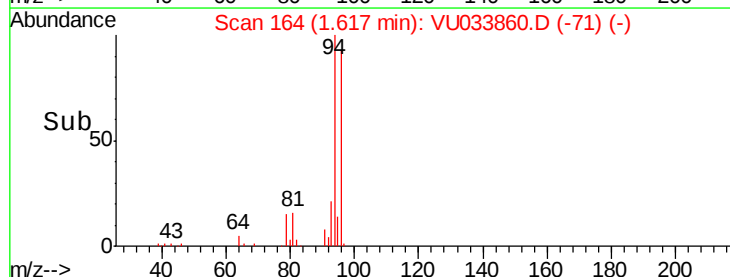
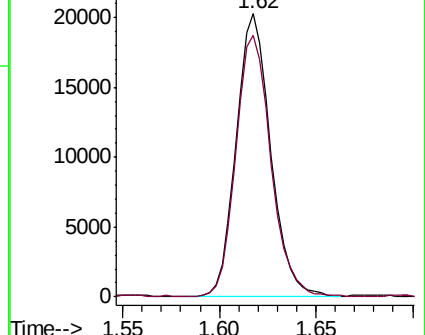
94 100

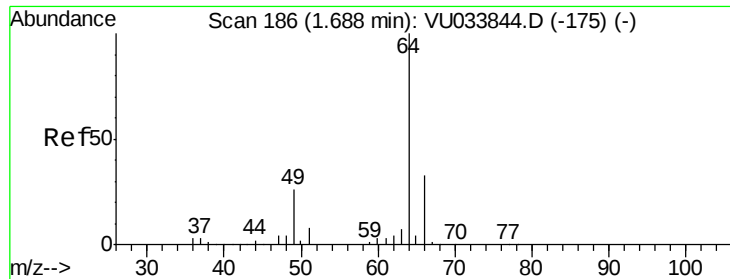
96 92.6 65.2 121.0



Abundance Ion 94.00 (93.70 to 94.70): VU033844.D (-154) (-)

Ion 96.00 (95.70 to 96.70): VU033860.D (-71) (-)





#8

Chloroethane

Concen: 4.983 ug/L

RT: 1.69 min Scan# 186

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

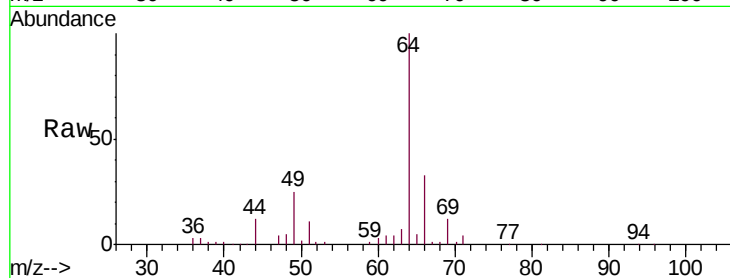
VSTD00515

Tgt Ion: 64 Resp: 52563

Ion Ratio Lower Upper

64 100

66 32.8 23.3 43.3



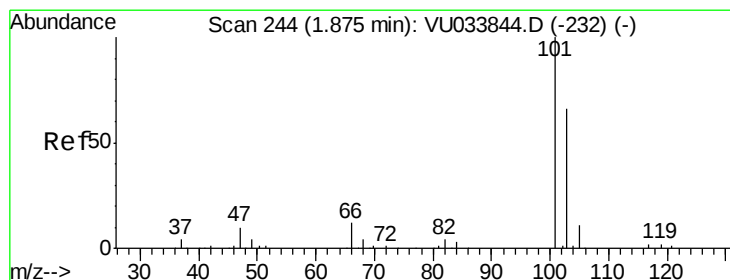
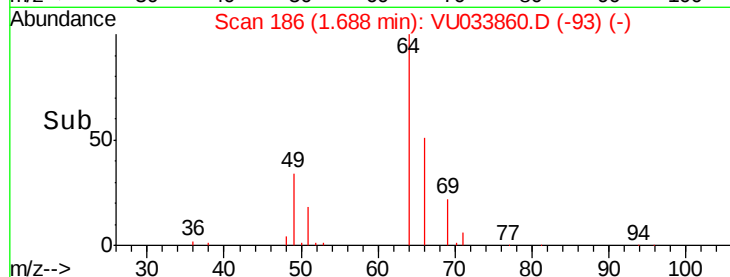
Abundance Ion 64.10 (63.80 to 64.80): VU033844.D (-175) (-)

Ion 66.05 (65.75 to 66.75): VU033844.D (-175) (-)

1.69

1.65 1.70 1.75

Time-->



#9

Trichlorofluoromethane

Concen: 4.910 ug/L

RT: 1.87 min Scan# 244

Delta R.T. -0.00 min

Lab File: VU033860.D

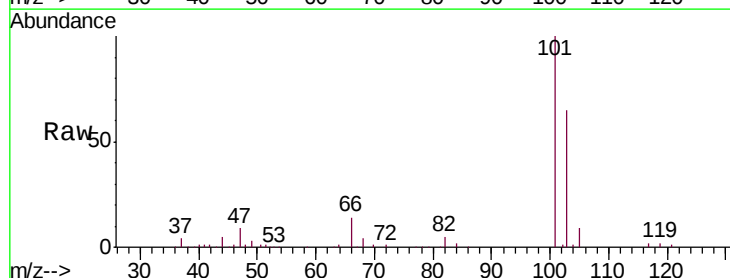
Acq: 20 Aug 2019 18:12

Tgt Ion: 101 Resp: 112170

Ion Ratio Lower Upper

101 100

103 65.2 52.2 78.2



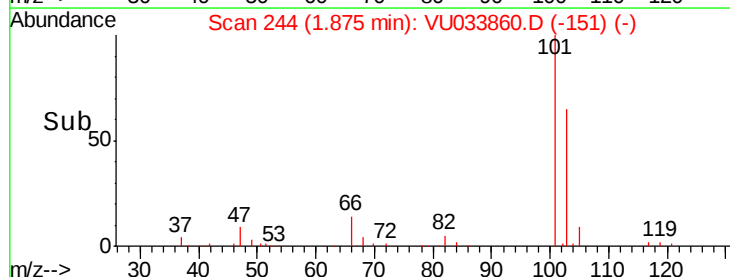
Abundance Ion 101.00 (100.70 to 101.70): VU033844.D (-232) (-)

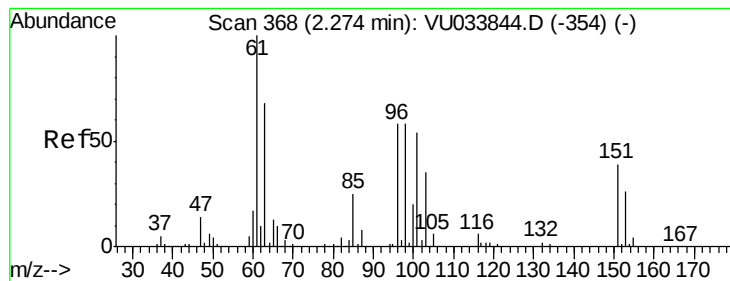
Ion 103.00 (102.70 to 103.70): VU033844.D (-232) (-)

1.87

1.80 1.85 1.90 1.95

Time-->





#10

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

Concen: 4.803 ug/L

RT: 2.27 min Scan# 368

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00515

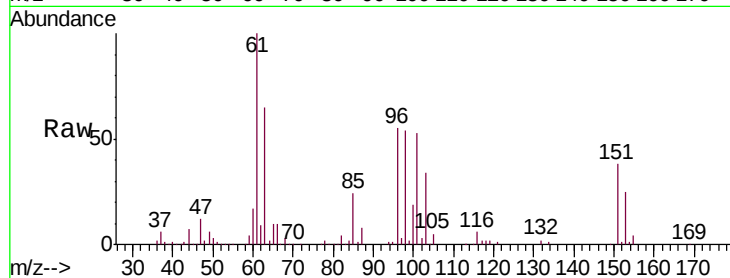
Tgt Ion:101 Resp: 63529

Ion Ratio Lower Upper

101 100

85 44.0 35.7 53.5

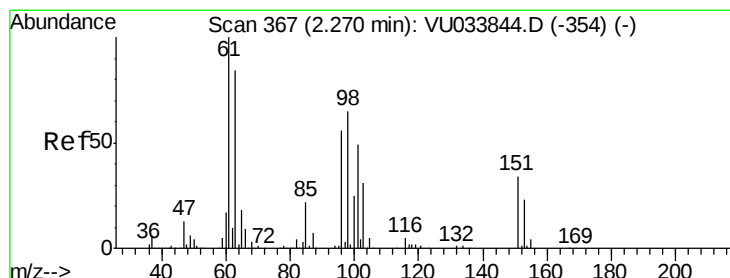
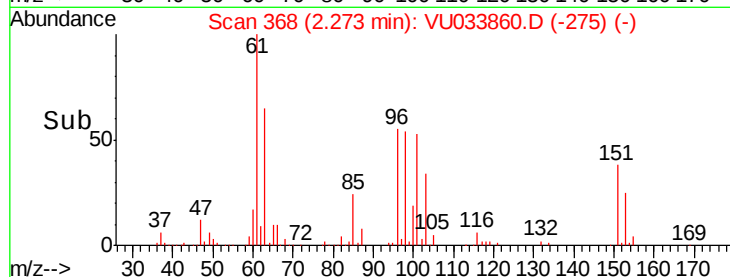
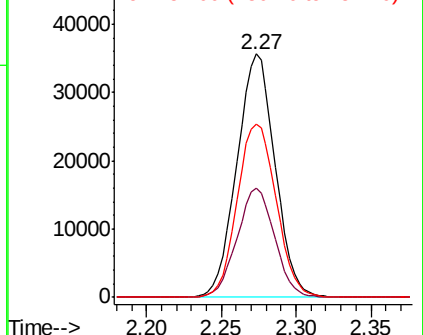
151 72.7 57.2 85.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VU0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 4.840 ug/L

RT: 2.27 min Scan# 367

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

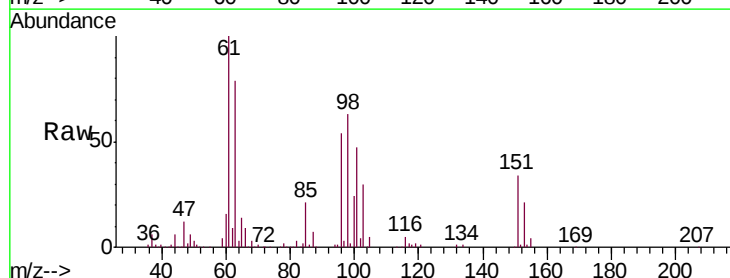
Tgt Ion: 96 Resp: 60778

Ion Ratio Lower Upper

96 100

61 184.2 124.3 230.9

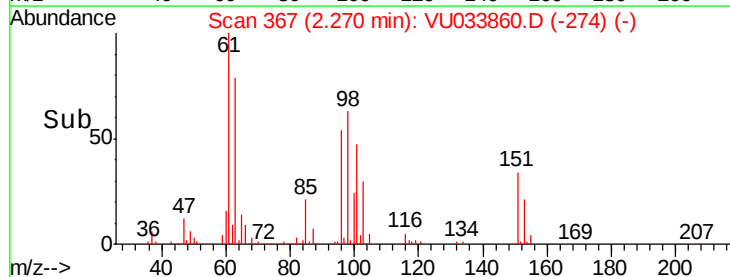
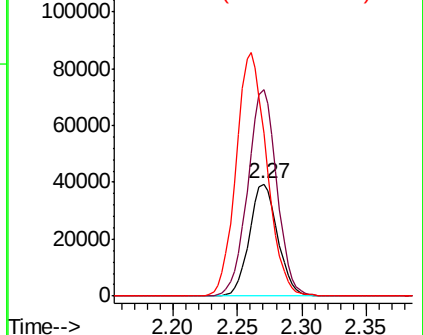
63 145.0 106.3 197.3

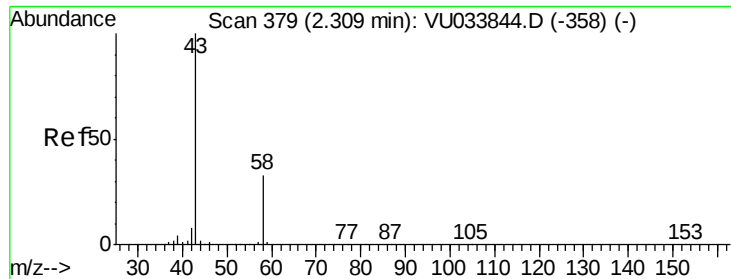


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 50.814 ug/L

RT: 2.31 min Scan# 378

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

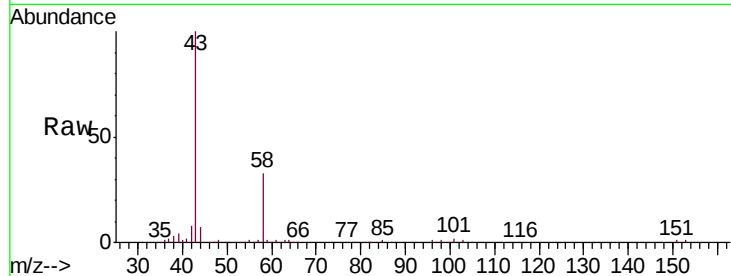
VSTD00515

Tgt Ion: 43 Resp: 119158

Ion Ratio Lower Upper

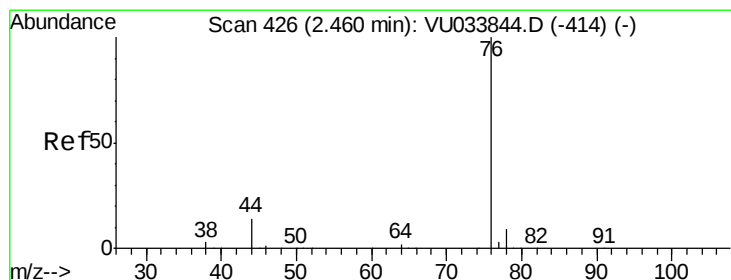
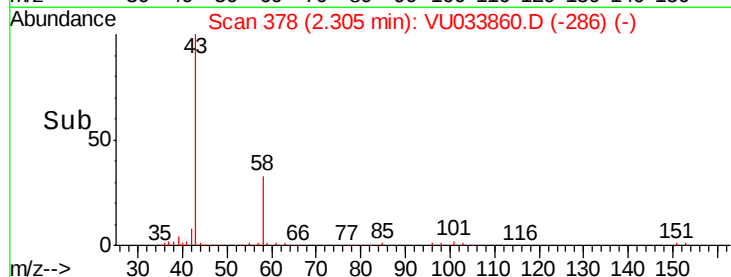
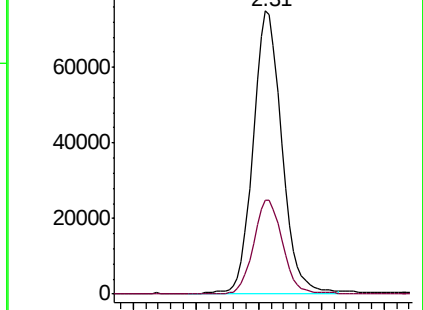
43 100

58 33.8 0.0 65.4



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

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



#14

Carbon disulfide

Concen: 4.720 ug/L

RT: 2.46 min Scan# 426

Delta R.T. -0.00 min

Lab File: VU033860.D

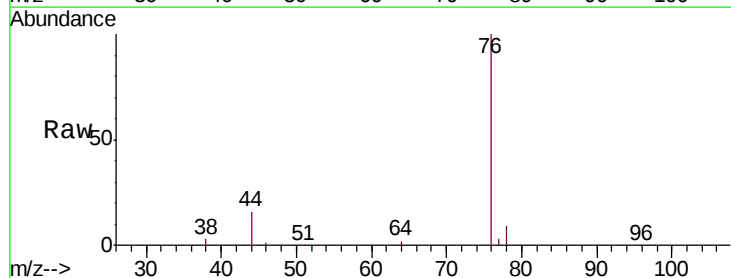
Acq: 20 Aug 2019 18:12

Tgt Ion: 76 Resp: 203701

Ion Ratio Lower Upper

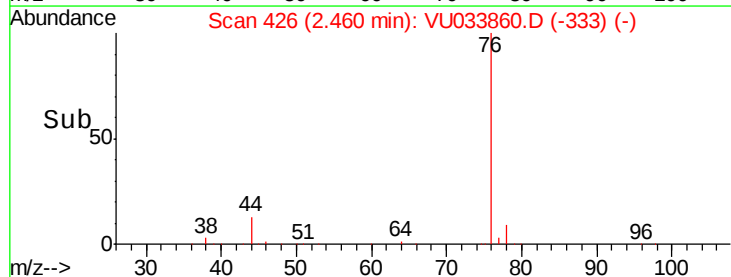
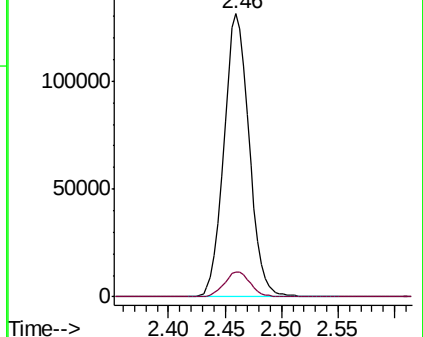
76 100

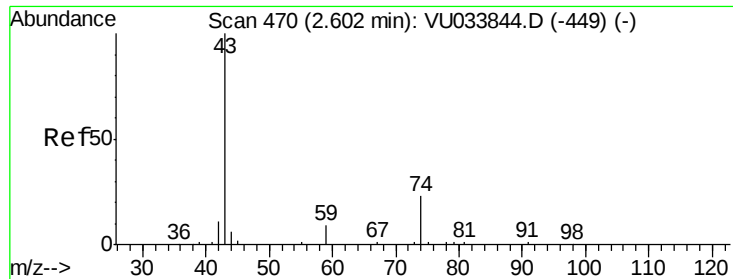
78 8.9 7.7 11.5



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

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

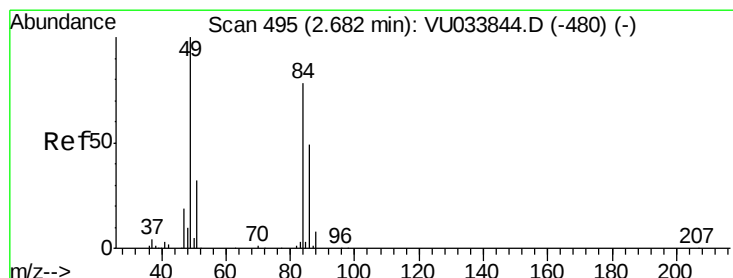
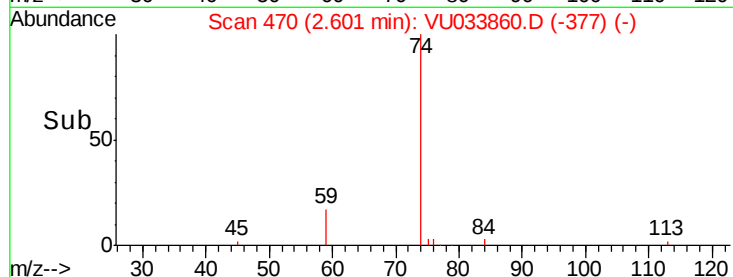
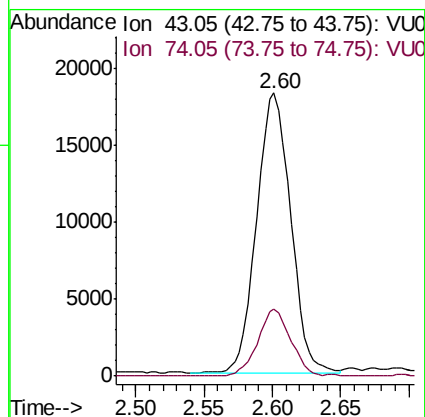
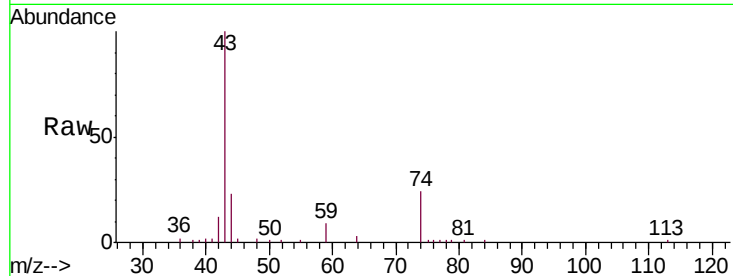




#15  
Methyl Acetate  
Concen: 5.376 ug/L  
RT: 2.60 min Scan# 470  
Delta R.T. -0.00 min  
Lab File: VU033860.D  
Acq: 20 Aug 2019 18:12

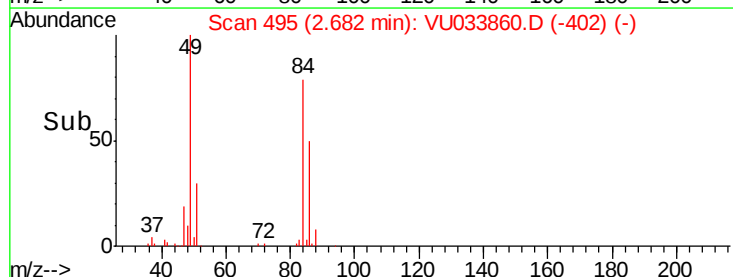
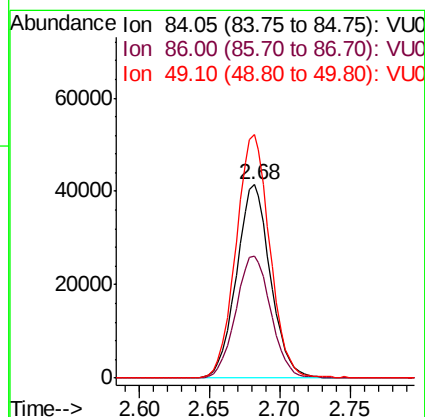
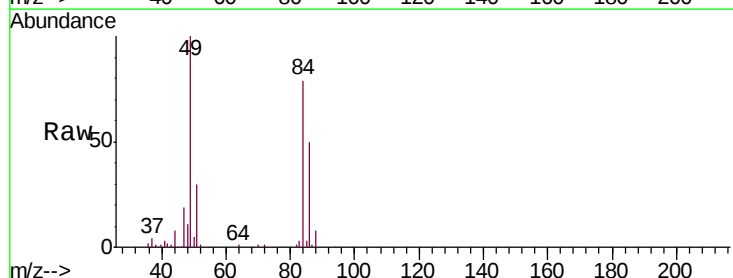
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00515

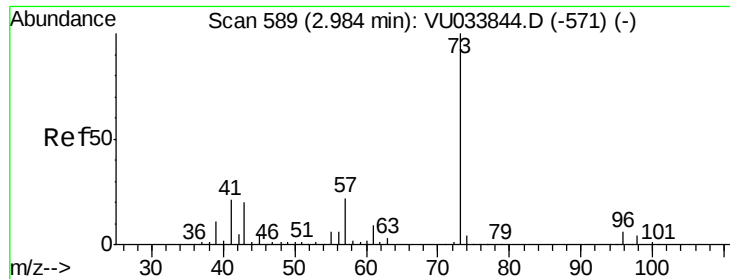
Tgt Ion: 43 Resp: 31588  
Ion Ratio Lower Upper  
43 100  
74 23.2 18.6 28.0



#16  
Methylene chloride  
Concen: 4.744 ug/L  
RT: 2.68 min Scan# 495  
Delta R.T. -0.00 min  
Lab File: VU033860.D  
Acq: 20 Aug 2019 18:12

Tgt Ion: 84 Resp: 69903  
Ion Ratio Lower Upper  
84 100  
86 63.4 43.8 81.3  
49 125.9 89.5 166.3





#17

Methyl tert-butyl Ether

Concen: 5.018 ug/L

RT: 2.98 min Scan# 589

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00515

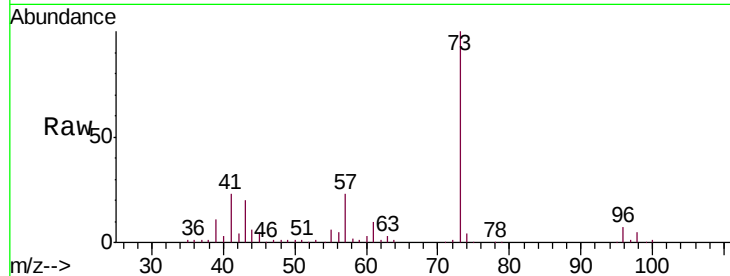
Tgt Ion: 73 Resp: 158080

Ion Ratio Lower Upper

73 100

43 20.4 15.9 23.9

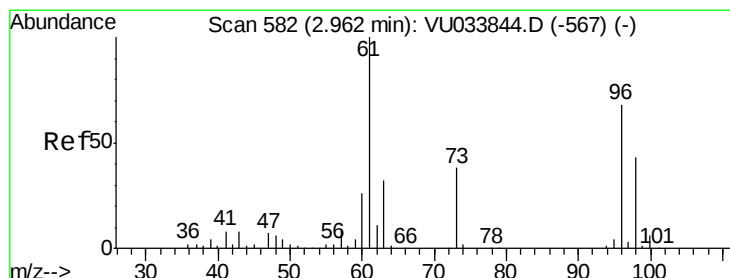
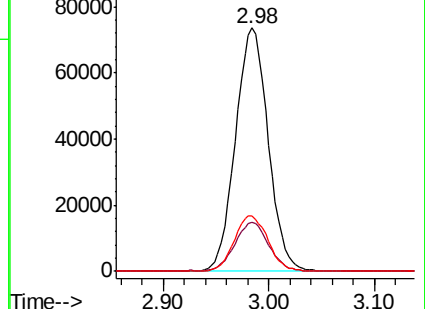
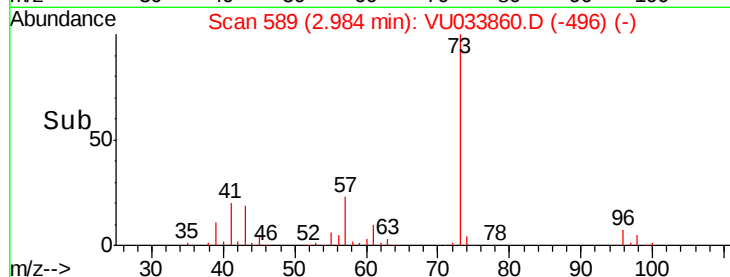
57 23.7 18.3 27.5



Abundance Ion 73.10 (72.80 to 73.80): VU033860.D (-496) (-)

Ion 43.05 (42.75 to 43.75): VU033860.D (-496) (-)

Ion 57.10 (56.80 to 57.80): VU033860.D (-496) (-)



#18

trans-1,2-Dichloroethene

Concen: 4.737 ug/L

RT: 2.96 min Scan# 581

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

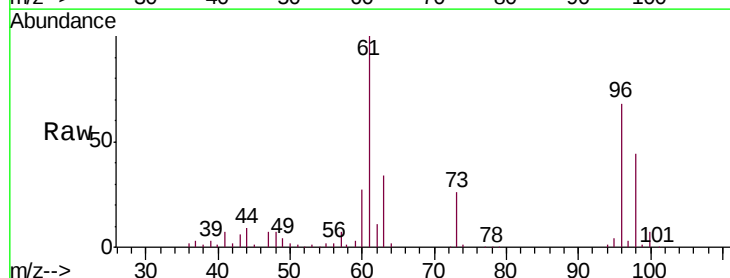
Tgt Ion: 96 Resp: 65539

Ion Ratio Lower Upper

96 100

61 147.2 102.9 191.1

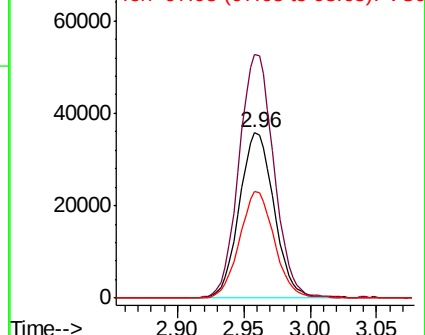
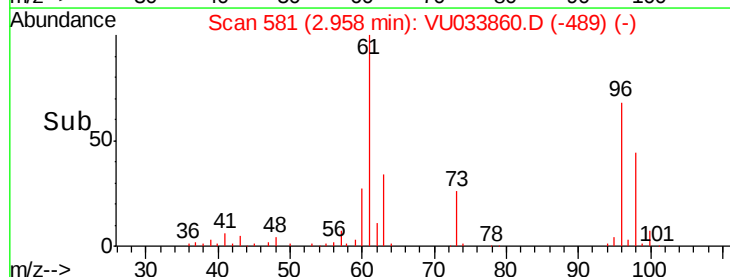
98 64.6 43.8 81.4

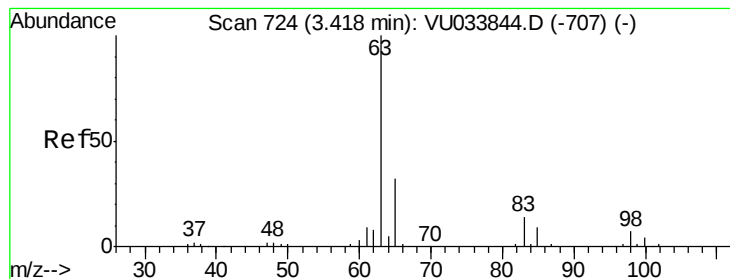


Abundance Ion 96.00 (95.70 to 96.70): VU033860.D (-489) (-)

Ion 61.05 (60.75 to 61.75): VU033860.D (-489) (-)

Ion 97.95 (97.65 to 98.65): VU033860.D (-489) (-)





#19

1,1-Dichloroethane

Concen: 4.870 ug/L

RT: 3.42 min Scan# 724

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00515

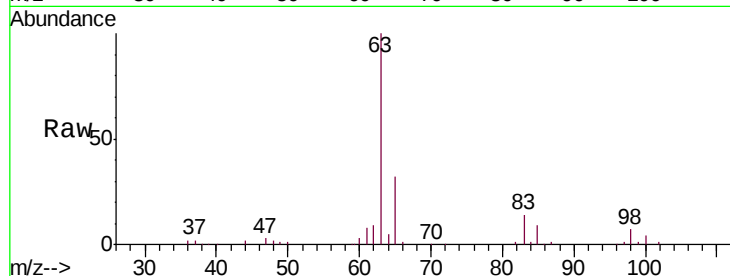
Tgt Ion: 63 Resp: 97724

Ion Ratio Lower Upper

63 100

65 32.2 22.2 41.2

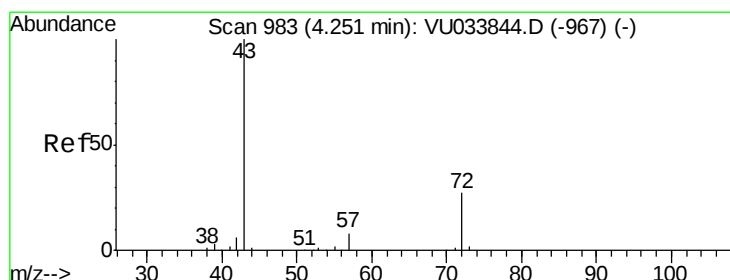
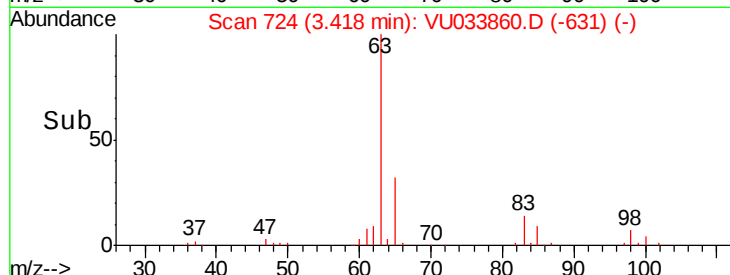
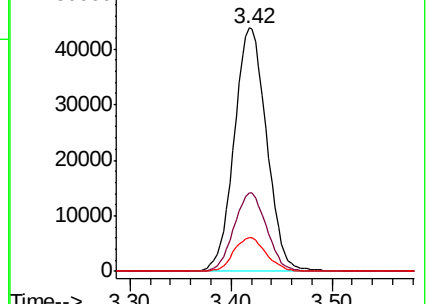
83 13.7 9.8 18.2



Abundance Ion 63.10 (62.80 to 63.80): VU033844.D (-707) (-)

Ion 65.10 (64.80 to 65.80): VU033844.D (-707) (-)

Ion 83.05 (82.75 to 83.75): VU033844.D (-707) (-)



#21

2-Butanone

Concen: 56.187 ug/L

RT: 4.25 min Scan# 983

Delta R.T. -0.00 min

Lab File: VU033860.D

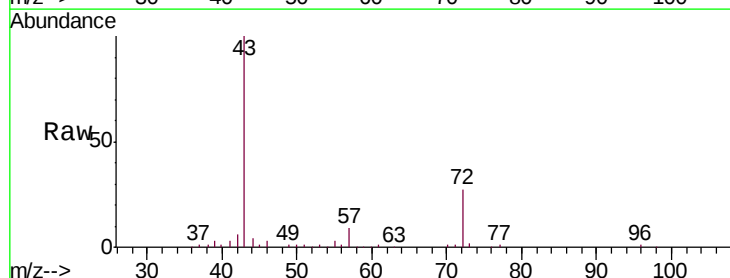
Acq: 20 Aug 2019 18:12

Tgt Ion: 43 Resp: 141286

Ion Ratio Lower Upper

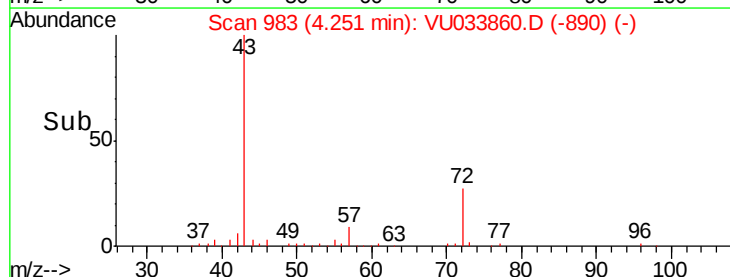
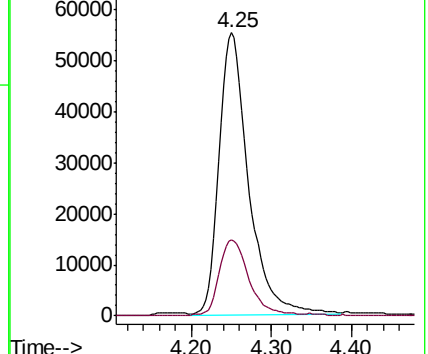
43 100

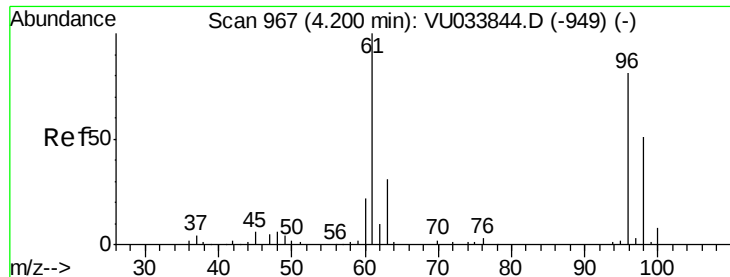
72 26.3 13.7 41.0



Abundance Ion 43.05 (42.75 to 43.75): VU033844.D (-967) (-)

Ion 72.10 (71.80 to 72.80): VU033844.D (-967) (-)



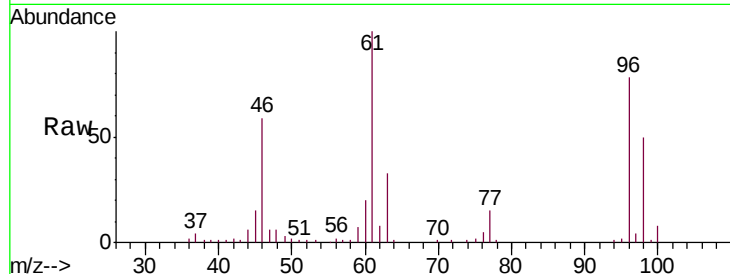


#22

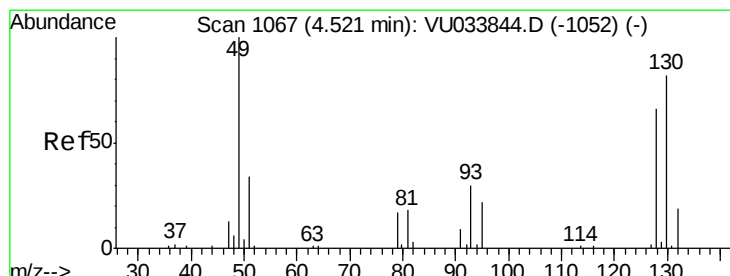
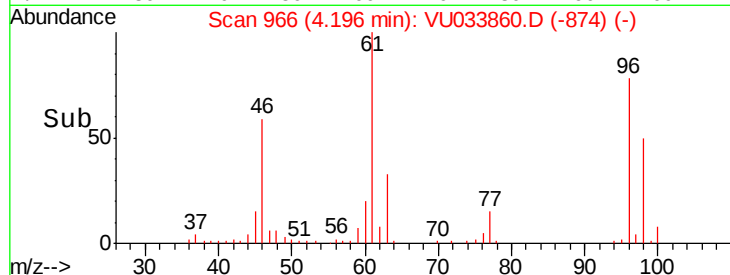
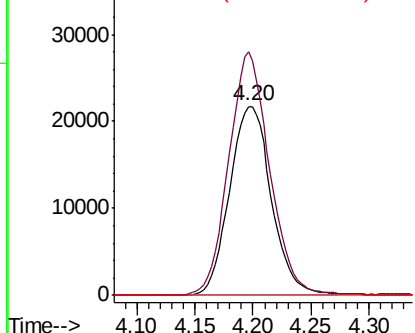
cis-1,2-Dichloroethene  
 Concen: 4.990 ug/L  
 RT: 4.20 min Scan# 966  
 Delta R.T. -0.00 min  
 Lab File: VU033860.D  
 Acq: 20 Aug 2019 18:12

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00515

Tgt Ion: 96 Resp: 54301  
 Ion Ratio Lower Upper  
 96 100  
 61 128.8 87.2 161.9  
 68 0.0 0.0 0.0



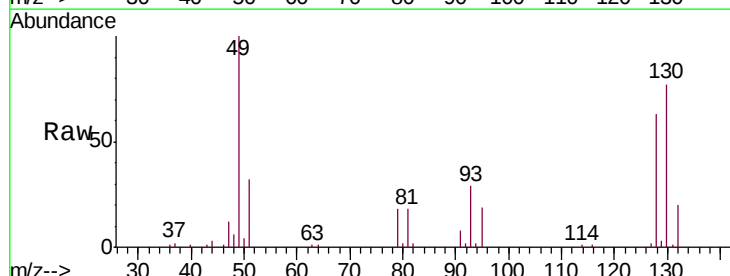
Abundance Ion 96.00 (95.70 to 96.70): VU0  
 Ion 61.05 (60.75 to 61.75): VU0  
 Ion 68.15 (67.85 to 68.85): VU0



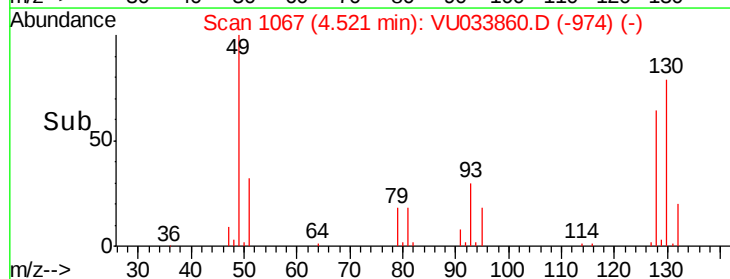
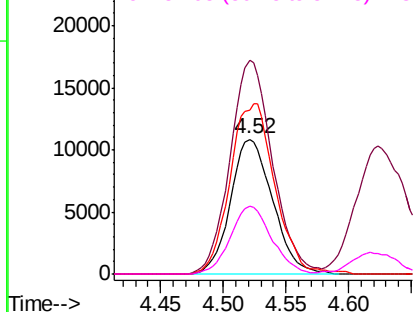
#23

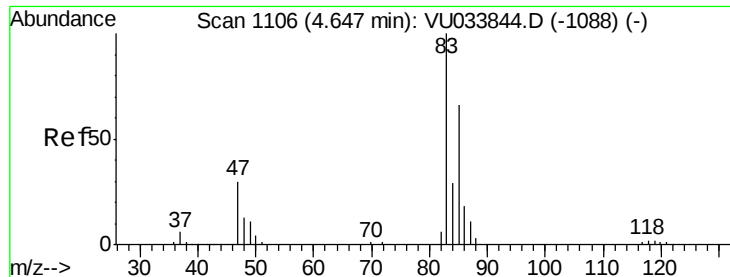
Bromochloromethane  
 Concen: 4.823 ug/L  
 RT: 4.52 min Scan# 1067  
 Delta R.T. -0.00 min  
 Lab File: VU033860.D  
 Acq: 20 Aug 2019 18:12

Tgt Ion: 128 Resp: 25373  
 Ion Ratio Lower Upper  
 128 100  
 49 158.7 105.6 196.0  
 130 122.1 86.5 160.6  
 51 50.5 41.0 61.4



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

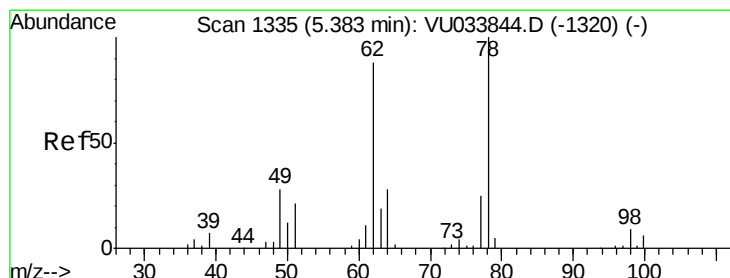
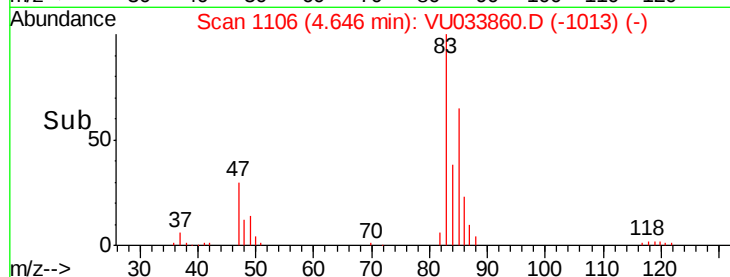
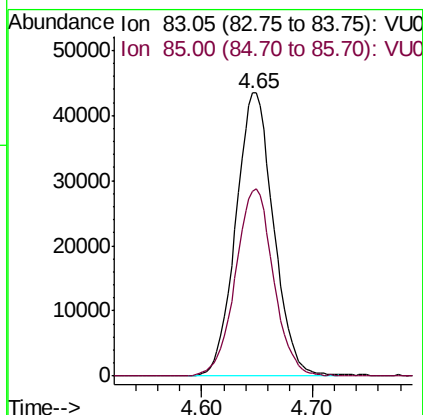
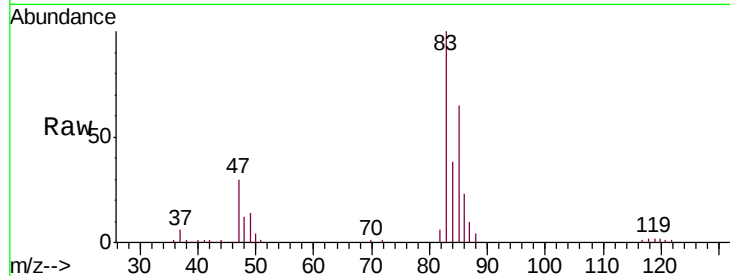




#25  
Chloroform  
Concen: 4.533 ug/L  
RT: 4.65 min Scan# 1106  
Delta R.T. -0.00 min  
Lab File: VU033860.D  
Acq: 20 Aug 2019 18:12

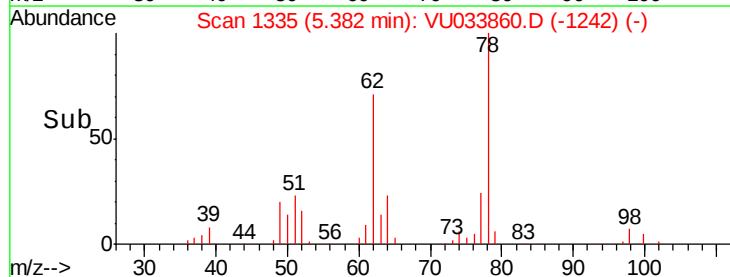
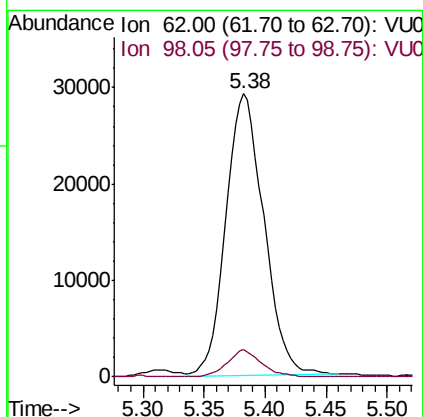
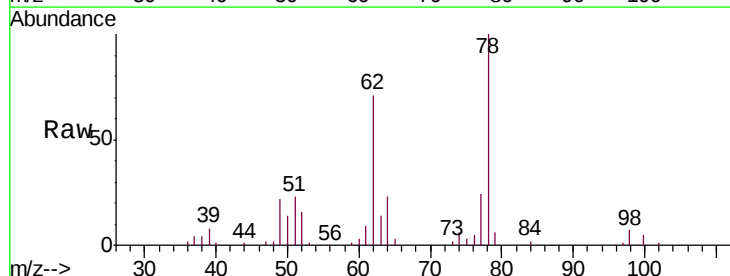
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00515

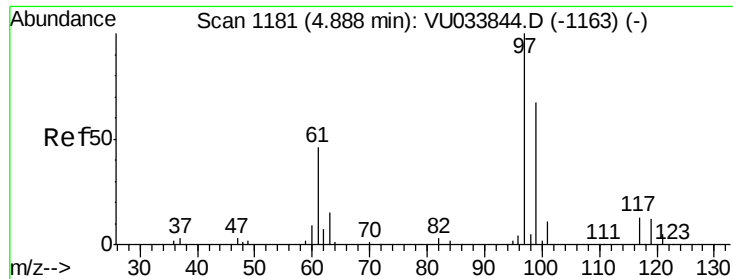
Tgt Ion: 83 Resp: 102835  
Ion Ratio Lower Upper  
83 100  
85 65.4 46.3 85.9



#27  
1,2-Dichloroethane  
Concen: 4.926 ug/L  
RT: 5.38 min Scan# 1335  
Delta R.T. -0.00 min  
Lab File: VU033860.D  
Acq: 20 Aug 2019 18:12

Tgt Ion: 62 Resp: 63450  
Ion Ratio Lower Upper  
62 100  
98 9.5 7.9 11.9

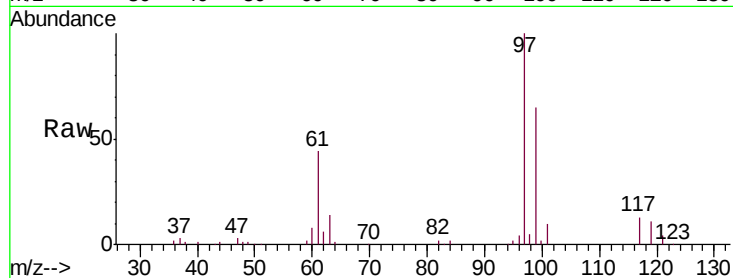




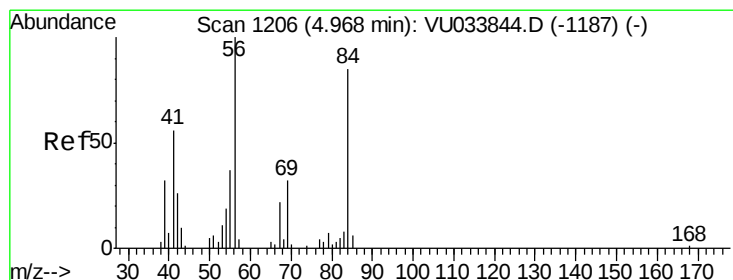
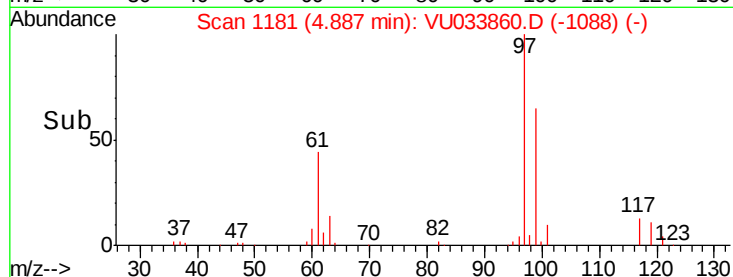
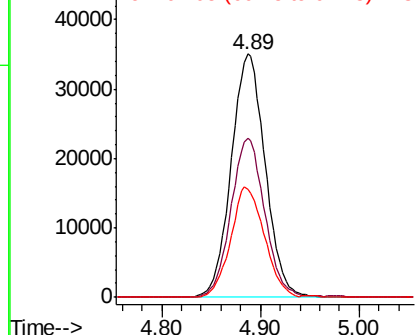
#29  
 1,1,1-Trichloroethane  
 Concen: 4.806 ug/L  
 RT: 4.89 min Scan# 1181  
 Delta R.T. -0.00 min  
 Lab File: VU033860.D  
 Acq: 20 Aug 2019 18:12

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00515

Tgt Ion: 97 Resp: 83616  
 Ion Ratio Lower Upper  
 97 100  
 99 64.9 53.4 80.0  
 61 44.9 36.6 55.0

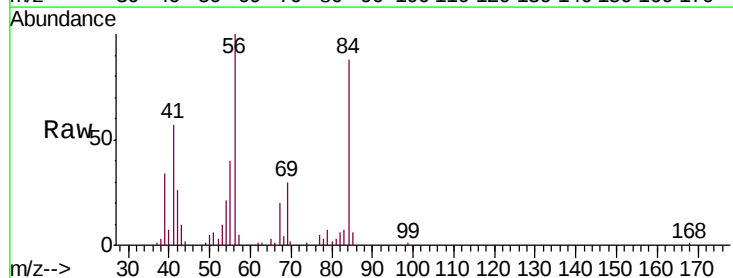


Abundance Ion 96.95 (96.65 to 97.65): VU0  
 Ion 99.05 (98.75 to 99.75): VU0  
 Ion 61.05 (60.75 to 61.75): VU0

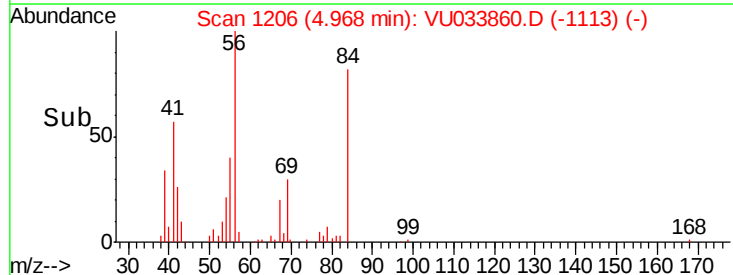
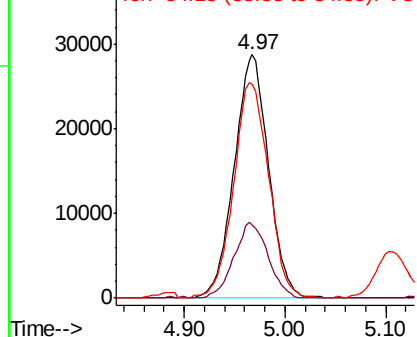


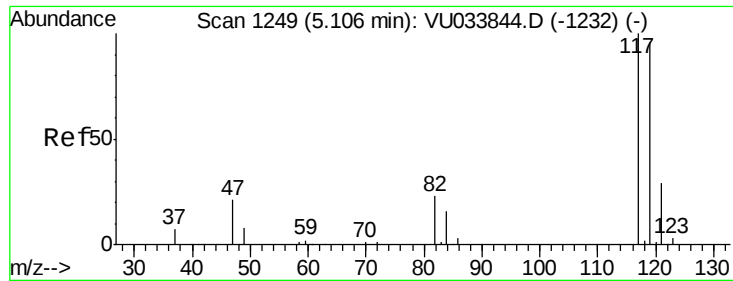
#30  
 Cyclohexane  
 Concen: 4.602 ug/L  
 RT: 4.97 min Scan# 1206  
 Delta R.T. -0.00 min  
 Lab File: VU033860.D  
 Acq: 20 Aug 2019 18:12

Tgt Ion: 56 Resp: 67623  
 Ion Ratio Lower Upper  
 56 100  
 69 30.8 25.1 37.7  
 84 90.7 69.5 104.3



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

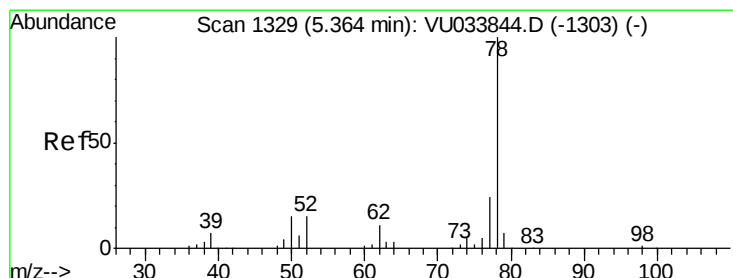
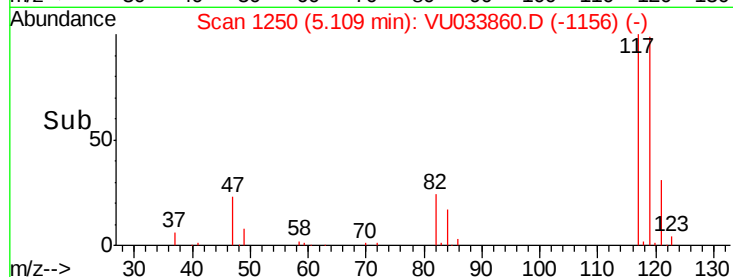
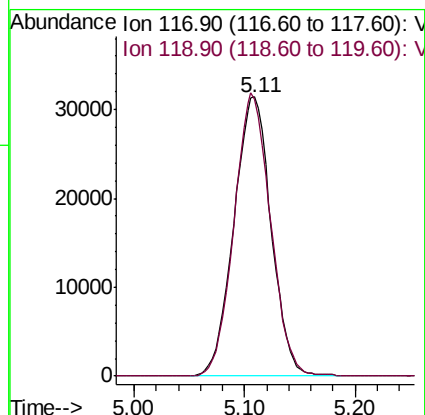
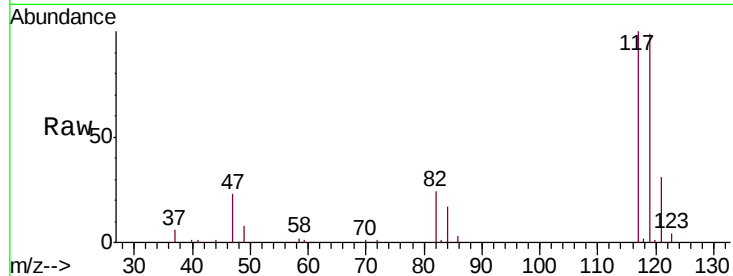




#31  
Carbon tetrachloride  
Concen: 4.687 ug/L  
RT: 5.11 min Scan# 1250  
Delta R.T. 0.00 min  
Lab File: VU033860.D  
Acq: 20 Aug 2019 18:12

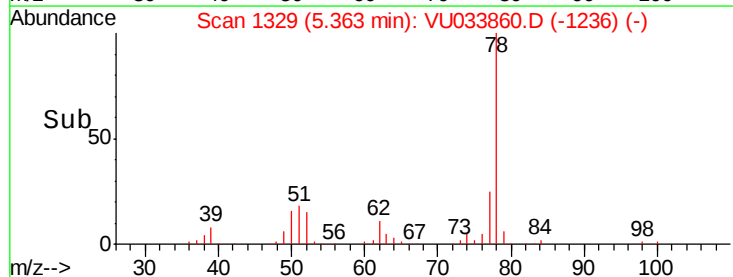
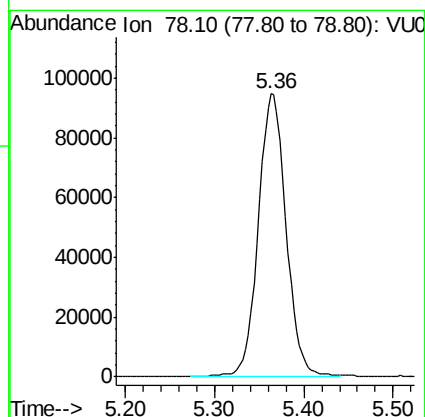
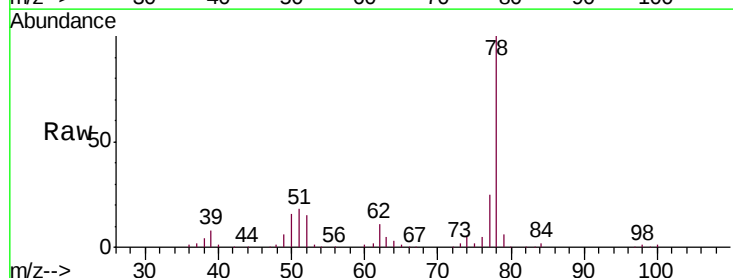
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00515

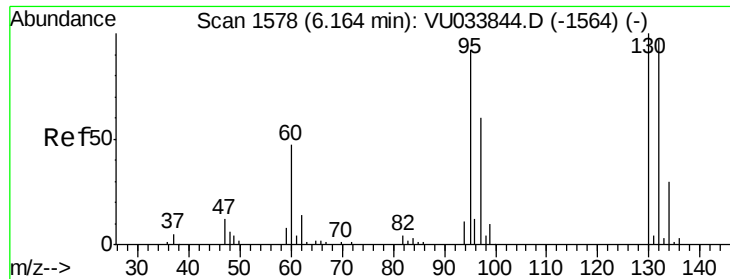
Tgt Ion:117 Resp: 73521  
Ion Ratio Lower Upper  
117 100  
119 99.0 77.6 116.4



#33  
Benzene  
Concen: 4.904 ug/L  
RT: 5.36 min Scan# 1329  
Delta R.T. -0.00 min  
Lab File: VU033860.D  
Acq: 20 Aug 2019 18:12

Tgt Ion: 78 Resp: 206554





#34

Trichloroethene

Concen: 4.645 ug/L

RT: 6.16 min Scan# 1578

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00515

Tgt Ion: 95 Resp: 52490

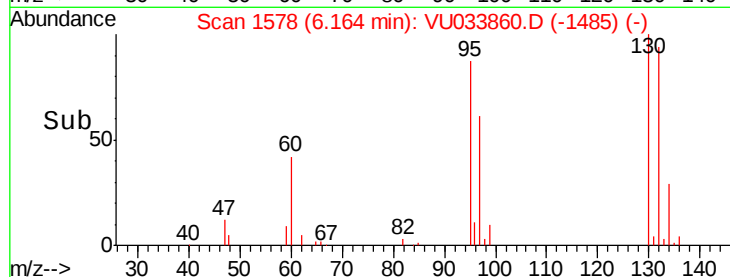
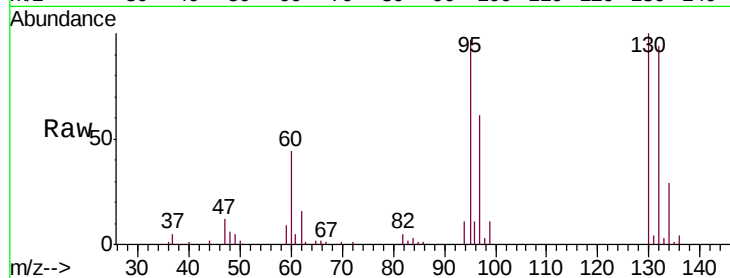
Ion Ratio Lower Upper

95 100

97 62.8 45.6 84.8

132 97.0 73.5 136.5

130 103.1 75.9 141.1

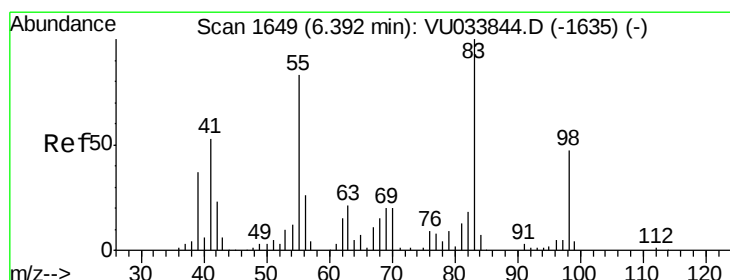
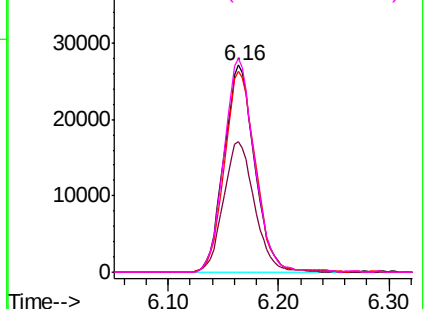


Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 96.95 (96.65 to 97.65): VU0

Ion 131.95 (131.65 to 132.65): V

Ion 129.95 (129.65 to 130.65): V



#35

Methylcyclohexane

Concen: 4.701 ug/L

RT: 6.39 min Scan# 1649

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

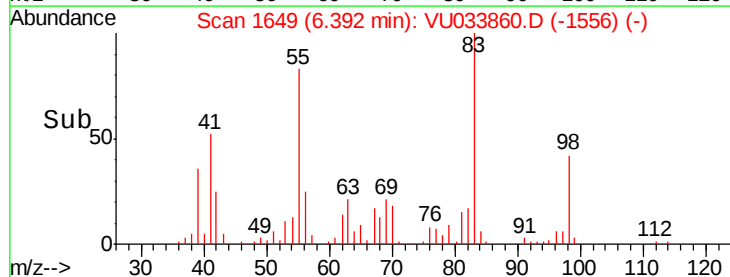
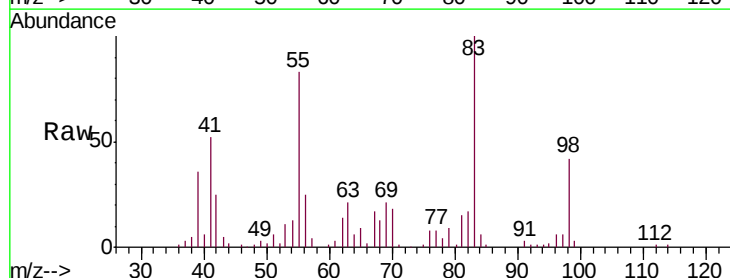
Tgt Ion: 83 Resp: 74231

Ion Ratio Lower Upper

83 100

55 83.4 64.3 96.5

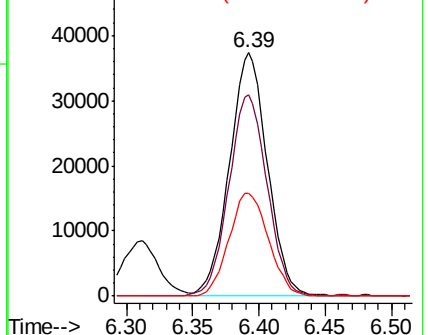
98 43.9 37.4 56.0

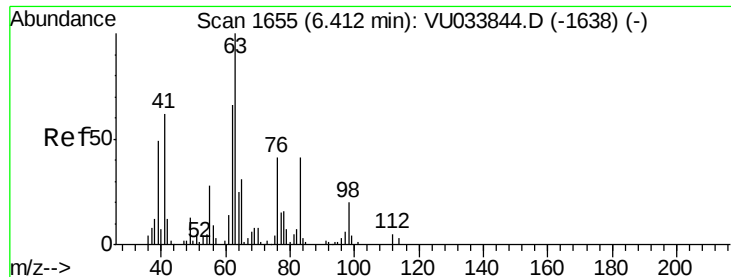


Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0

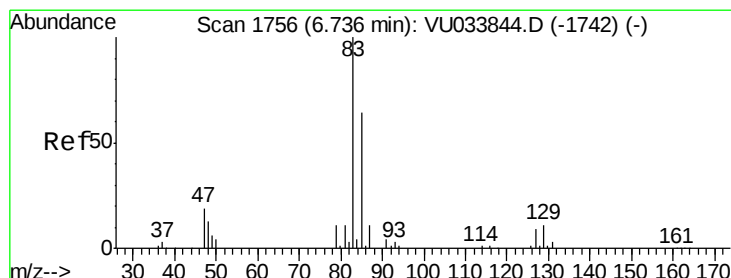
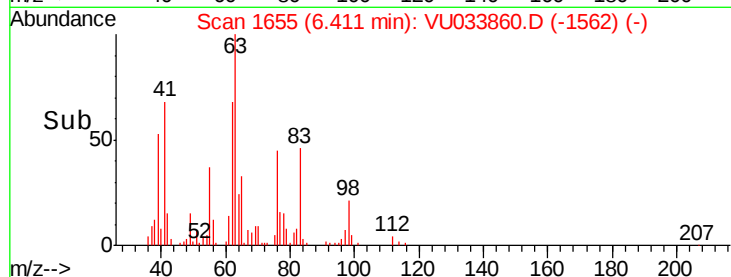
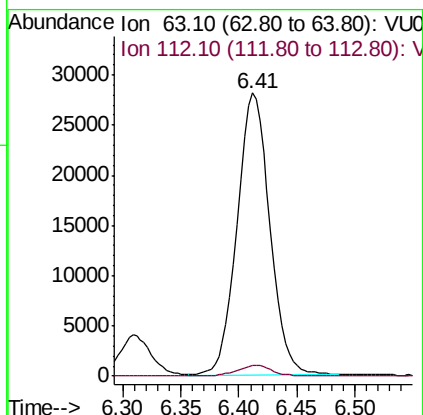
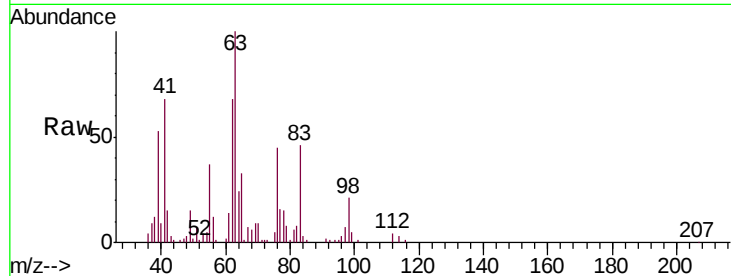




#37  
 1,2-Dichloropropane  
 Concen: 4.958 ug/L  
 RT: 6.41 min Scan# 1655  
 Delta R.T. -0.00 min  
 Lab File: VU033860.D  
 Acq: 20 Aug 2019 18:12

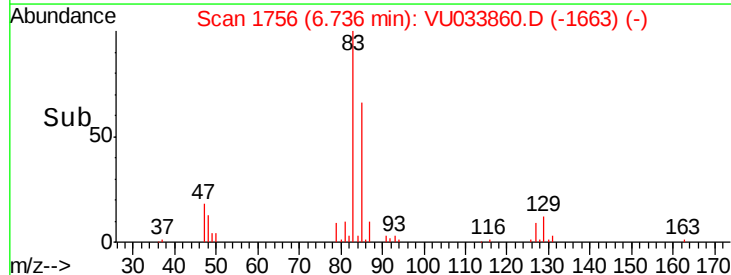
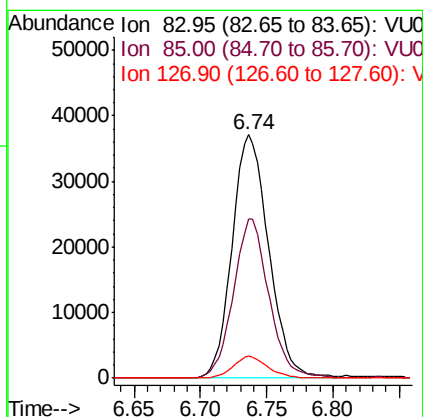
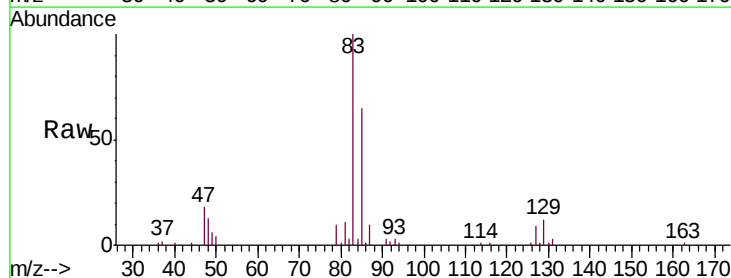
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00515

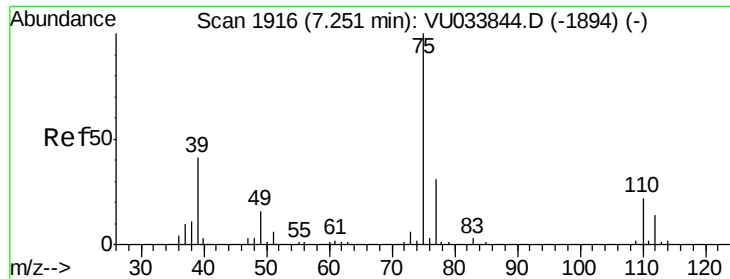
Tgt Ion: 63 Resp: 55257  
 Ion Ratio Lower Upper  
 63 100  
 112 4.0 3.5 5.3



#38  
 Bromodichloromethane  
 Concen: 4.963 ug/L  
 RT: 6.74 min Scan# 1756  
 Delta R.T. -0.00 min  
 Lab File: VU033860.D  
 Acq: 20 Aug 2019 18:12

Tgt Ion: 83 Resp: 71243  
 Ion Ratio Lower Upper  
 83 100  
 85 65.2 44.7 83.1  
 127 9.2 7.1 10.7

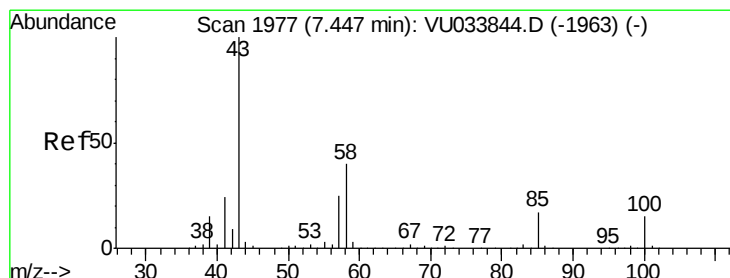
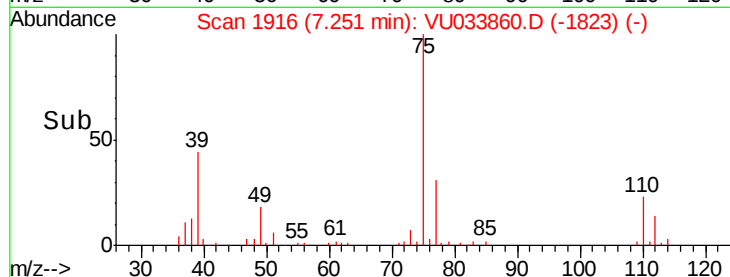
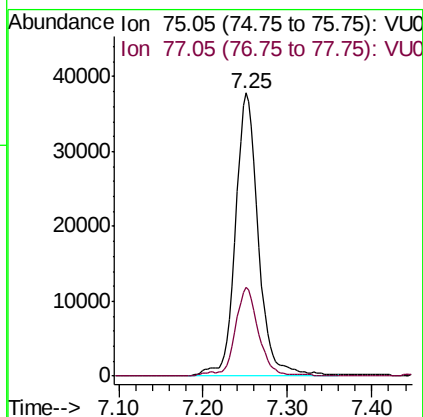
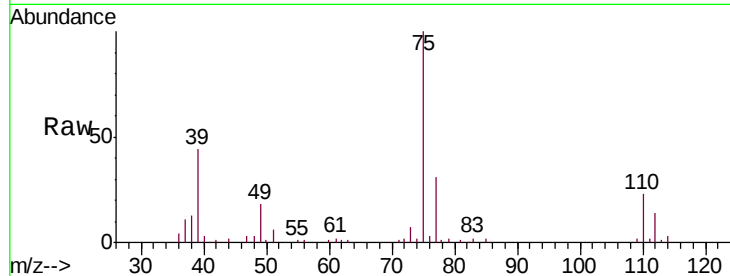




#39  
 cis-1,3-Dichloropropene  
 Concen: 4.893 ug/L  
 RT: 7.25 min Scan# 1916  
 Delta R.T. -0.00 min  
 Lab File: VU033860.D  
 Acq: 20 Aug 2019 18:12

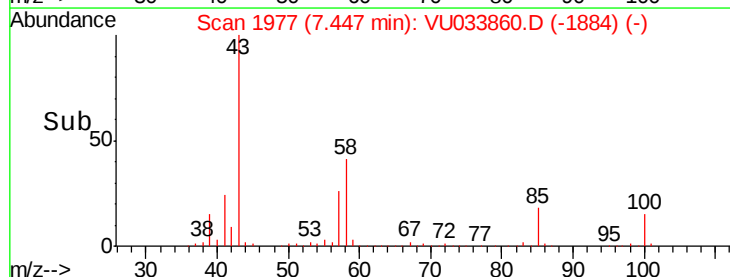
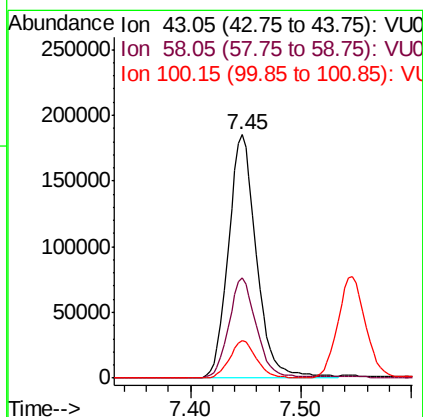
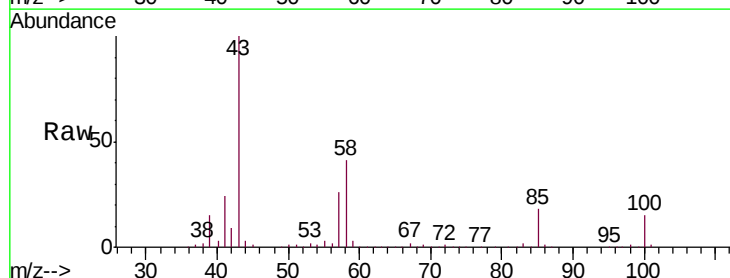
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00515

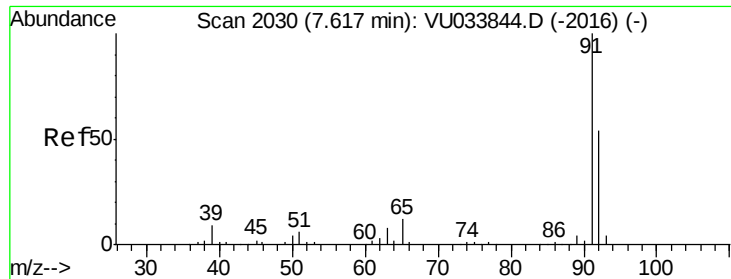
Tgt Ion: 75 Resp: 72066  
 Ion Ratio Lower Upper  
 75 100  
 77 31.3 21.6 40.2



#40  
 4-Methyl-2-pentanone  
 Concen: 55.486 ug/L  
 RT: 7.45 min Scan# 1977  
 Delta R.T. -0.00 min  
 Lab File: VU033860.D  
 Acq: 20 Aug 2019 18:12

Tgt Ion: 43 Resp: 327517  
 Ion Ratio Lower Upper  
 43 100  
 58 40.5 32.0 48.0  
 100 14.7 11.8 17.6





#42

Toluene

Concen: 5.168 ug/L

RT: 7.62 min Scan# 2030

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

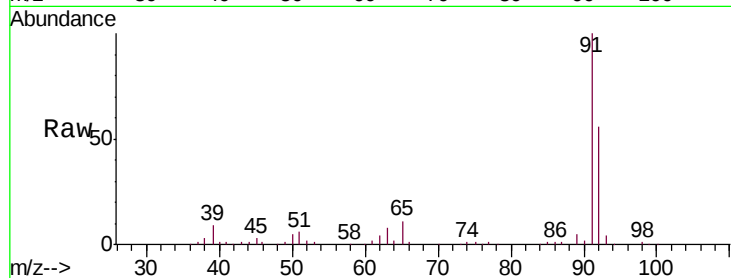
VSTD00515

Tgt Ion: 91 Resp: 222990

Ion Ratio Lower Upper

91 100

92 56.1 38.1 70.7



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

Ion 92.15 (91.85 to 92.85): VU033860.D (-1937) (-)

7.62

150000

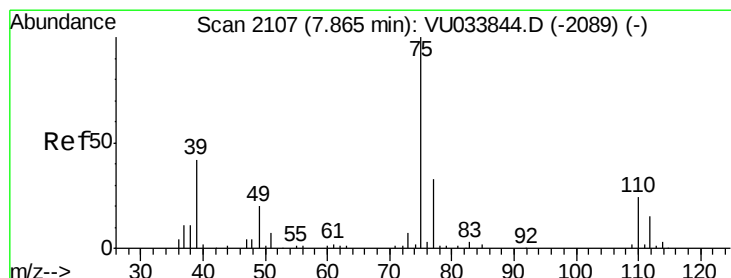
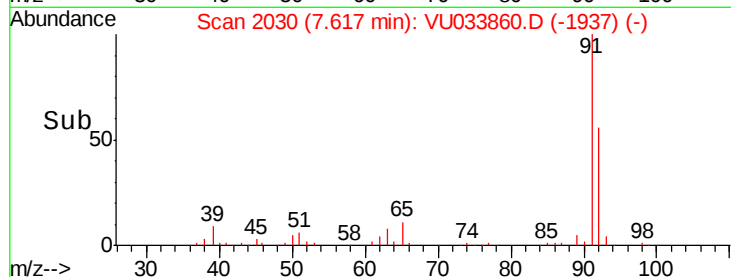
100000

50000

0

7.50 7.60 7.70

Time-->



#44

trans-1,3-Dichloropropene

Concen: 4.880 ug/L

RT: 7.86 min Scan# 2107

Delta R.T. -0.00 min

Lab File: VU033860.D

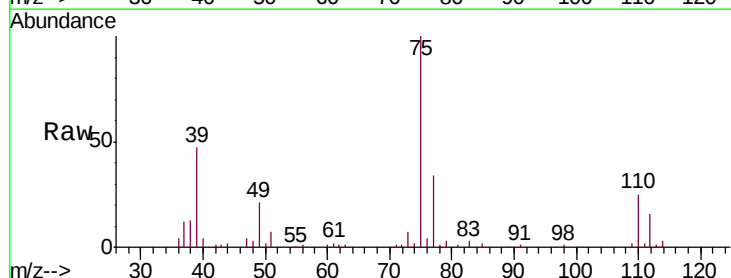
Acq: 20 Aug 2019 18:12

Tgt Ion: 75 Resp: 60107

Ion Ratio Lower Upper

75 100

77 34.4 23.0 42.6



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

Ion 77.05 (76.75 to 77.75): VU033860.D (-2144) (-)

7.86

30000

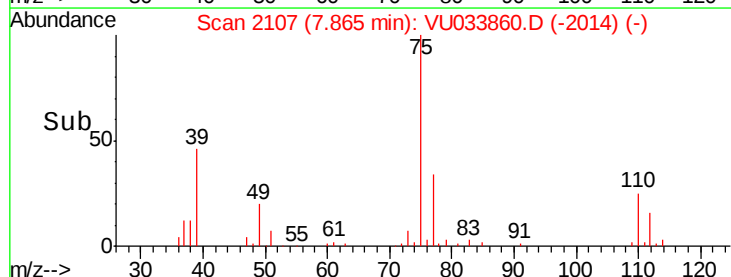
20000

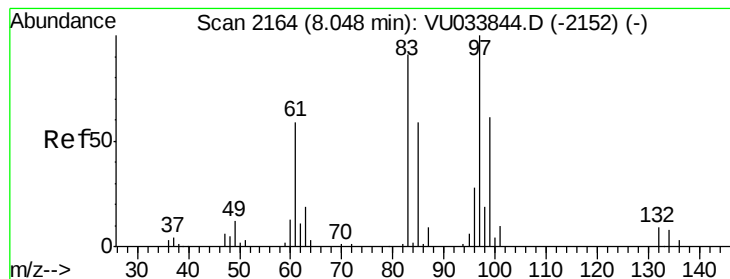
10000

0

7.75 7.80 7.85 7.90 7.95

Time-->





#45

1,1,2-Trichloroethane

Concen: 5.144 ug/L

RT: 8.05 min Scan# 2165

Delta R.T. 0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00515

Tgt Ion: 97 Resp: 41033

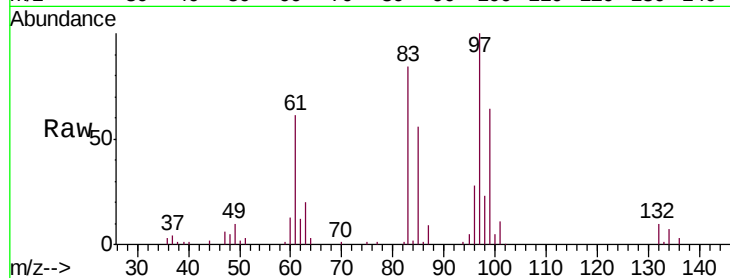
Ion Ratio Lower Upper

97 100

99 64.4 42.8 79.6

83 84.3 63.6 118.0

85 56.1 41.2 76.6

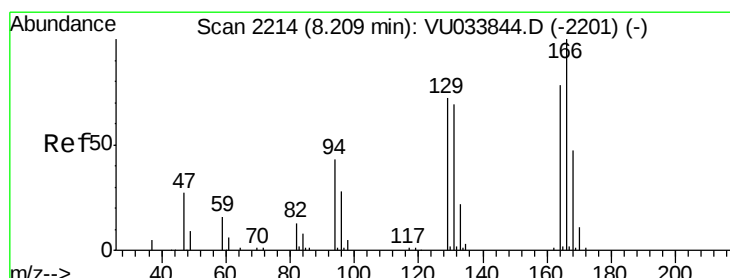
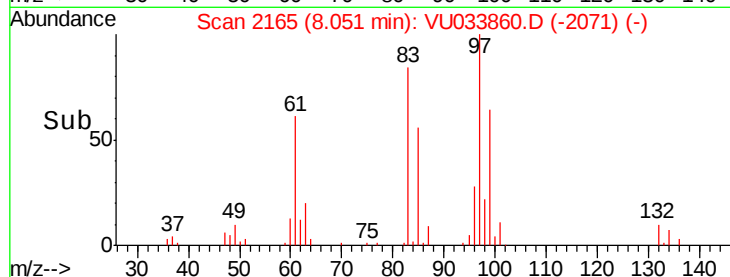
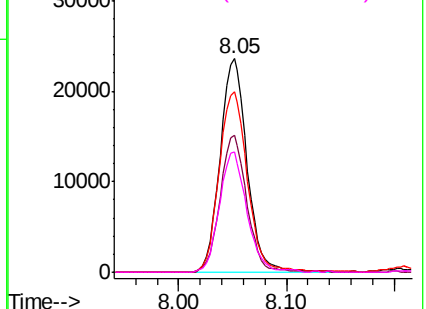


Abundance Ion 96.95 (96.65 to 97.65): VU0

Ion 99.05 (98.75 to 99.75): VU0

Ion 82.95 (82.65 to 83.65): VU0

Ion 85.00 (84.70 to 85.70): VU0



#47

Tetrachloroethene

Concen: 4.827 ug/L

RT: 8.21 min Scan# 2214

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Tgt Ion: 164 Resp: 44745

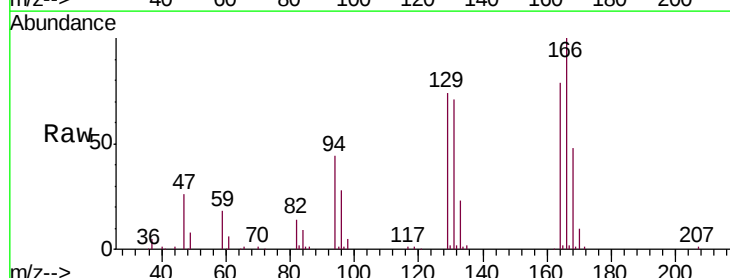
Ion Ratio Lower Upper

164 100

129 93.6 63.9 118.7

131 90.1 61.5 114.1

166 126.4 89.2 165.6

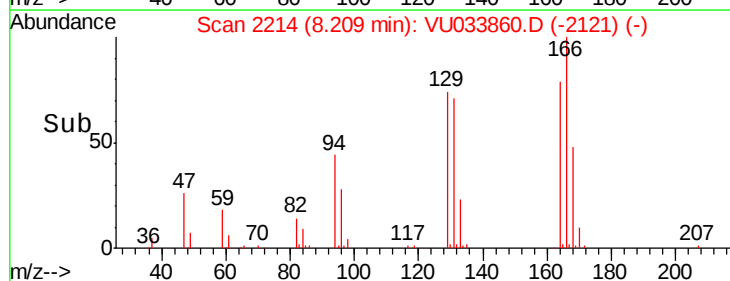
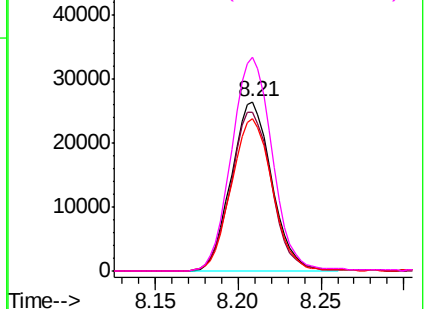


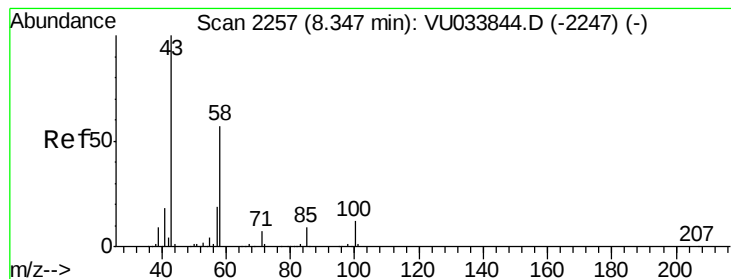
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V





#48

2-Hexanone

Concen: 58.063 ug/L

RT: 8.35 min Scan# 2257

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00515

Tgt Ion: 43 Resp: 250431

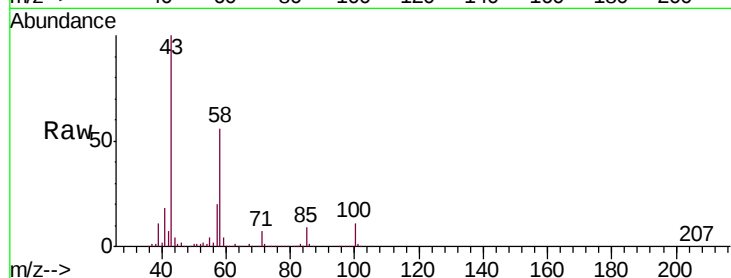
Ion Ratio Lower Upper

43 100

58 53.6 45.1 67.7

57 18.2 15.4 23.0

100 11.2 8.9 13.3

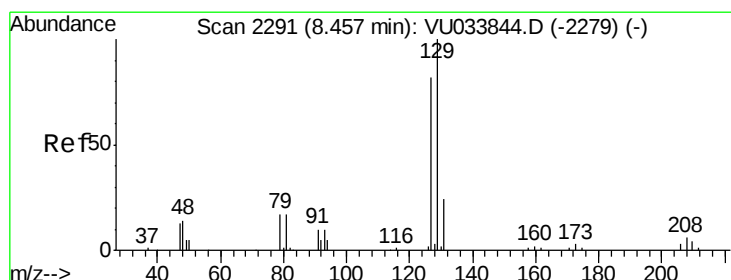
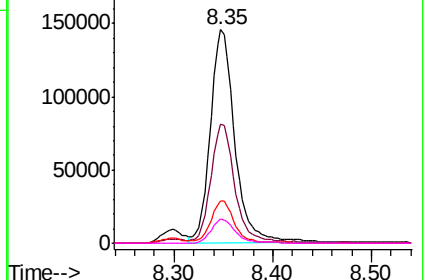
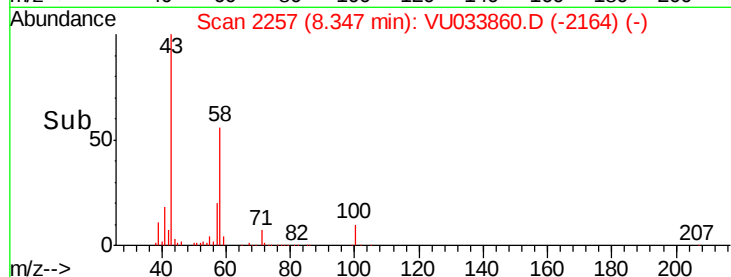


Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 58.05 (57.75 to 58.75): VU0

Ion 57.20 (56.90 to 57.90): VU0

Ion 100.15 (99.85 to 100.85): VU0



#49

Dibromochloromethane

Concen: 5.073 ug/L

RT: 8.46 min Scan# 2292

Delta R.T. 0.00 min

Lab File: VU033860.D

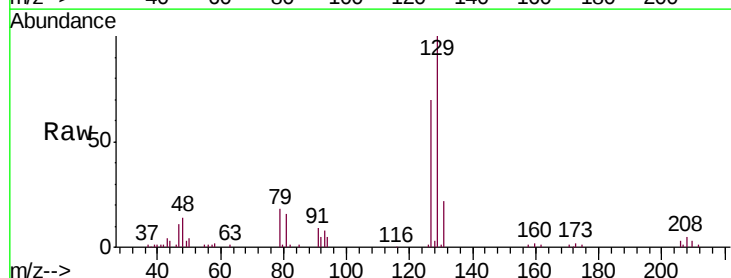
Acq: 20 Aug 2019 18:12

Tgt Ion: 129 Resp: 50525

Ion Ratio Lower Upper

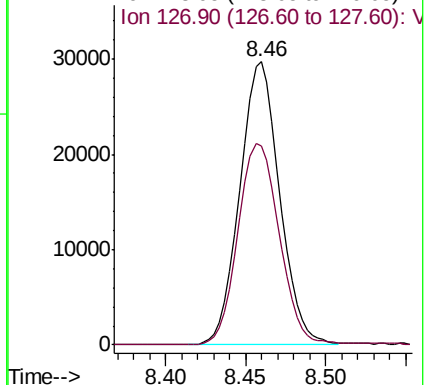
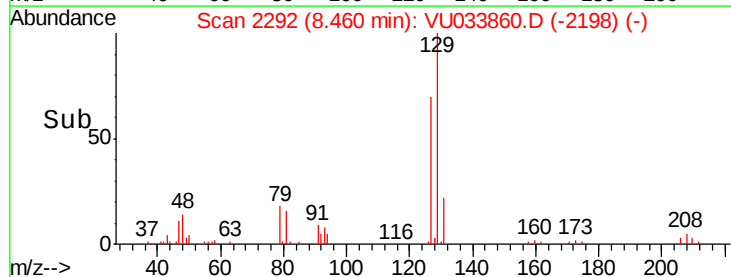
129 100

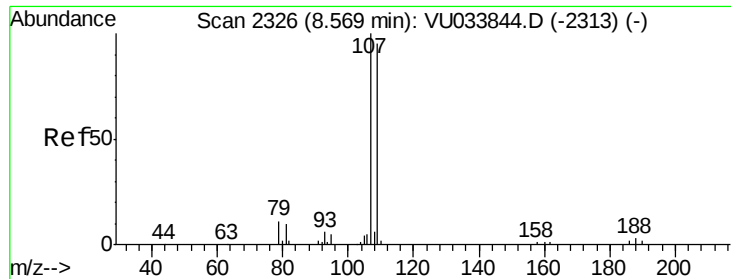
127 70.5 57.1 106.1



Abundance Ion 128.95 (128.65 to 129.65): V

Ion 126.90 (126.60 to 127.60): V

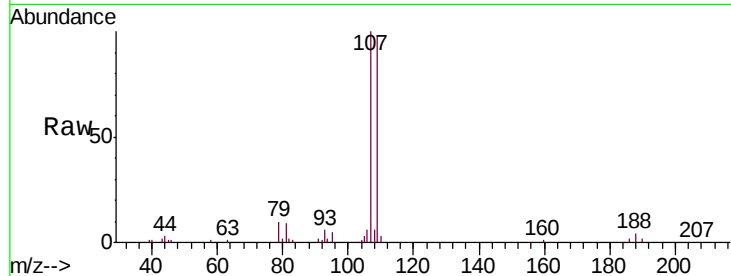




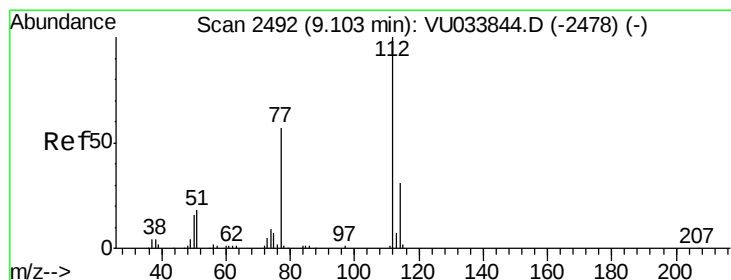
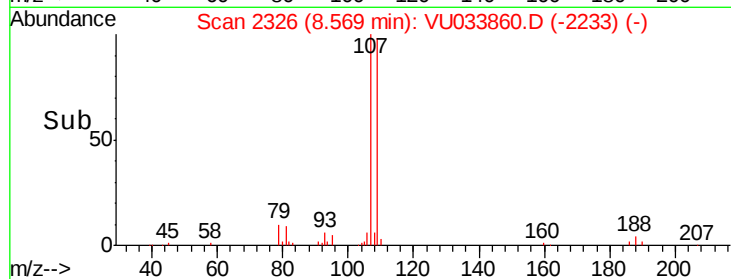
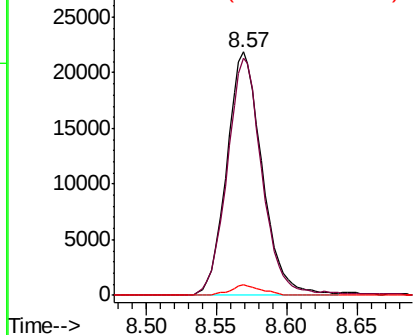
#50  
 1,2-Dibromoethane  
 Concen: 5.042 ug/L  
 RT: 8.57 min Scan# 2326  
 Delta R.T. -0.00 min  
 Lab File: VU033860.D  
 Acq: 20 Aug 2019 18:12

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00515

Tgt Ion:107 Resp: 38439  
 Ion Ratio Lower Upper  
 107 100  
 109 97.7 66.3 123.1  
 188 4.3 2.4 3.6#

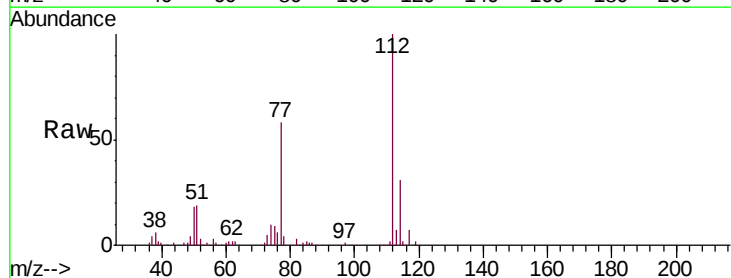


Abundance Ion 106.95 (106.65 to 107.65): V  
 Ion 109.00 (108.70 to 109.70): V  
 Ion 187.90 (187.60 to 188.60): V

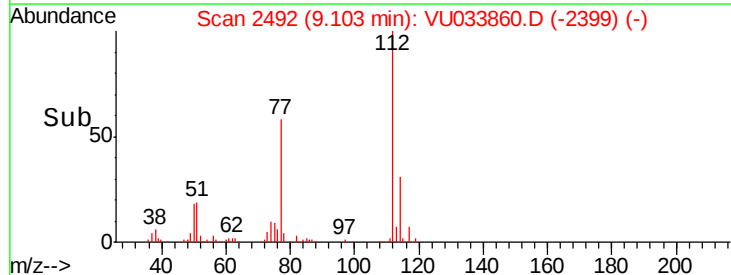
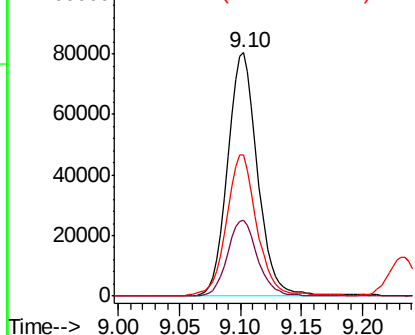


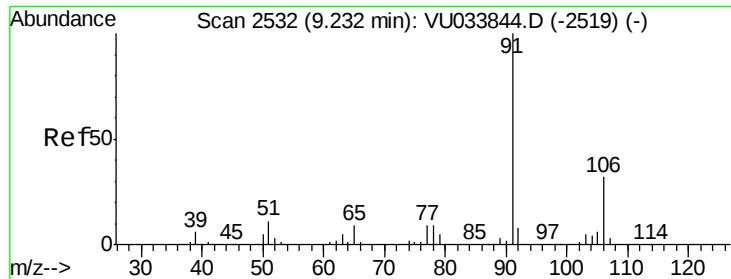
#51  
 Chlorobenzene  
 Concen: 4.839 ug/L  
 RT: 9.10 min Scan# 2492  
 Delta R.T. -0.00 min  
 Lab File: VU033860.D  
 Acq: 20 Aug 2019 18:12

Tgt Ion:112 Resp: 138088  
 Ion Ratio Lower Upper  
 112 100  
 114 31.2 21.3 39.6  
 77 57.8 46.6 69.8



Abundance Ion 112.10 (111.80 to 112.80): V  
 Ion 114.05 (113.75 to 114.75): V  
 Ion 77.10 (76.80 to 77.80): VU0





#52

Ethylbenzene

Concen: 5.008 ug/L

RT: 9.23 min Scan# 2532

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

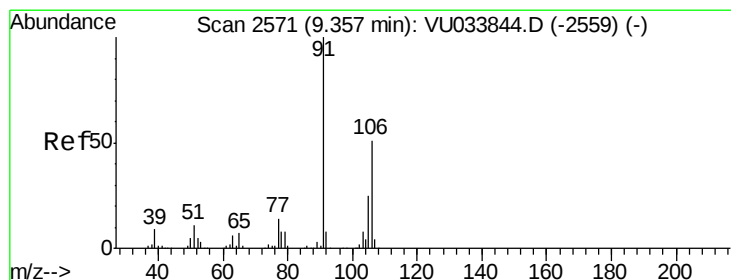
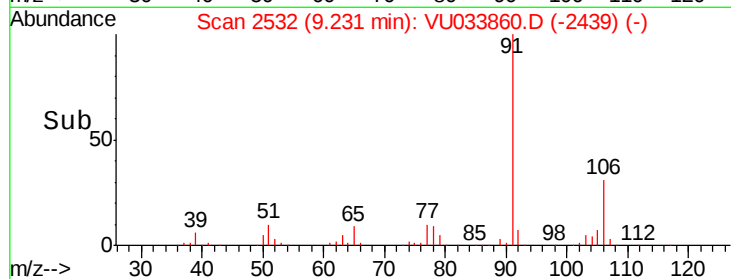
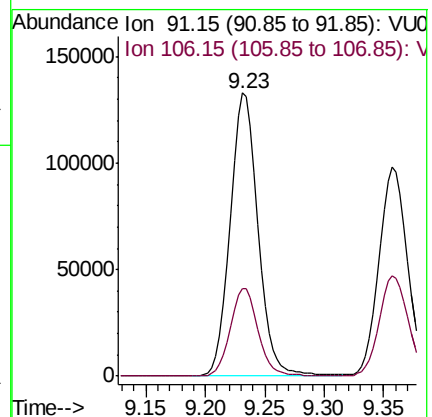
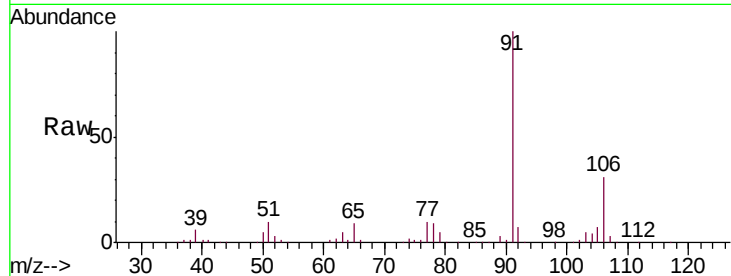
VSTD00515

Tgt Ion: 91 Resp: 216265

Ion Ratio Lower Upper

91 100

106 31.0 22.3 41.3



#53

m,p-Xylene

Concen: 4.983 ug/L

RT: 9.36 min Scan# 2571

Delta R.T. -0.00 min

Lab File: VU033860.D

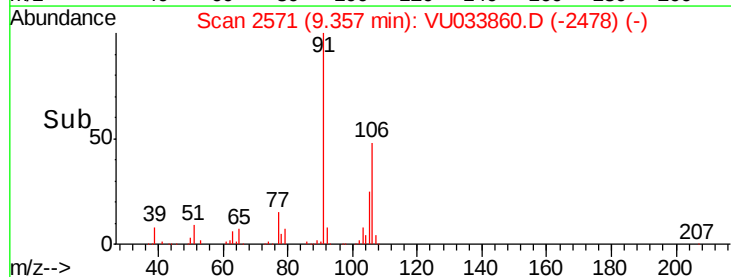
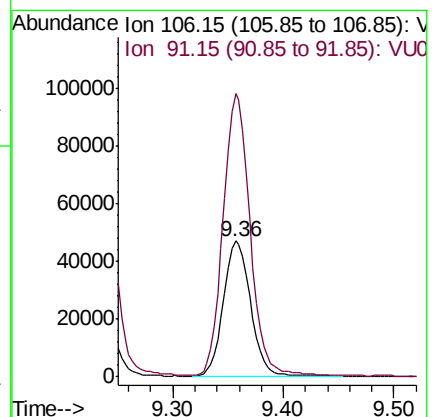
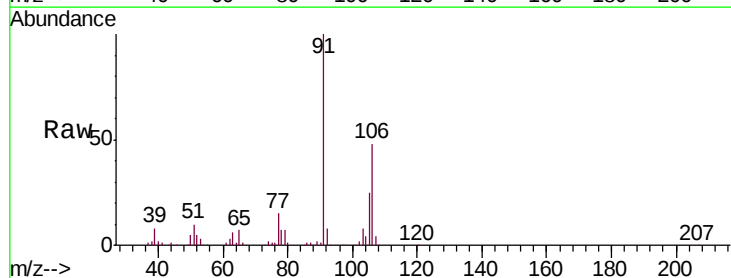
Acq: 20 Aug 2019 18:12

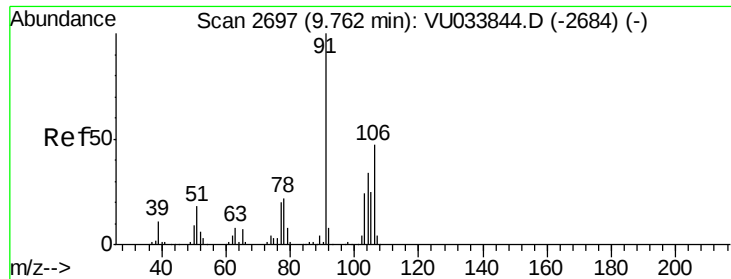
Tgt Ion: 106 Resp: 80785

Ion Ratio Lower Upper

106 100

91 208.1 137.7 255.7

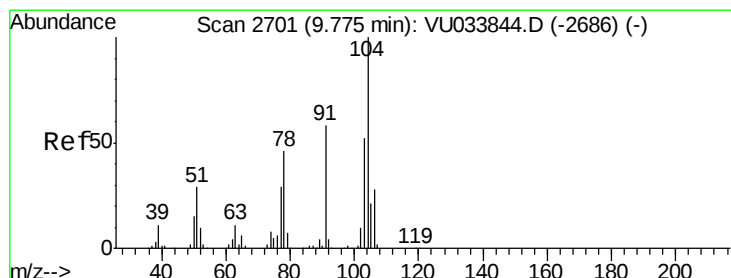
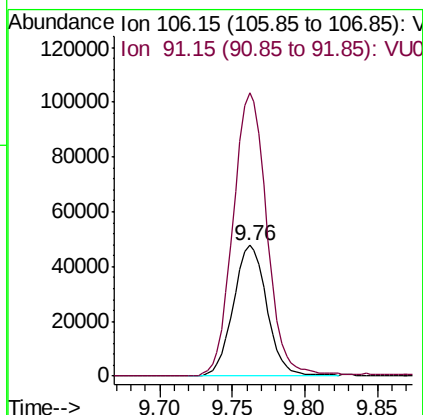
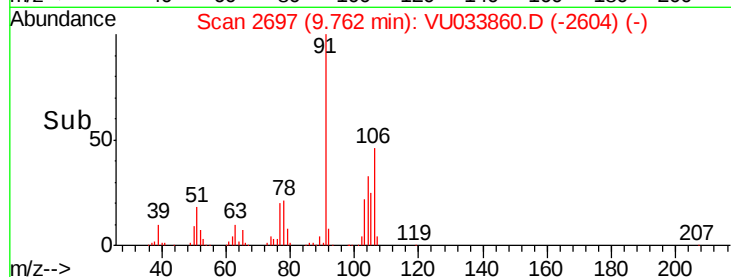
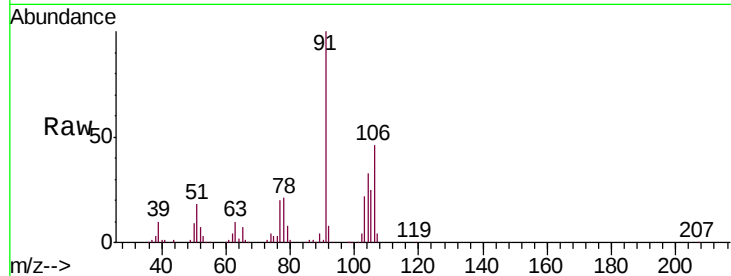




#54  
o-Xylene  
Concen: 4.950 ug/L  
RT: 9.76 min Scan# 2697  
Delta R.T. -0.00 min  
Lab File: VU033860.D  
Acq: 20 Aug 2019 18:12

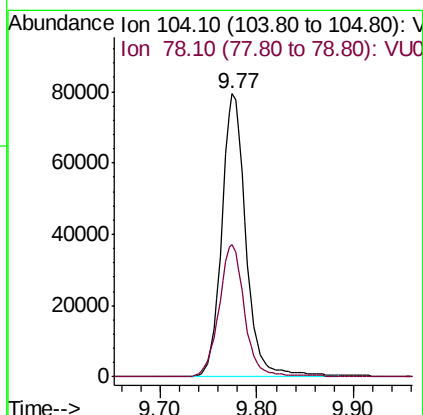
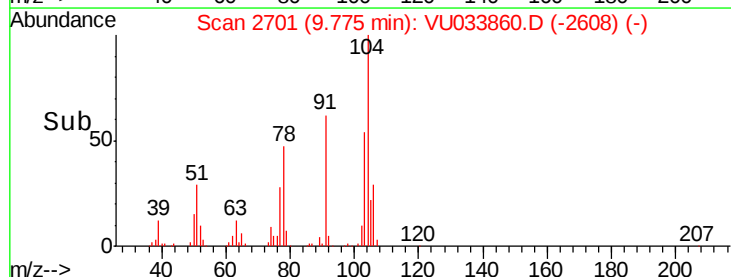
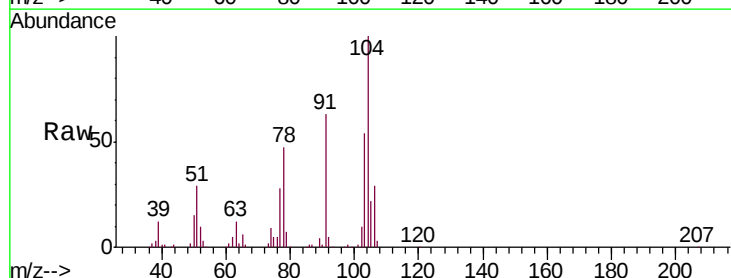
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00515

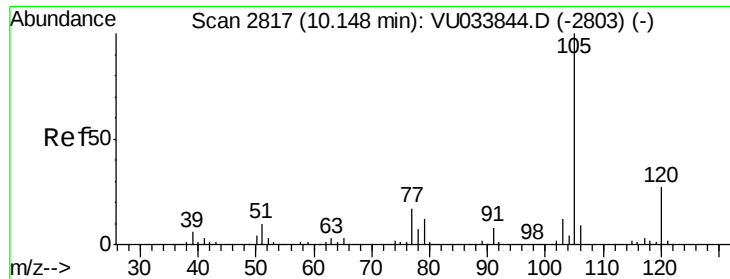
Tgt Ion:106 Resp: 76946  
Ion Ratio Lower Upper  
106 100  
91 216.8 148.6 276.0



#55  
Styrene  
Concen: 5.117 ug/L  
RT: 9.77 min Scan# 2701  
Delta R.T. -0.00 min  
Lab File: VU033860.D  
Acq: 20 Aug 2019 18:12

Tgt Ion:104 Resp: 137864  
Ion Ratio Lower Upper  
104 100  
78 47.0 32.3 59.9





#56

Isopropylbenzene

Concen: 5.023 ug/L

RT: 10.15 min Scan# 2818

Delta R.T. 0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00515

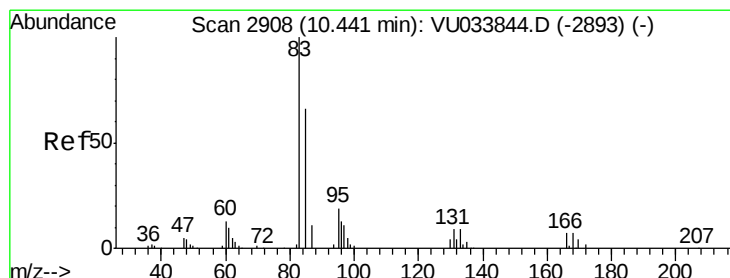
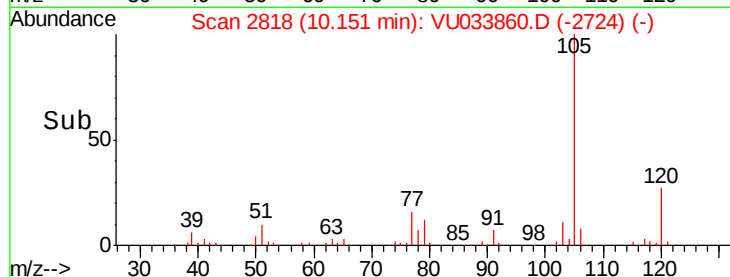
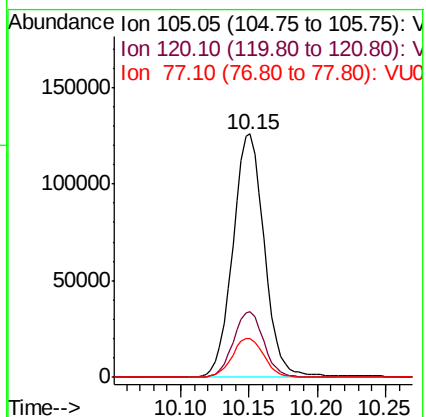
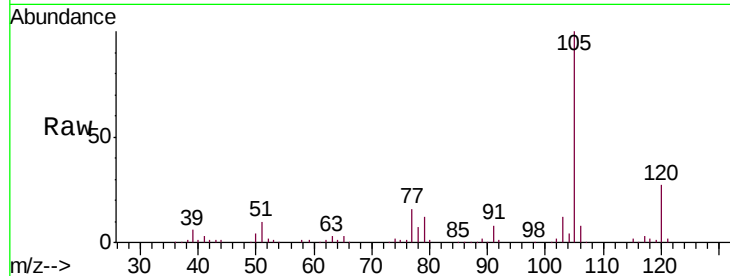
Tgt Ion:105 Resp: 202054

Ion Ratio Lower Upper

105 100

120 26.0 21.2 31.8

77 16.6 13.1 19.7



#58

1,1,2,2-Tetrachloroethane

Concen: 5.410 ug/L

RT: 10.44 min Scan# 2908

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

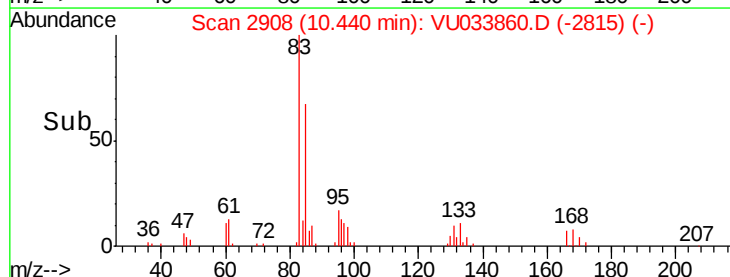
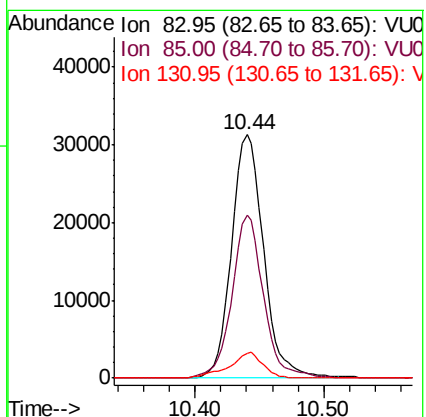
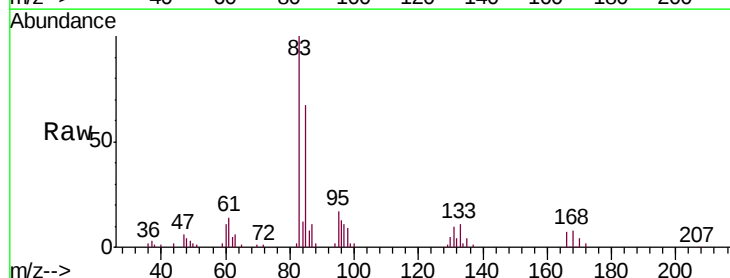
Tgt Ion: 83 Resp: 54174

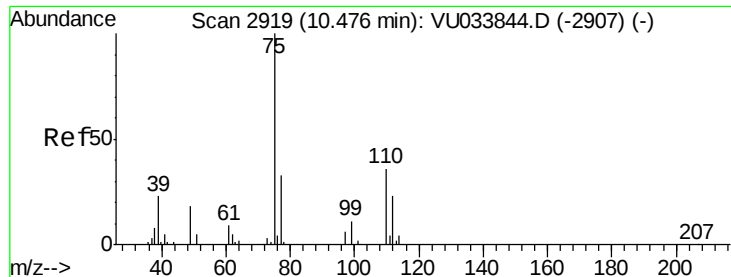
Ion Ratio Lower Upper

83 100

85 67.1 46.5 86.3

131 10.4 7.1 10.7





#59

1,2,3-Trichloropropane

Concen: 5.296 ug/L

RT: 10.48 min Scan# 2919

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

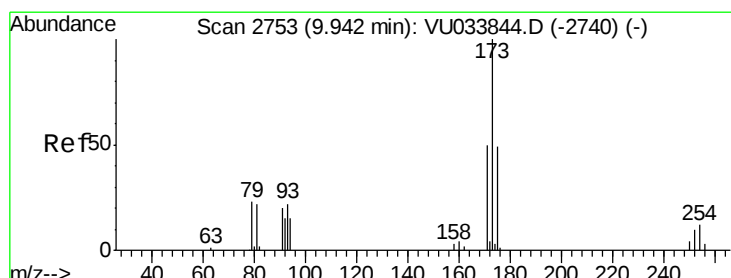
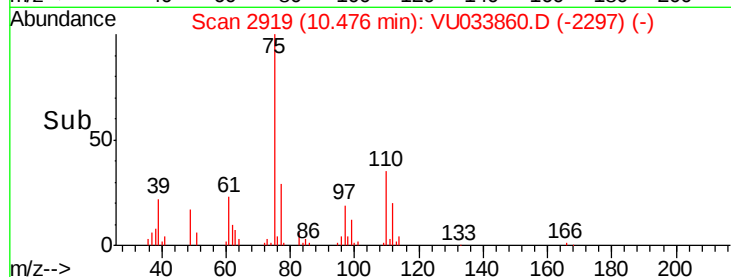
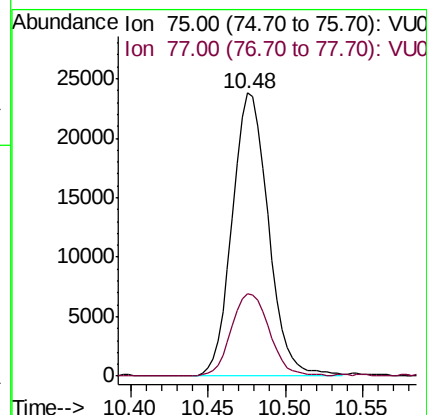
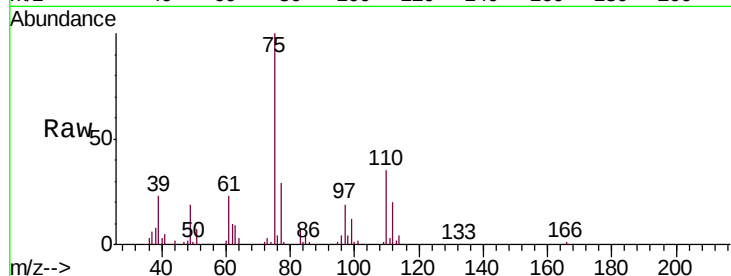
VSTD00515

Tgt Ion: 75 Resp: 38677

Ion Ratio Lower Upper

75 100

77 30.6 26.3 39.5



#61

Bromoform

Concen: 5.020 ug/L

RT: 9.94 min Scan# 2753

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

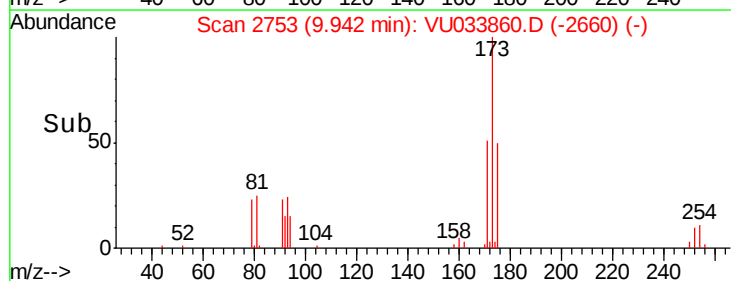
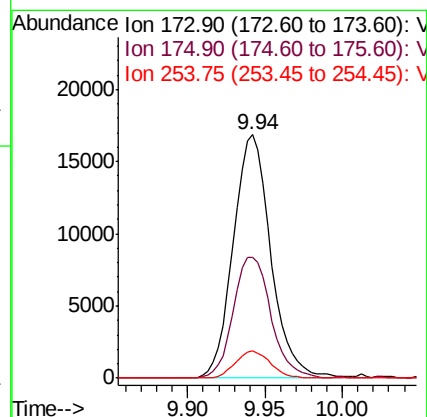
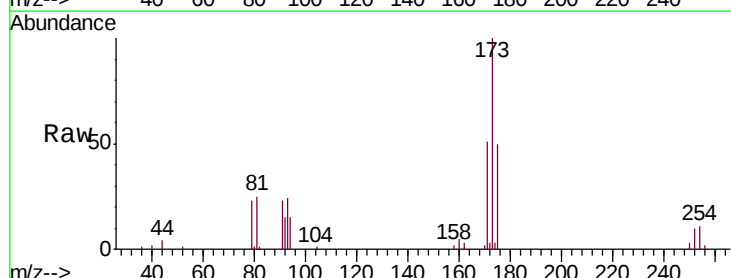
Tgt Ion: 173 Resp: 28367

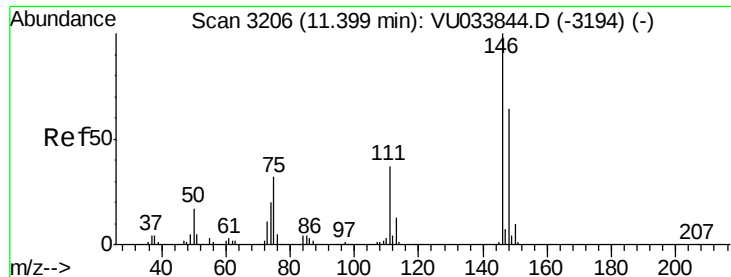
Ion Ratio Lower Upper

173 100

175 49.9 39.3 58.9

254 10.3 8.1 12.1





#62

1,3-Dichlorobenzene

Concen: 4.937 ug/L

RT: 11.40 min Scan# 3207

Delta R.T. 0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00515

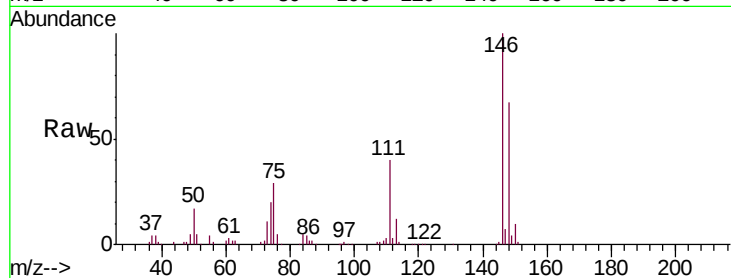
Tgt Ion:146 Resp: 112199

Ion Ratio Lower Upper

146 100

111 40.1 25.9 48.1

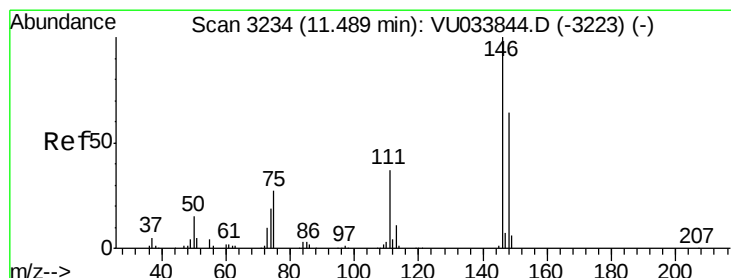
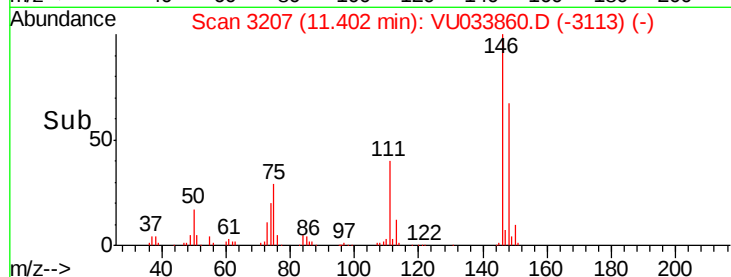
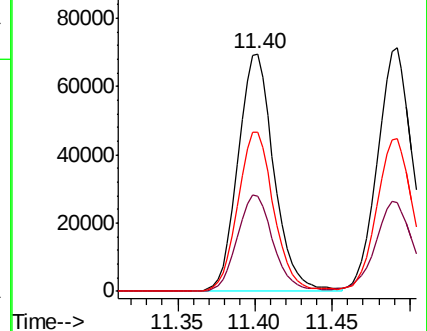
148 67.1 44.7 83.1



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 4.936 ug/L

RT: 11.49 min Scan# 3235

Delta R.T. 0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

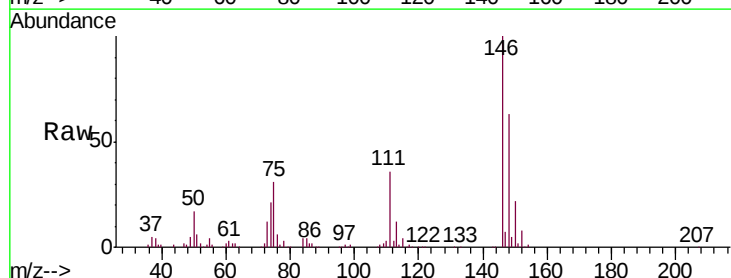
Tgt Ion:146 Resp: 115347

Ion Ratio Lower Upper

146 100

111 36.3 26.2 48.6

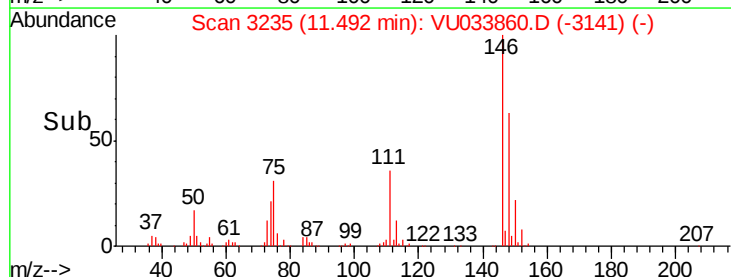
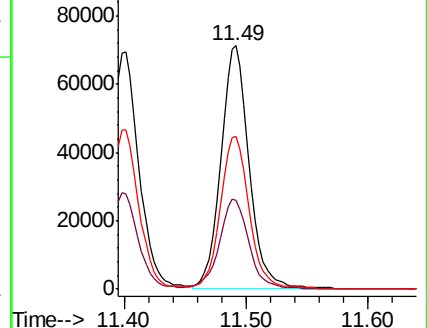
148 62.6 44.7 83.1

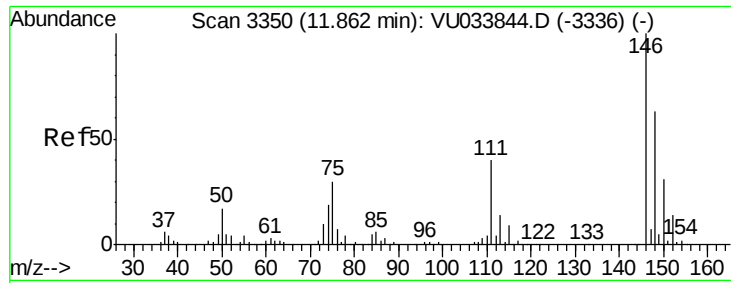


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 4.920 ug/L

RT: 11.86 min Scan# 3350

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00515

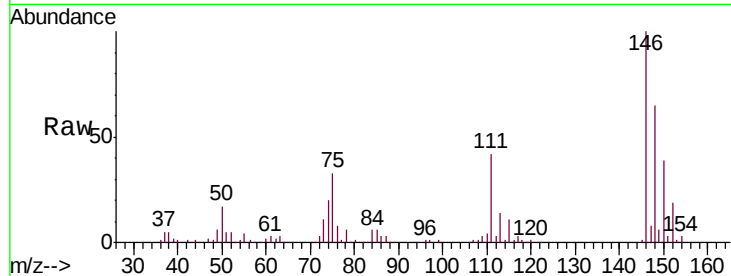
Tgt Ion:146 Resp: 108194

Ion Ratio Lower Upper

146 100

111 42.0 31.9 47.9

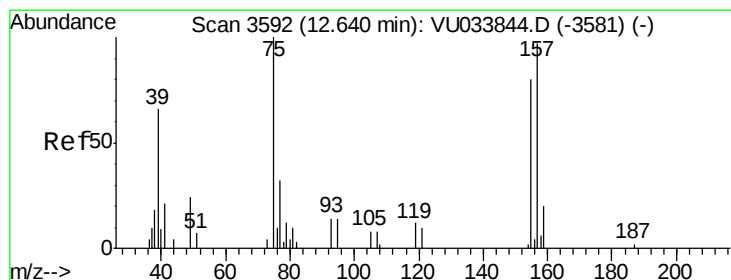
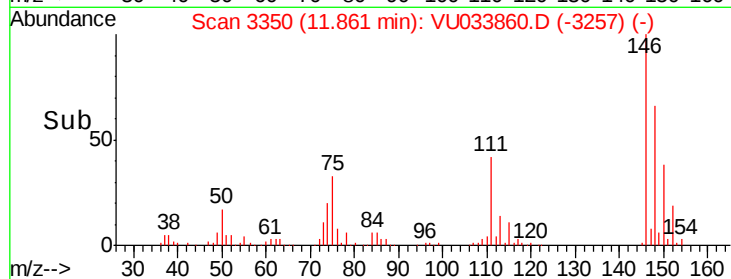
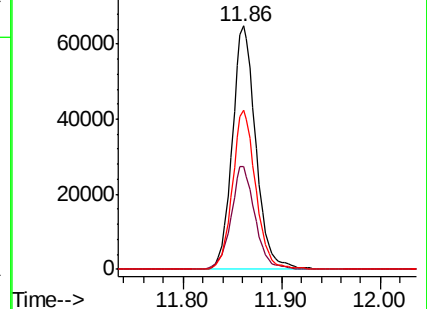
148 65.5 50.6 76.0



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 5.484 ug/L

RT: 12.64 min Scan# 3593

Delta R.T. 0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

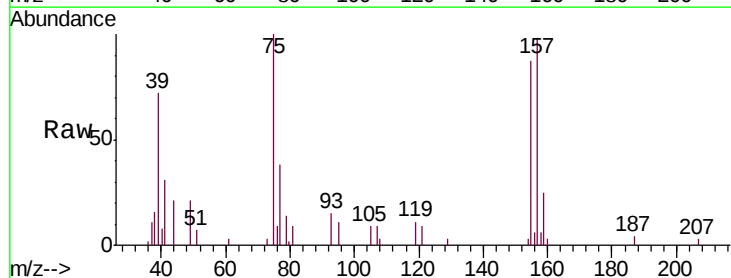
Tgt Ion: 75 Resp: 8531

Ion Ratio Lower Upper

75 100

155 87.2 64.1 96.1

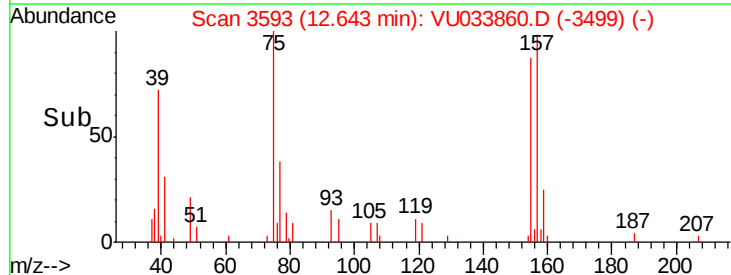
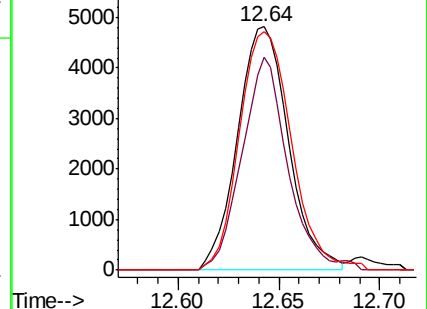
157 98.1 77.5 116.3

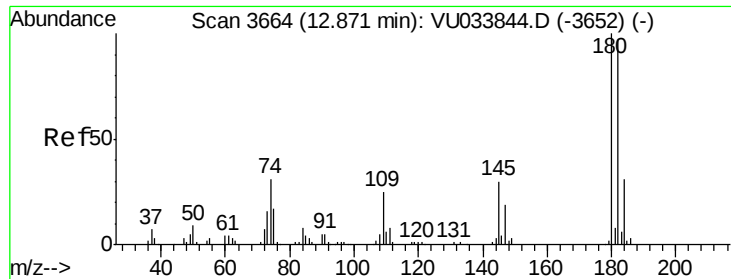


Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

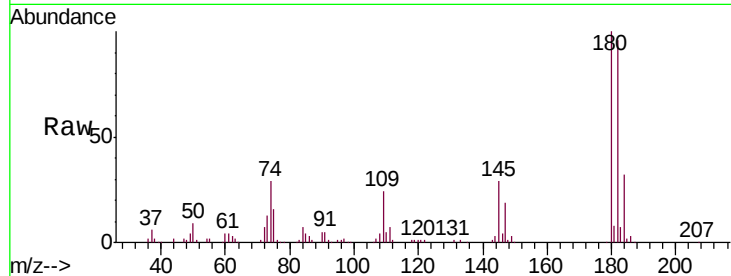




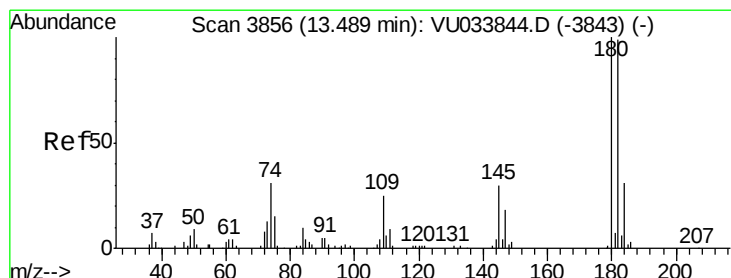
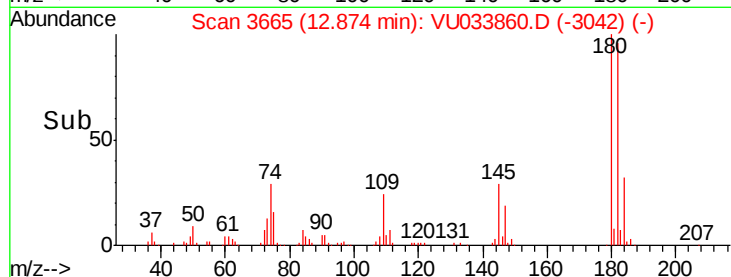
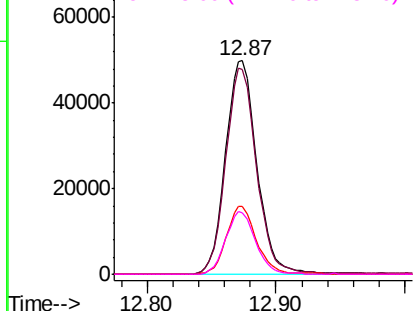
#67  
 1,3,5-Trichlorobenzene  
 Concen: 4.881 ug/L  
 RT: 12.87 min Scan# 3665  
 Delta R.T. 0.00 min  
 Lab File: VU033860.D  
 Acq: 20 Aug 2019 18:12

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00515

Tgt Ion:180 Resp: 84199  
 Ion Ratio Lower Upper  
 180 100  
 182 94.9 77.5 116.3  
 184 30.4 24.2 36.4  
 145 28.0 23.4 35.2

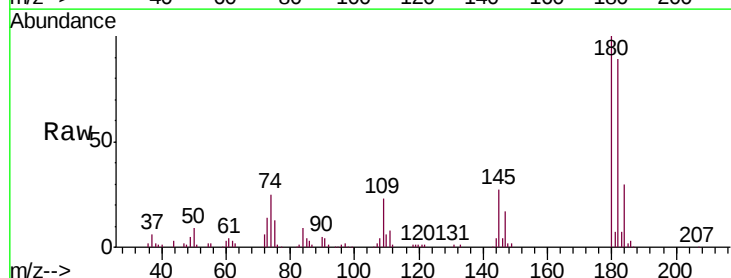


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

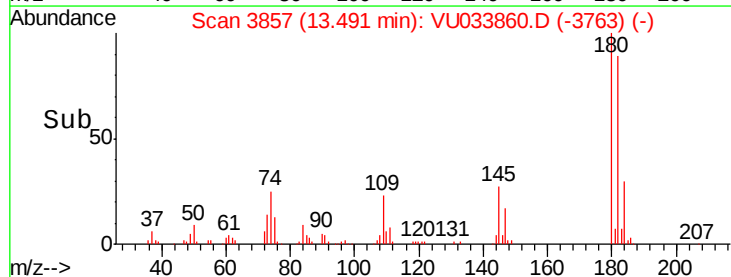
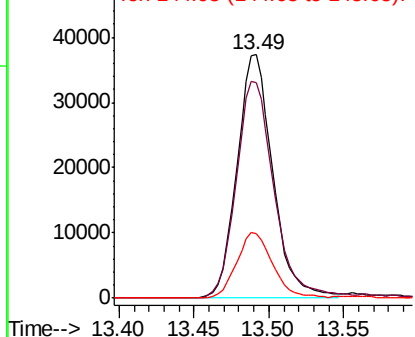


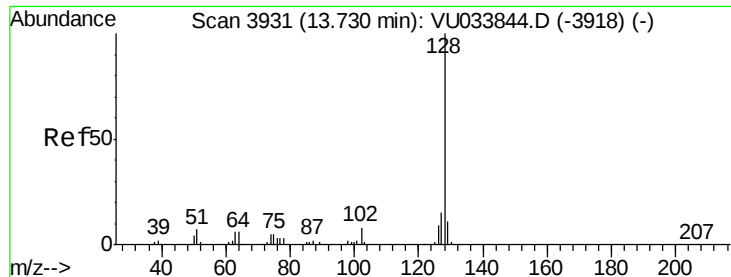
#68  
 1,2,4-trichlorobenzene  
 Concen: 4.968 ug/L  
 RT: 13.49 min Scan# 3857  
 Delta R.T. 0.00 min  
 Lab File: VU033860.D  
 Acq: 20 Aug 2019 18:12

Tgt Ion:180 Resp: 62372  
 Ion Ratio Lower Upper  
 180 100  
 182 94.0 77.6 116.4  
 145 27.2 24.4 36.6



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





#69

Naphthalene

Concen: 5.139 ug/L

RT: 13.73 min Scan# 3931

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00515

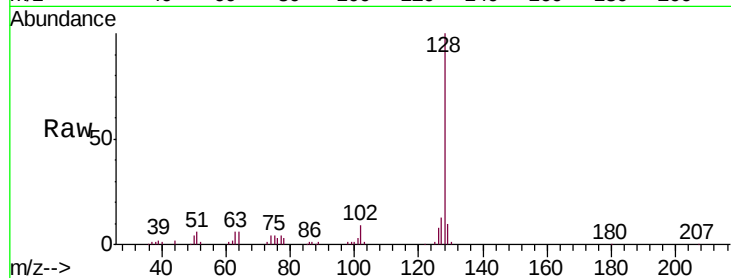
Tgt Ion:128 Resp: 93703

Ion Ratio Lower Upper

128 100

129 10.0 9.0 13.6

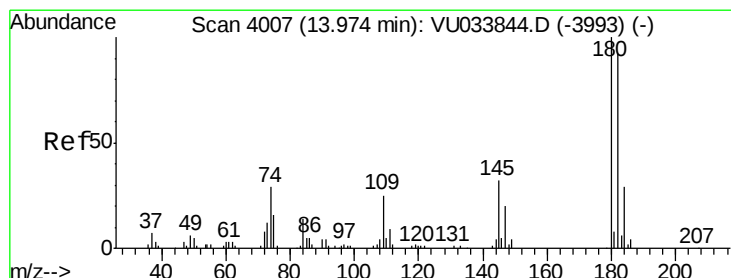
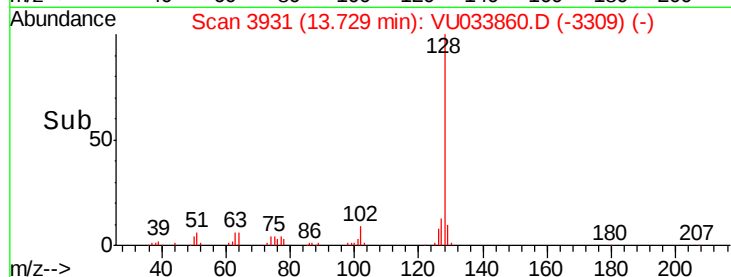
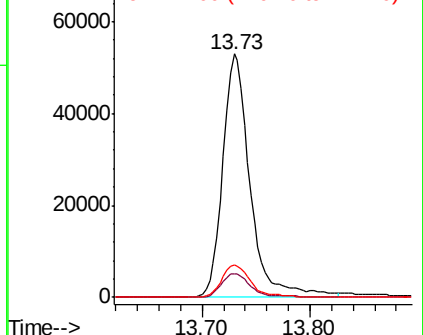
127 14.1 10.9 16.3



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 5.118 ug/L

RT: 13.97 min Scan# 4007

Delta R.T. -0.00 min

Lab File: VU033860.D

Acq: 20 Aug 2019 18:12

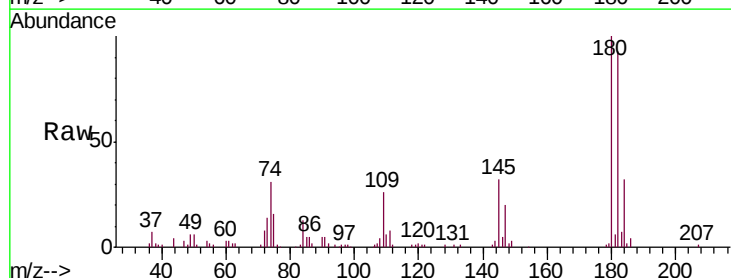
Tgt Ion:180 Resp: 61073

Ion Ratio Lower Upper

180 100

182 93.2 76.9 115.3

145 30.8 24.6 36.8



Abundance Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

