

Data File : VU033493.D  
Acq On : 30 Jul 2019 15:22  
Operator : JC/SP  
Sample : VSTD01035  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01035

Quant Time: Jul 31 07:38:05 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM073119WMA.M  
Quant Title : VOC Analysis  
QLast Update : Wed Jul 31 07:35:00 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.86  | 114  | 313484   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.07  | 117  | 316099   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.47 | 152  | 163978   | 50.00 | ug/L  | 0.00     |

System Monitoring Compounds

|                                |       |     |       |       |      |      |
|--------------------------------|-------|-----|-------|-------|------|------|
| 4) Vinyl Chloride-d3           | 1.39  | 65  | 23832 | 10.08 | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.67  | 69  | 19954 | 9.83  | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.26  | 63  | 44031 | 10.50 | ug/L | 0.00 |
| 21) 2-Butanone-d5              | 4.16  | 46  | 28740 | 18.92 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.62  | 84  | 38825 | 9.81  | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.29  | 65  | 25007 | 9.84  | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.32  | 84  | 77545 | 9.92  | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.31  | 67  | 24131 | 9.63  | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.55  | 98  | 70551 | 9.58  | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.84  | 79  | 11807 | 9.70  | ug/L | 0.00 |
| 47) 2-Hexanone-d5              | 8.30  | 63  | 19489 | 16.99 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.41 | 84  | 36906 | 9.76  | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.85 | 152 | 29457 | 10.02 | ug/L | 0.00 |

Target Compounds

|                                |      |     |       |             | Qvalue |
|--------------------------------|------|-----|-------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 29606 | 9.488 ug/L  | 99     |
| 3) Chloromethane               | 1.32 | 50  | 30930 | 10.001 ug/L | 99     |
| 5) Vinyl chloride              | 1.40 | 62  | 33039 | 9.391 ug/L  | 97     |
| 6) Bromomethane                | 1.62 | 94  | 20120 | 8.475 ug/L  | 97     |
| 8) Chloroethane                | 1.69 | 64  | 19064 | 8.919 ug/L  | 96     |
| 9) Trichlorofluoromethane      | 1.88 | 101 | 41837 | 9.050 ug/L  | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27 | 101 | 21657 | 10.137 ug/L | 99     |
| 12) 1,1-Dichloroethene         | 2.27 | 96  | 21198 | 10.162 ug/L | 94     |
| 13) Acetone                    | 2.31 | 43  | 34037 | 18.198 ug/L | 98     |
| 14) Carbon disulfide           | 2.46 | 76  | 63369 | 9.828 ug/L  | 99     |
| 15) Methyl Acetate             | 2.60 | 43  | 24358 | 9.760 ug/L  | 99     |
| 16) Methylene chloride         | 2.68 | 84  | 23359 | 9.699 ug/L  | 99     |
| 17) trans-1,2-Dichloroethene   | 2.96 | 96  | 20703 | 9.490 ug/L  | 98     |
| 18) Methyl tert-butyl Ether    | 2.98 | 73  | 60707 | 9.014 ug/L  | 99     |
| 19) 1,1-Dichloroethane         | 3.42 | 63  | 40417 | 9.656 ug/L  | 99     |
| 20) cis-1,2-Dichloroethene     | 4.20 | 96  | 22837 | 9.299 ug/L  | 96     |
| 22) 2-Butanone                 | 4.24 | 43  | 34298 | 16.343 ug/L | 98     |
| 23) Bromochloromethane         | 4.52 | 128 | 12699 | 10.013 ug/L | 97     |
| 25) Chloroform                 | 4.65 | 83  | 42493 | 9.519 ug/L  | 98     |
| 27) 1,2-Dichloroethane         | 5.38 | 62  | 33383 | 9.727 ug/L  | 96     |
| 29) Cyclohexane                | 4.97 | 56  | 30211 | 8.644 ug/L  | 98     |
| 30) 1,1,1-Trichloroethane      | 4.89 | 97  | 35955 | 9.596 ug/L  | 99     |
| 31) Carbon tetrachloride       | 5.11 | 117 | 31016 | 9.473 ug/L  | 99     |
| 33) Benzene                    | 5.37 | 78  | 87482 | 9.345 ug/L  | 100    |
| 34) Trichloroethene            | 6.17 | 95  | 23130 | 9.462 ug/L  | 96     |
| 35) Methylcyclohexane          | 6.40 | 83  | 34206 | 9.087 ug/L  | 99     |
| 37) 1,2-Dichloropropane        | 6.41 | 63  | 23643 | 9.346 ug/L  | # 98   |
| 38) Bromodichloromethane       | 6.74 | 83  | 31005 | 9.511 ug/L  | 99     |
| 39) cis-1,3-Dichloropropene    | 7.25 | 75  | 34845 | 8.885 ug/L  | 95     |
| 40) 4-Methyl-2-pentanone       | 7.44 | 43  | 60008 | 17.496 ug/L | 99     |

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Quant Title : VOC Analysis  
QLast Update : Wed Jul 31 07:35:00 2019  
Response via : Initial Calibration

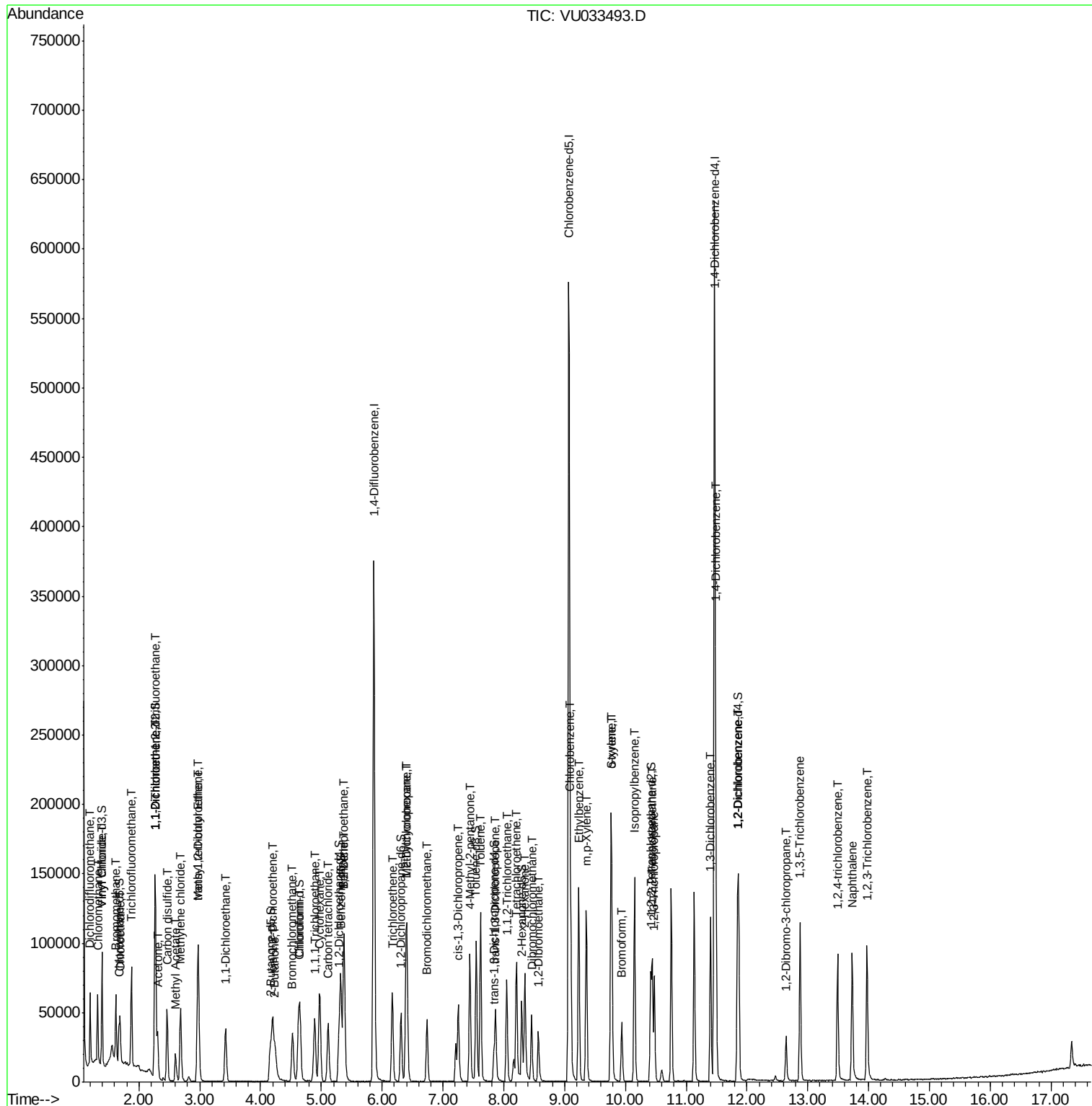
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 42) Toluene                    | 7.62  | 91   | 91996    | 9.124  | ug/L   | 99       |
| 44) trans-1,3-Dichloropropene  | 7.86  | 75   | 32134    | 9.178  | ug/L   | 99       |
| 45) 1,1,2-Trichloroethane      | 8.05  | 97   | 22571    | 9.423  | ug/L   | 99       |
| 46) Tetrachloroethene          | 8.21  | 164  | 17921    | 9.339  | ug/L   | 97       |
| 48) 2-Hexanone                 | 8.35  | 43   | 48811    | 17.479 | ug/L   | 96       |
| 49) Dibromochloromethane       | 8.46  | 129  | 25319    | 9.418  | ug/L   | 99       |
| 50) 1,2-Dibromoethane          | 8.57  | 107  | 24620    | 9.399  | ug/L # | 97       |
| 51) Chlorobenzene              | 9.10  | 112  | 61350    | 9.321  | ug/L   | 96       |
| 52) Ethylbenzene               | 9.23  | 91   | 96840    | 8.986  | ug/L   | 100      |
| 53) m,p-Xylene                 | 9.36  | 106  | 36904    | 9.041  | ug/L   | 96       |
| 54) o-xylene                   | 9.76  | 106  | 35757    | 8.807  | ug/L   | 98       |
| 55) Styrene                    | 9.78  | 104  | 58450    | 8.501  | ug/L   | 100      |
| 56) Isopropylbenzene           | 10.15 | 105  | 91683    | 8.776  | ug/L   | 100      |
| 58) 1,1,2,2-Tetrachloroethane  | 10.44 | 83   | 40595    | 9.606  | ug/L   | 99       |
| 59) 1,2,3-Trichloropropane     | 10.48 | 75   | 31638    | 9.550  | ug/L   | 98       |
| 61) Bromoform                  | 9.94  | 173  | 18850    | 9.225  | ug/L   | 97       |
| 62) 1,3-Dichlorobenzene        | 11.40 | 146  | 47127    | 9.175  | ug/L   | 99       |
| 63) 1,4-Dichlorobenzene        | 11.49 | 146  | 51296    | 9.586  | ug/L   | 99       |
| 65) 1,2-Dichlorobenzene        | 11.86 | 146  | 49057    | 9.347  | ug/L   | 98       |
| 66) 1,2-Dibromo-3-chloropropan | 12.64 | 75   | 8969     | 8.973  | ug/L   | 90       |
| 67) 1,3,5-Trichlorobenzene     | 12.87 | 180  | 37414    | 9.935  | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.49 | 180  | 29765    | 9.043  | ug/L   | 96       |
| 69) Naphthalene                | 13.73 | 128  | 80430    | 7.794  | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.97 | 180  | 32770    | 9.167  | ug/L   | 99       |

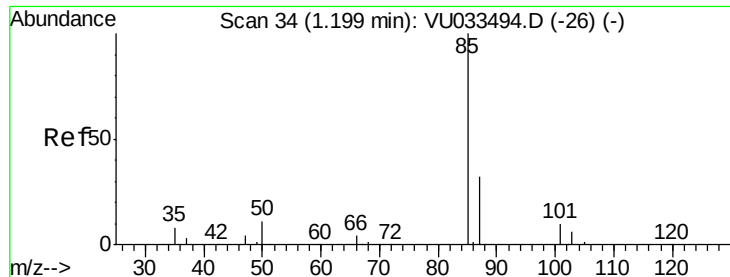
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#2

Dichlorodifluoromethane

Concen: 9.488 ug/L

RT: 1.20 min Scan# 34

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

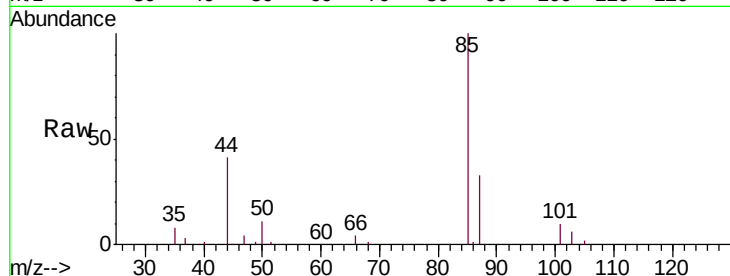
VSTD01035

Tgt Ion: 85 Resp: 29606

Ion Ratio Lower Upper

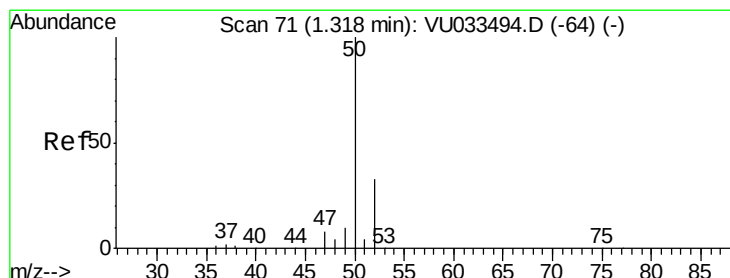
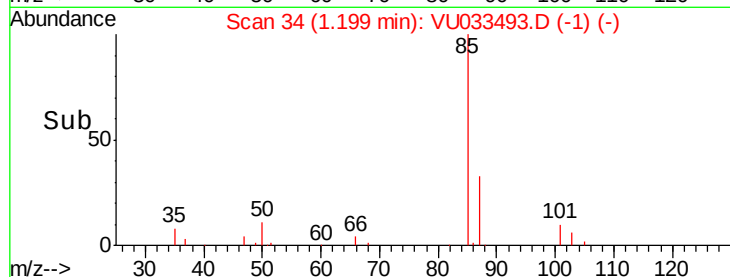
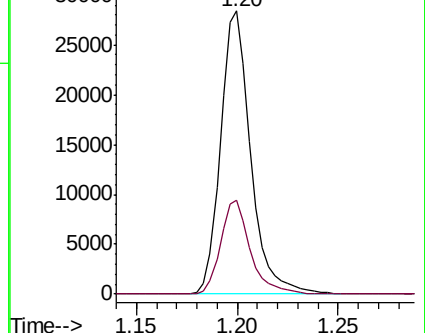
85 100

87 32.4 25.4 38.2



Abundance Ion 85.00 (84.70 to 85.70): VU033493.D (-1) (-)

Ion 87.00 (86.70 to 87.70): VU033493.D (-1) (-)



#3

Chloromethane

Concen: 10.001 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VU033493.D

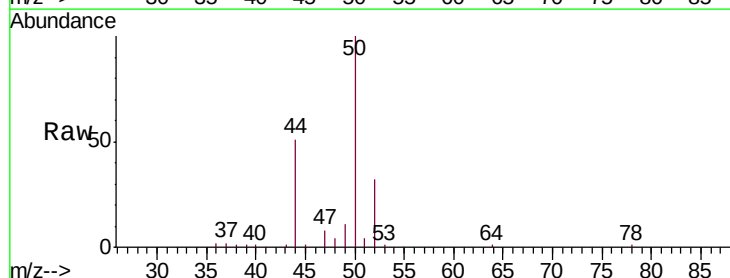
Acq: 30 Jul 2019 15:22

Tgt Ion: 50 Resp: 30930

Ion Ratio Lower Upper

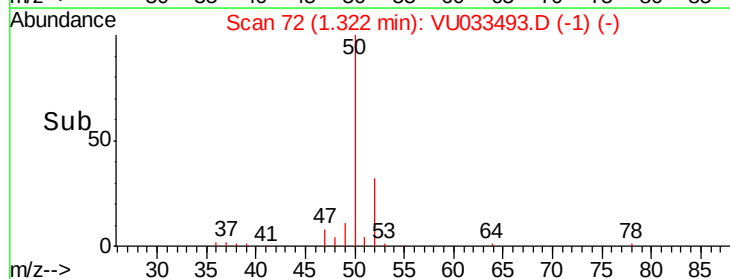
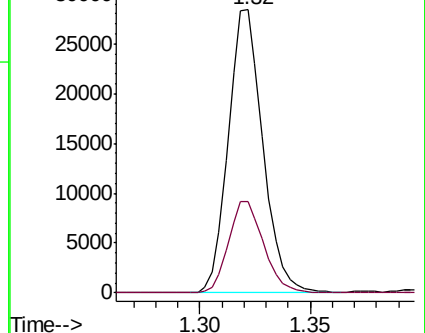
50 100

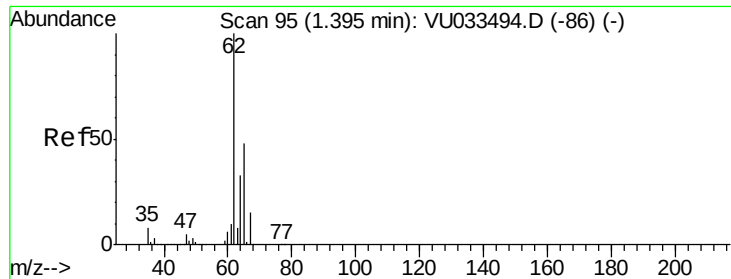
52 32.2 23.1 42.9



Abundance Ion 50.00 (49.70 to 50.70): VU033493.D (-1) (-)

Ion 52.00 (51.70 to 52.70): VU033493.D (-1) (-)





#5

Vinyl chloride

Concen: 9.391 ug/L

RT: 1.40 min Scan# 95

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

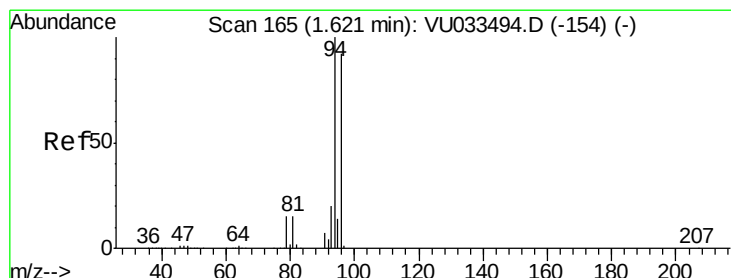
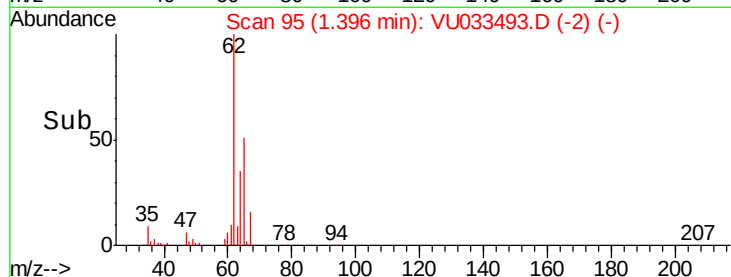
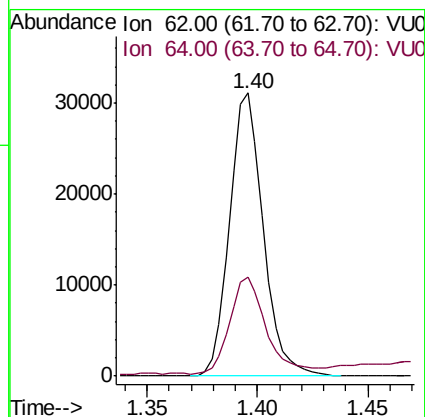
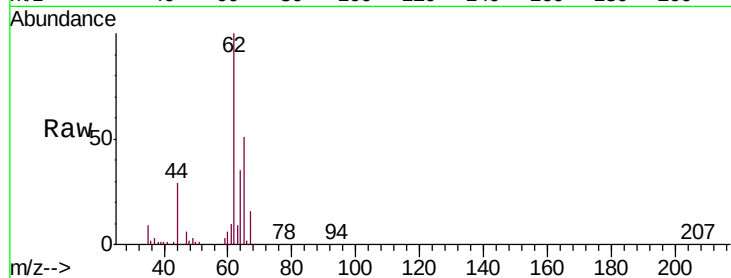
VSTD01035

Tgt Ion: 62 Resp: 33039

Ion Ratio Lower Upper

62 100

64 35.1 23.4 43.4



#6

Bromomethane

Concen: 8.475 ug/L

RT: 1.62 min Scan# 165

Delta R.T. 0.00 min

Lab File: VU033493.D

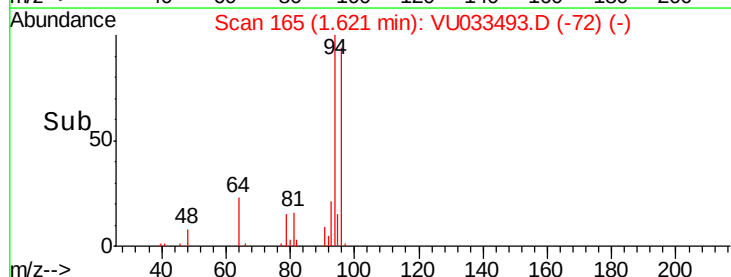
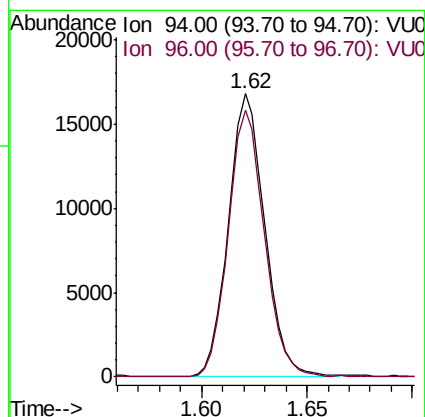
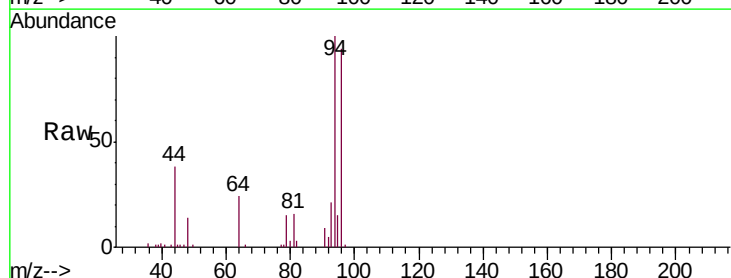
Acq: 30 Jul 2019 15:22

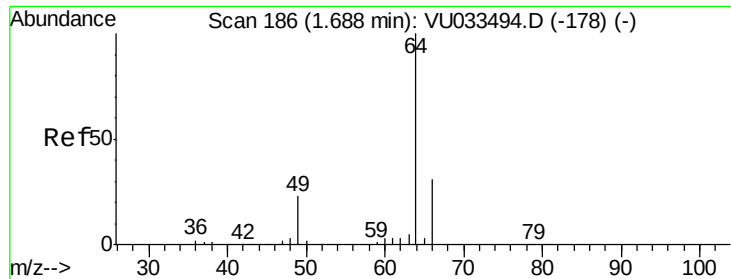
Tgt Ion: 94 Resp: 20120

Ion Ratio Lower Upper

94 100

96 94.4 64.4 119.6





#8

Chloroethane

Concen: 8.919 ug/L

RT: 1.69 min Scan# 187

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

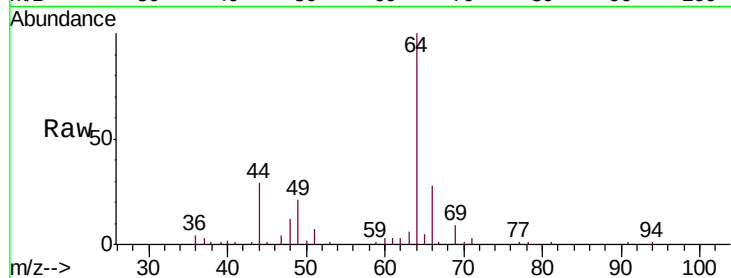
VSTD01035

Tgt Ion: 64 Resp: 19064

Ion Ratio Lower Upper

64 100

66 28.1 21.1 39.3



Abundance Ion 64.00 (63.70 to 64.70): VU033493.D (-178) (-)

Ion 66.00 (65.70 to 66.70): VU033493.D (-178) (-)

1.69

20000

15000

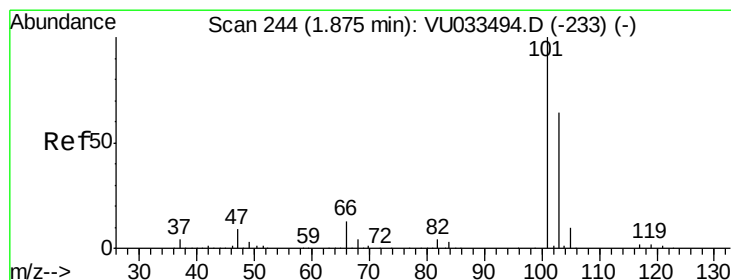
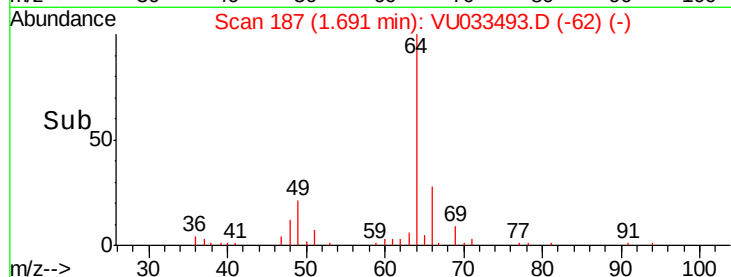
10000

5000

0

1.65 1.70 1.75

Time-->



#9

Trichlorofluoromethane

Concen: 9.050 ug/L

RT: 1.88 min Scan# 245

Delta R.T. 0.00 min

Lab File: VU033493.D

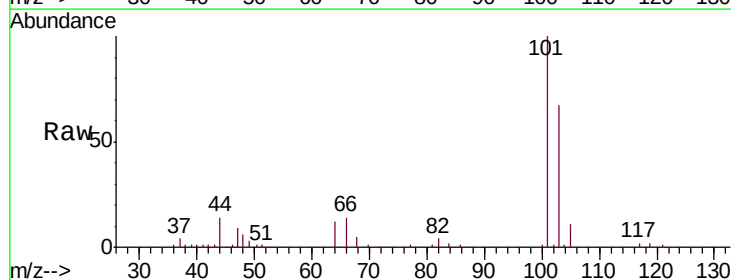
Acq: 30 Jul 2019 15:22

Tgt Ion: 101 Resp: 41837

Ion Ratio Lower Upper

101 100

103 64.5 51.6 77.4



Abundance Ion 101.00 (100.70 to 101.70): VU033493.D (-233) (-)

Ion 103.00 (102.70 to 103.70): VU033493.D (-233) (-)

1.88

30000

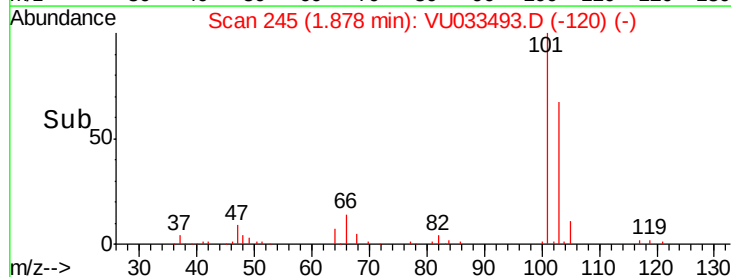
20000

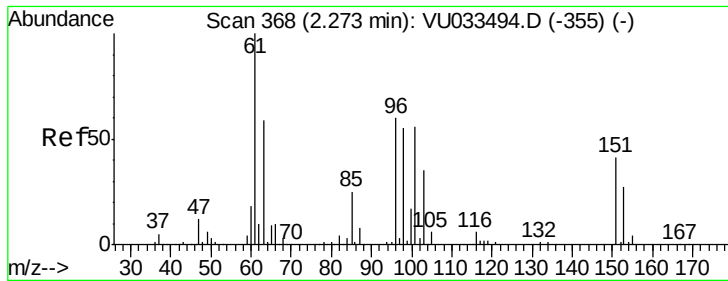
10000

0

1.85 1.90

Time-->





#10

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

Concen: 10.137 ug/L

RT: 2.27 min Scan# 368

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

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ClientSampleId :

VSTD01035

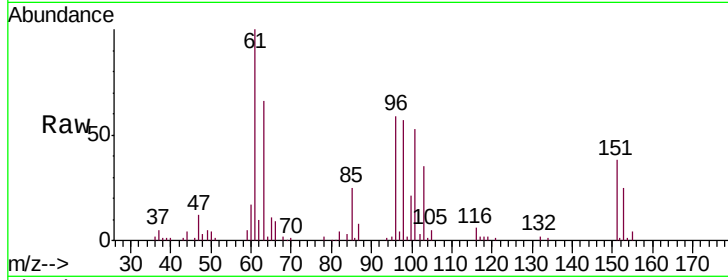
Tgt Ion: 101 Resp: 21657

Ion Ratio Lower Upper

101 100

85 45.0 35.8 53.8

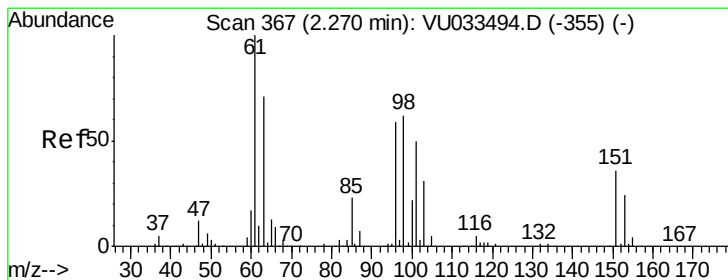
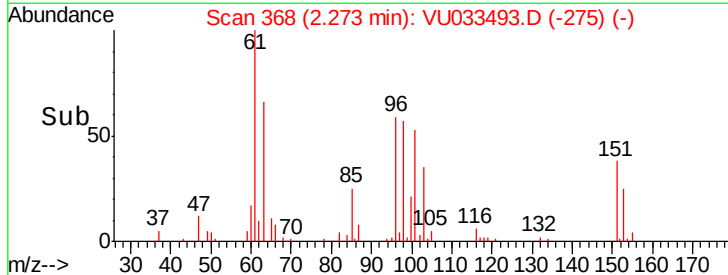
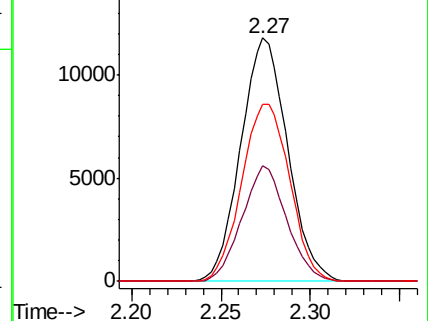
151 74.5 60.1 90.1



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: 10.162 ug/L

RT: 2.27 min Scan# 367

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

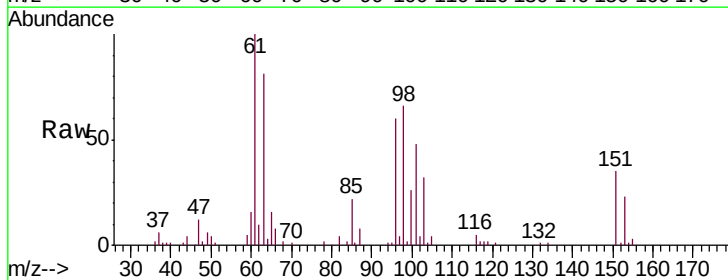
Tgt Ion: 96 Resp: 21198

Ion Ratio Lower Upper

96 100

61 167.5 119.3 221.5

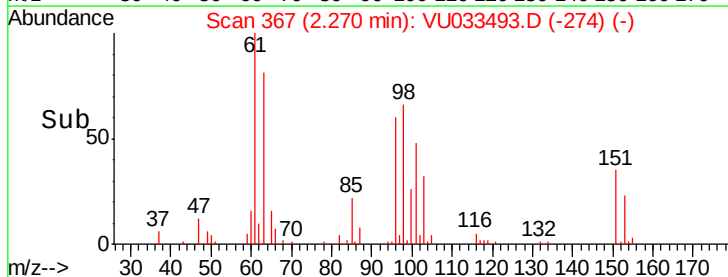
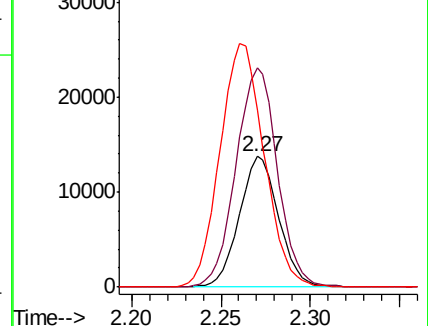
63 135.9 86.6 160.8

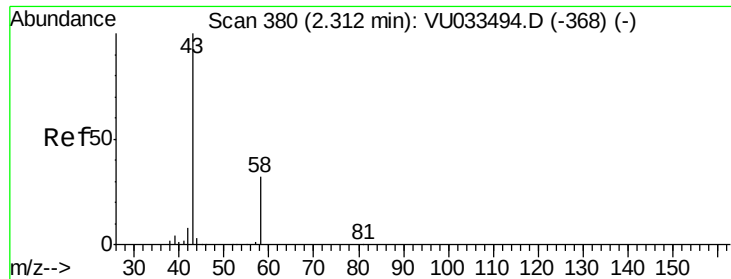


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 18.198 ug/L

RT: 2.31 min Scan# 379

Delta R.T. -0.00 min

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ClientSampleId :

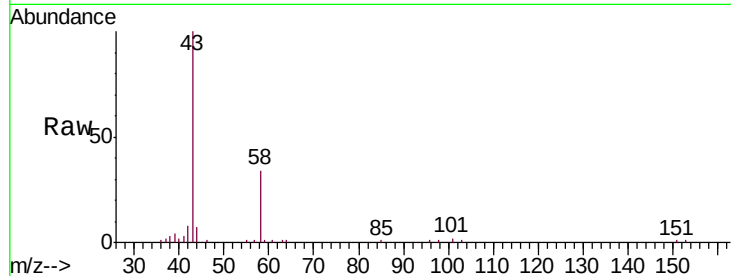
VSTD01035

Tgt Ion: 43 Resp: 34037

Ion Ratio Lower Upper

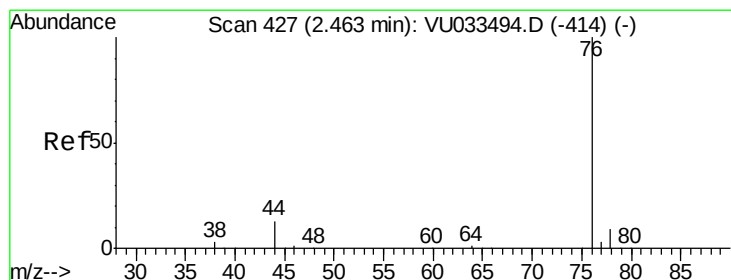
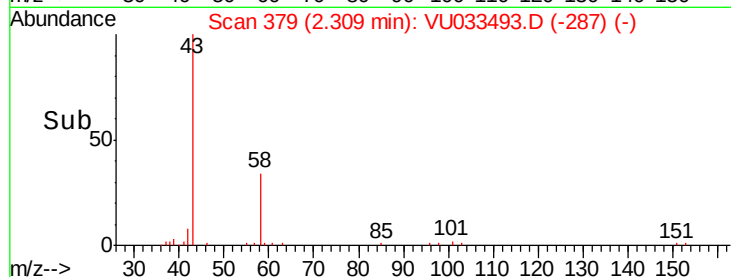
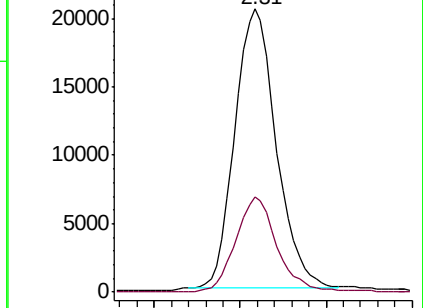
43 100

58 34.2 0.0 66.2



Abundance Ion 43.00 (42.70 to 43.70): VU033493.D (-368) (-)

Ion 58.00 (57.70 to 58.70): VU033493.D (-368) (-)



#14

Carbon disulfide

Concen: 9.828 ug/L

RT: 2.46 min Scan# 427

Delta R.T. 0.00 min

Lab File: VU033493.D

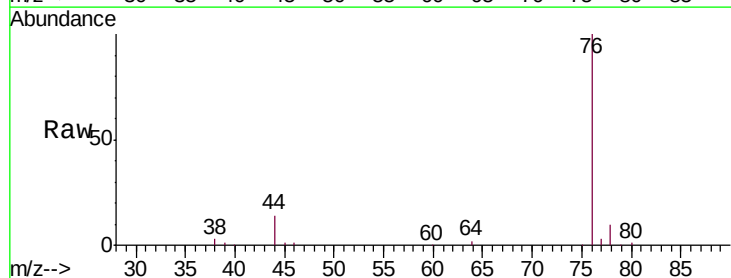
Acq: 30 Jul 2019 15:22

Tgt Ion: 76 Resp: 63369

Ion Ratio Lower Upper

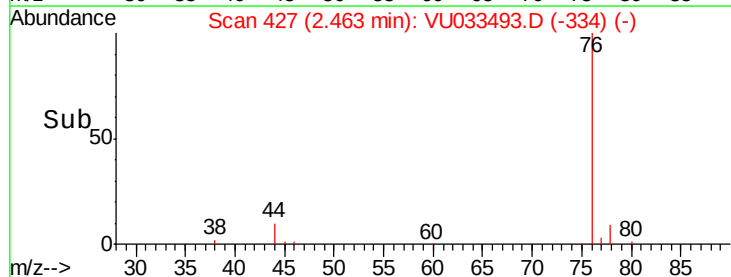
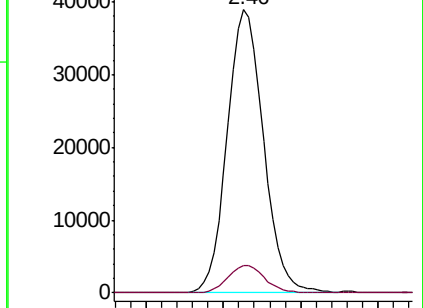
76 100

78 9.6 7.4 11.0

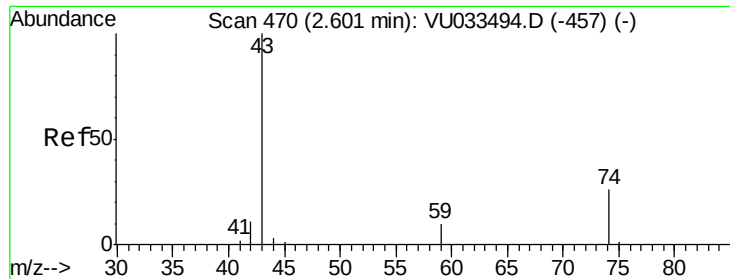


Abundance Ion 76.00 (75.70 to 76.70): VU033493.D (-334) (-)

Ion 78.00 (77.70 to 78.70): VU033493.D (-334) (-)



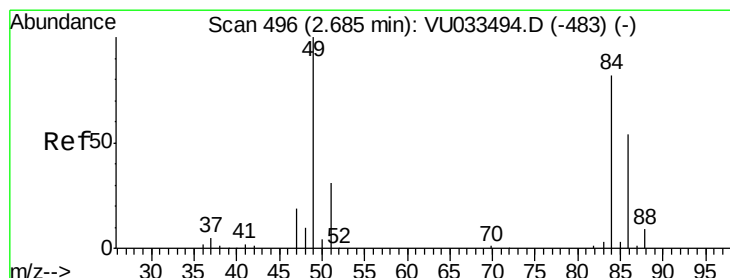
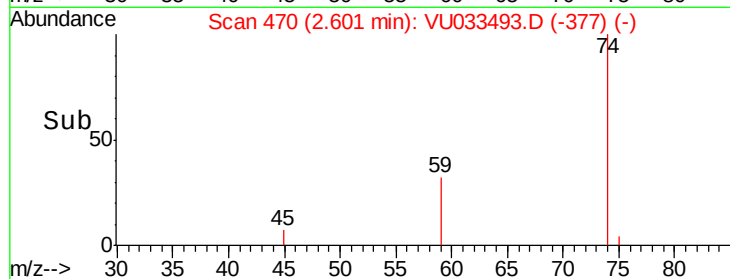
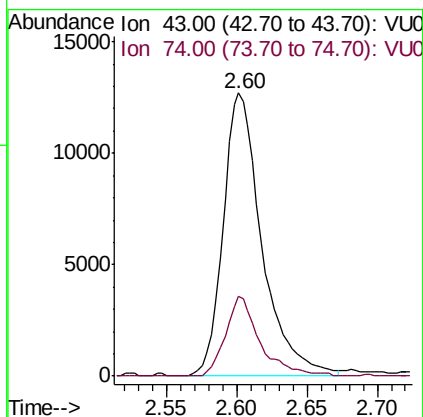
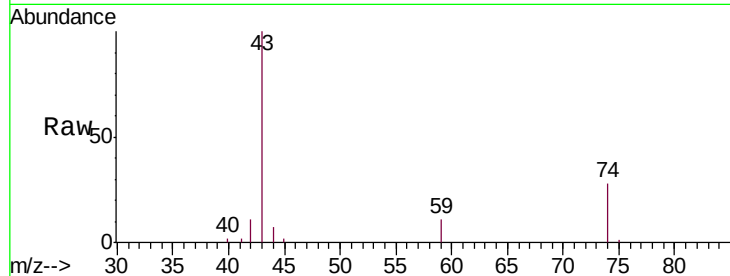




#15  
Methyl Acetate  
Concen: 9.760 ug/L  
RT: 2.60 min Scan# 470  
Delta R.T. 0.00 min  
Lab File: VU033493.D  
Acq: 30 Jul 2019 15:22

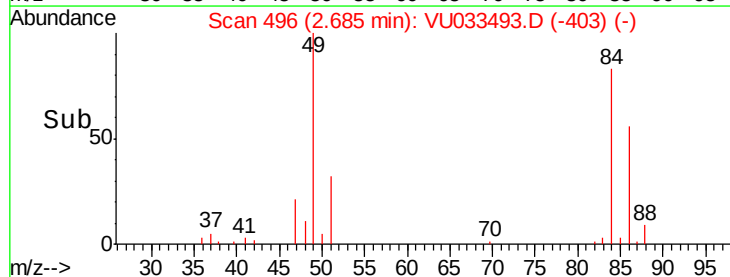
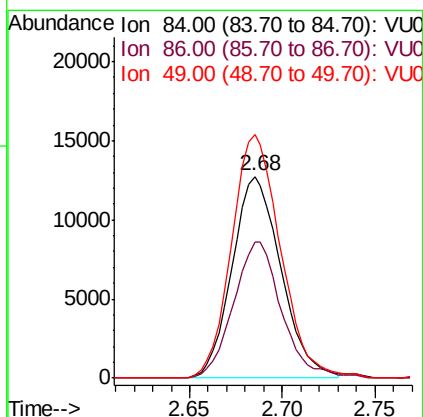
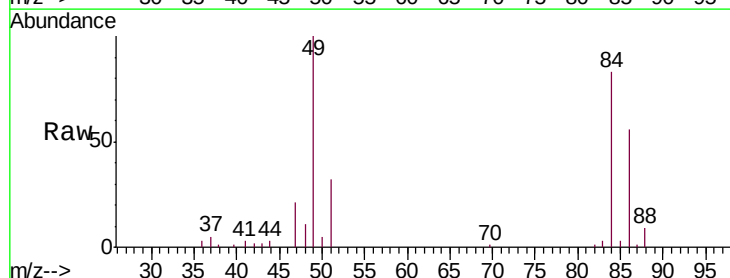
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01035

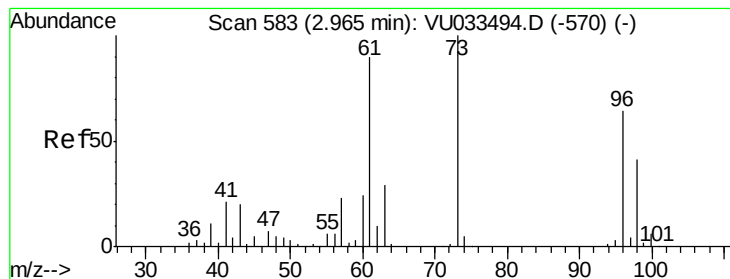
Tgt Ion: 43 Resp: 24358  
Ion Ratio Lower Upper  
43 100  
74 24.5 20.1 30.1



#16  
Methylene chloride  
Concen: 9.699 ug/L  
RT: 2.68 min Scan# 496  
Delta R.T. 0.00 min  
Lab File: VU033493.D  
Acq: 30 Jul 2019 15:22

Tgt Ion: 84 Resp: 23359  
Ion Ratio Lower Upper  
84 100  
86 67.2 45.7 84.9  
49 120.7 85.0 158.0





#17

trans-1,2-Dichloroethene

Concen: 9.490 ug/L

RT: 2.96 min Scan# 583

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01035

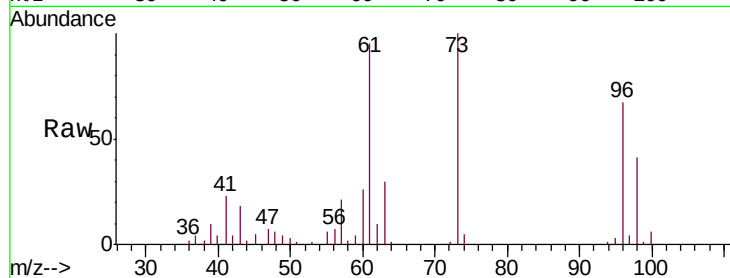
Tgt Ion: 96 Resp: 20703

Ion Ratio Lower Upper

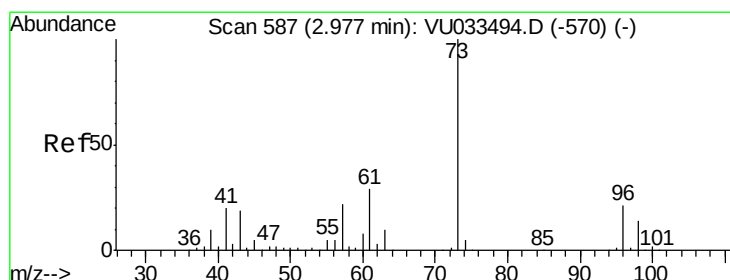
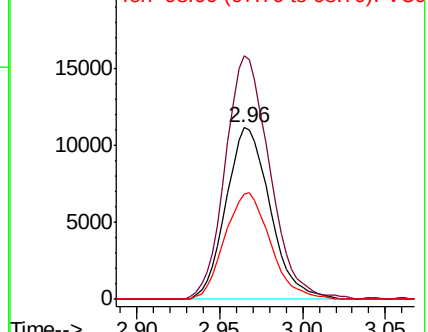
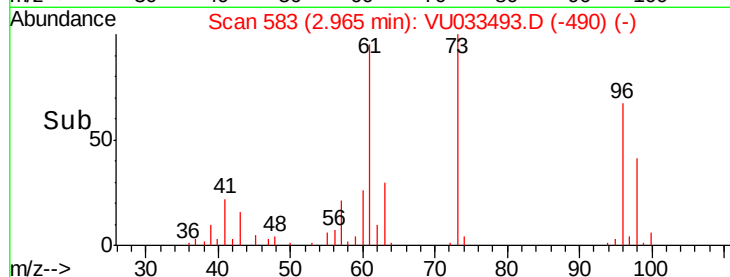
96 100

61 141.6 98.3 182.5

98 61.0 44.3 82.3



Abundance Ion 96.00 (95.70 to 96.70): VU033493.D (-490) (-)



#18

Methyl tert-butyl Ether

Concen: 9.014 ug/L

RT: 2.98 min Scan# 587

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

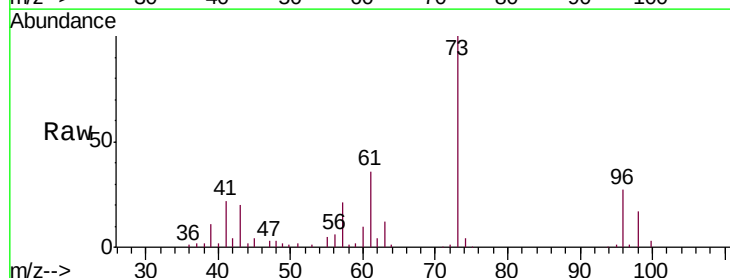
Tgt Ion: 73 Resp: 60707

Ion Ratio Lower Upper

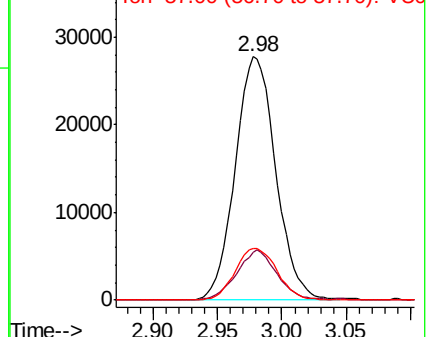
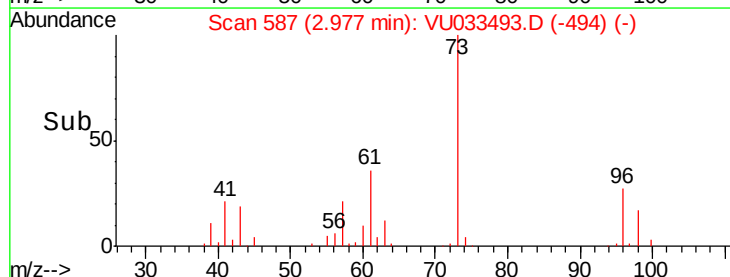
73 100

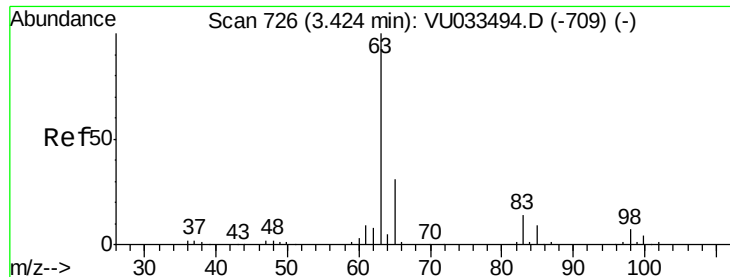
43 20.3 15.4 23.2

57 22.1 17.4 26.2



Abundance Ion 73.00 (72.70 to 73.70): VU033493.D (-494) (-)





#19

1,1-Dichloroethane

Concen: 9.656 ug/L

RT: 3.42 min Scan# 726

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01035

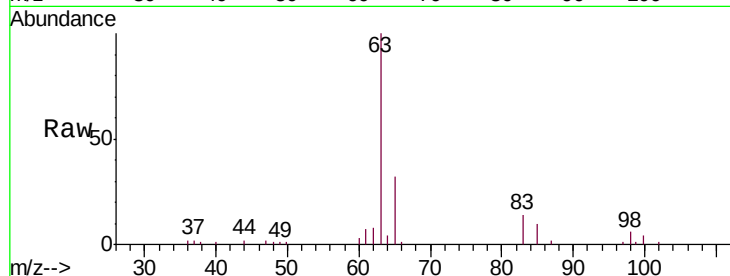
Tgt Ion: 63 Resp: 40417

Ion Ratio Lower Upper

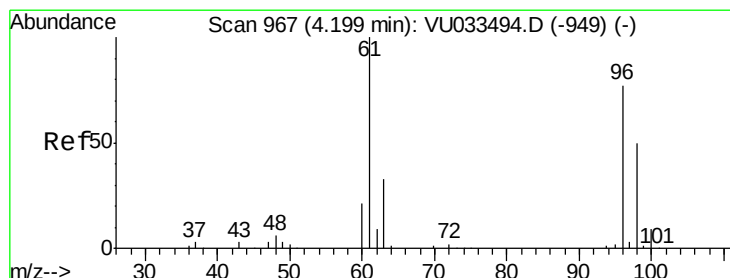
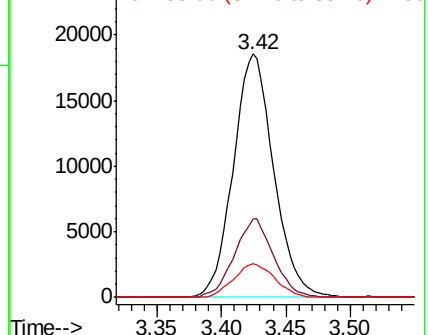
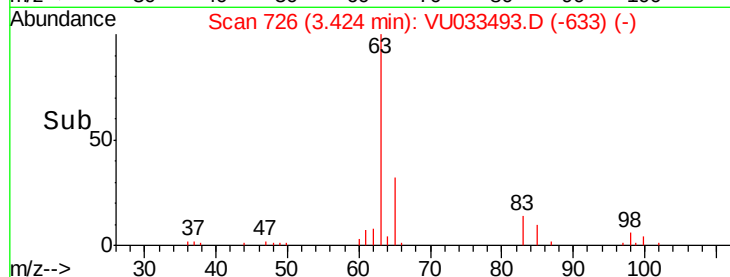
63 100

65 32.4 22.0 40.8

83 13.7 9.5 17.7



Abundance Ion 63.00 (62.70 to 63.70): VU033493.D (-633) (-)



#20

cis-1,2-Dichloroethene

Concen: 9.299 ug/L

RT: 4.20 min Scan# 968

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

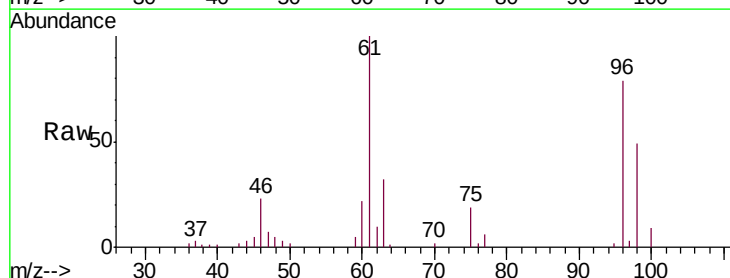
Tgt Ion: 96 Resp: 22837

Ion Ratio Lower Upper

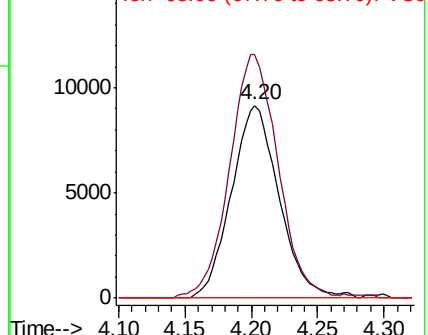
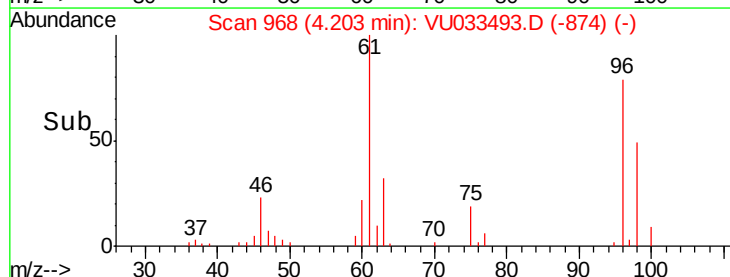
96 100

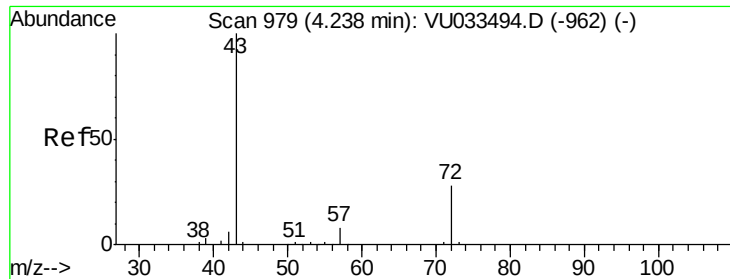
61 126.3 91.3 169.6

68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU033493.D (-874) (-)





#22

2-Butanone

Concen: 16.343 ug/L

RT: 4.24 min Scan# 981

Delta R.T. 0.01 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

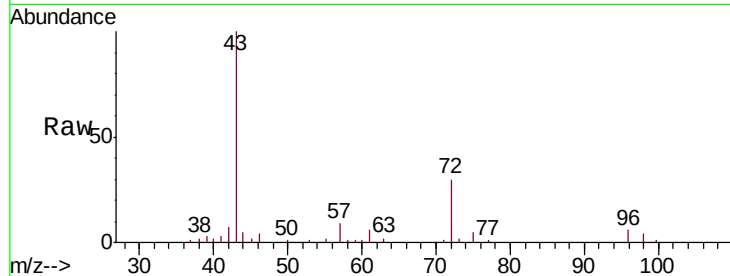
VSTD01035

Tgt Ion: 43 Resp: 34298

Ion Ratio Lower Upper

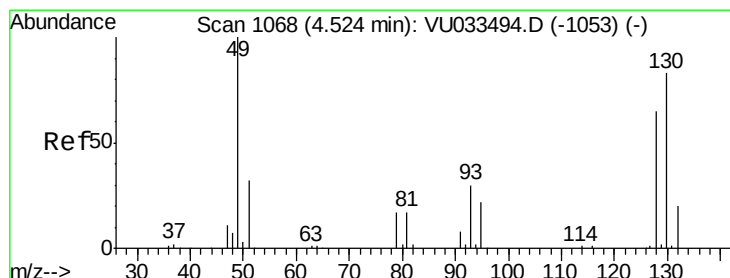
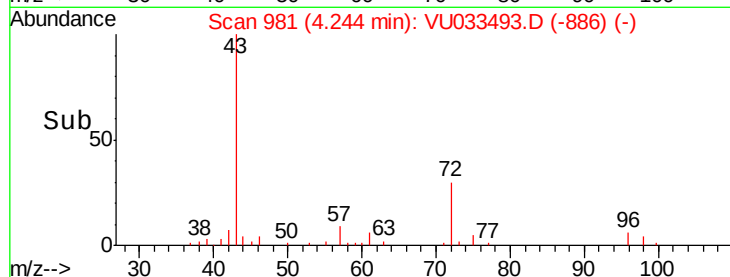
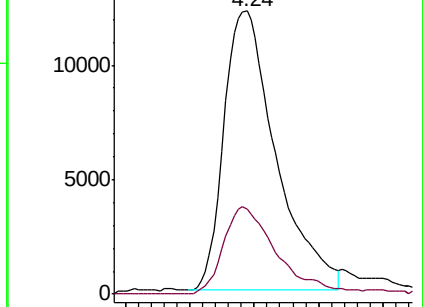
43 100

72 29.3 14.2 42.6



Abundance Ion 43.00 (42.70 to 43.70): VU033493.D (-981) (-)

Ion 72.00 (71.70 to 72.70): VU033493.D (-981) (-)



#23

Bromochloromethane

Concen: 10.013 ug/L

RT: 4.52 min Scan# 1068

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Tgt Ion: 128 Resp: 12699

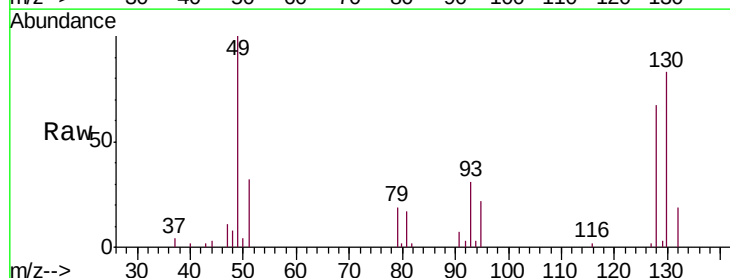
Ion Ratio Lower Upper

128 100

49 149.4 108.4 201.2

130 124.5 89.7 166.5

51 47.3 38.9 58.3

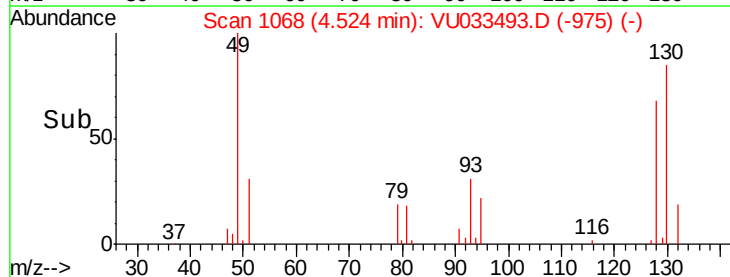
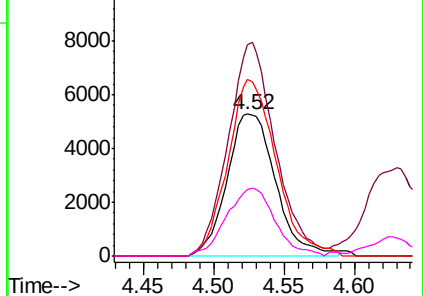


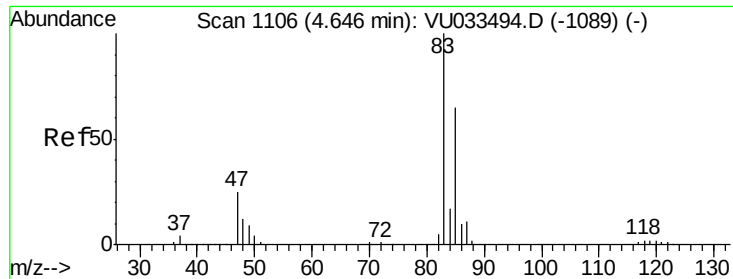
Abundance Ion 128.00 (127.70 to 128.70): VU033493.D (-1068) (-)

Ion 49.00 (48.70 to 49.70): VU033493.D (-1068) (-)

Ion 130.00 (129.70 to 130.70): VU033493.D (-1068) (-)

Ion 51.00 (50.70 to 51.70): VU033493.D (-1068) (-)

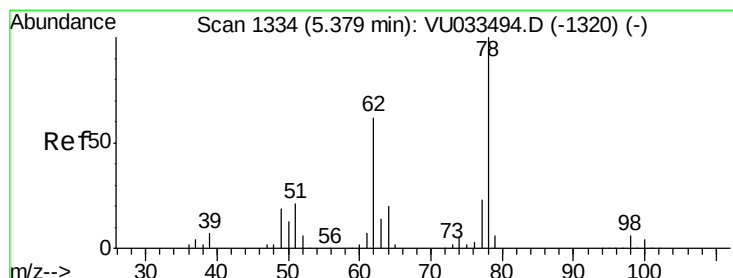
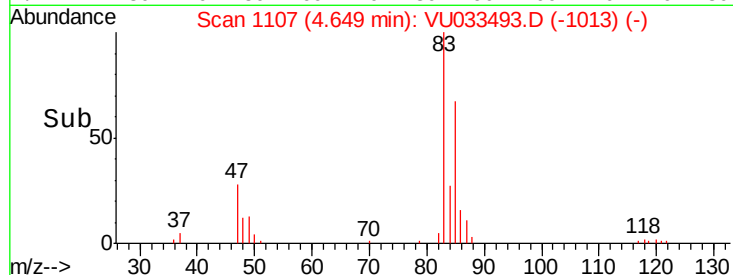
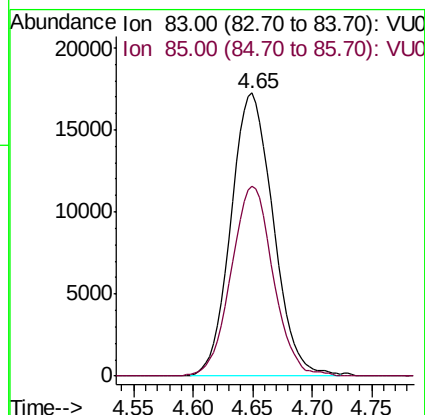
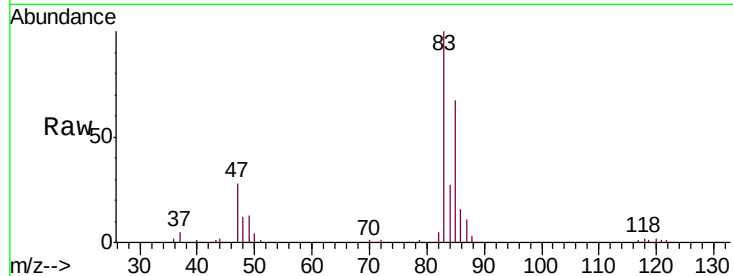




#25  
Chloroform  
Concen: 9.519 ug/L  
RT: 4.65 min Scan# 1107  
Delta R.T. 0.00 min  
Lab File: VU033493.D  
Acq: 30 Jul 2019 15:22

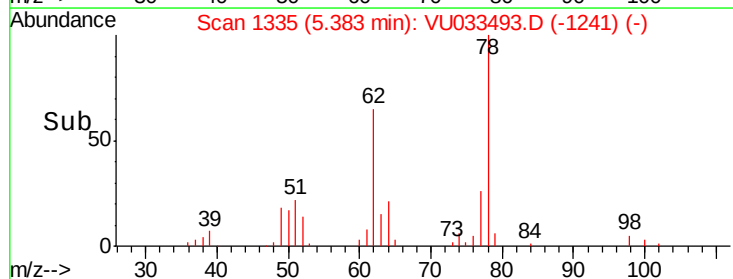
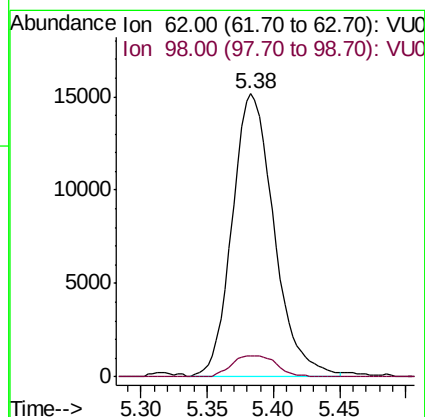
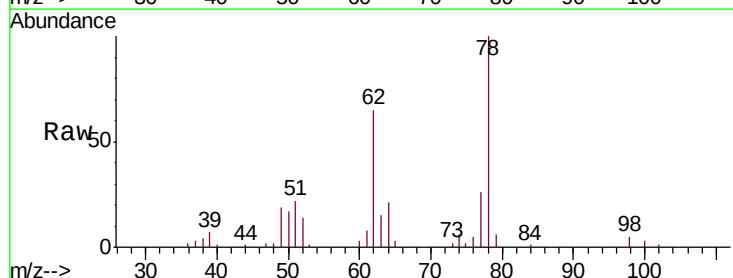
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01035

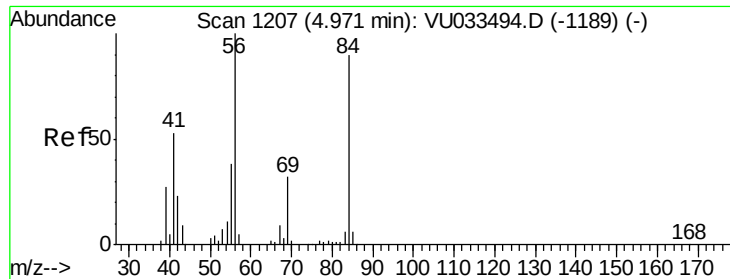
Tgt Ion: 83 Resp: 42493  
Ion Ratio Lower Upper  
83 100  
85 67.2 45.6 84.8



#27  
1,2-Dichloroethane  
Concen: 9.727 ug/L  
RT: 5.38 min Scan# 1335  
Delta R.T. 0.00 min  
Lab File: VU033493.D  
Acq: 30 Jul 2019 15:22

Tgt Ion: 62 Resp: 33383  
Ion Ratio Lower Upper  
62 100  
98 7.5 7.2 10.8

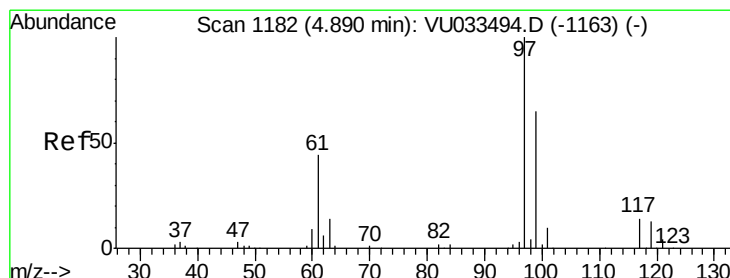
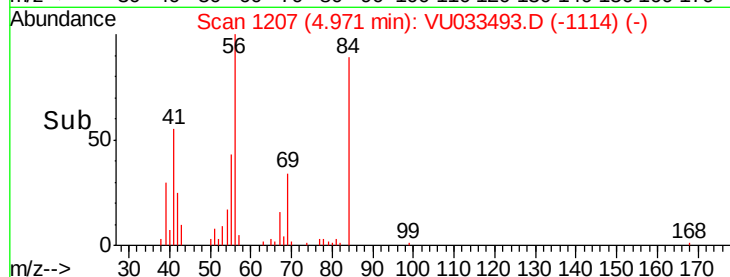
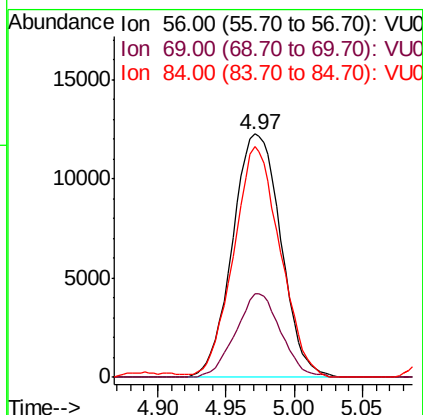
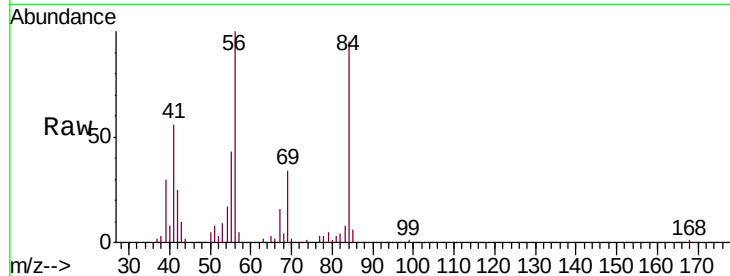




#29  
Cyclohexane  
Concen: 8.644 ug/L  
RT: 4.97 min Scan# 1207  
Delta R.T. 0.00 min  
Lab File: VU033493.D  
Acq: 30 Jul 2019 15:22

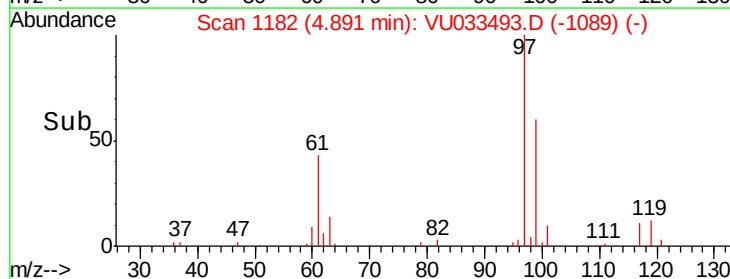
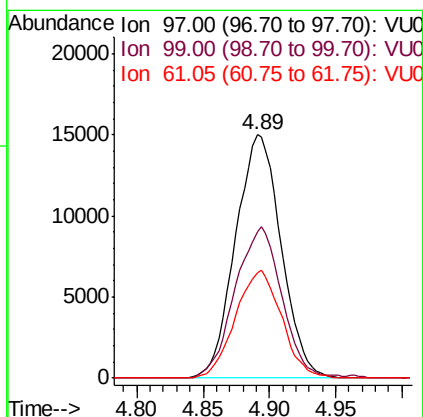
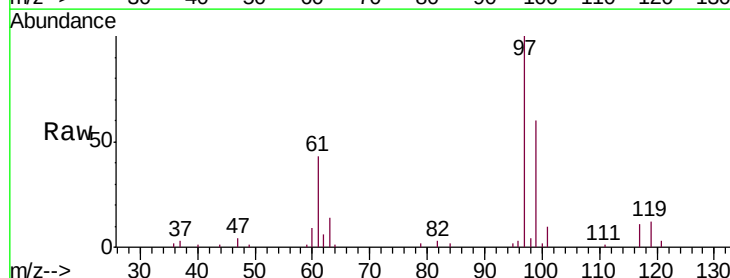
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01035

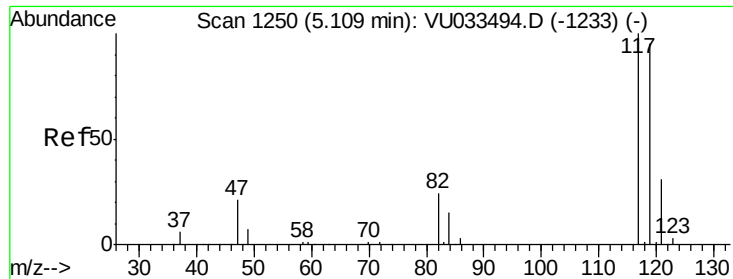
Tgt Ion: 56 Resp: 30211  
Ion Ratio Lower Upper  
56 100  
69 32.0 25.0 37.6  
84 91.4 71.6 107.4



#30  
1,1,1-Trichloroethane  
Concen: 9.596 ug/L  
RT: 4.89 min Scan# 1182  
Delta R.T. 0.00 min  
Lab File: VU033493.D  
Acq: 30 Jul 2019 15:22

Tgt Ion: 97 Resp: 35955  
Ion Ratio Lower Upper  
97 100  
99 63.5 51.1 76.7  
61 44.7 35.5 53.3





#31

Carbon tetrachloride

Concen: 9.473 ug/L

RT: 5.11 min Scan# 1251

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

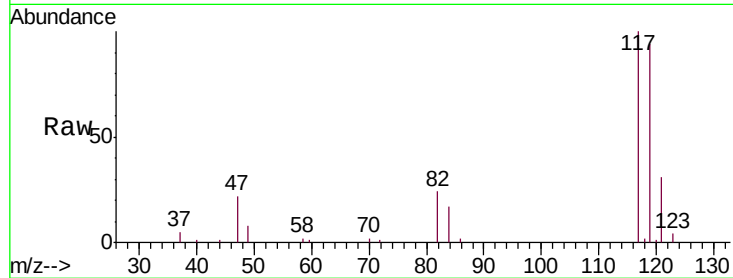
VSTD01035

Tgt Ion:117 Resp: 31016

Ion Ratio Lower Upper

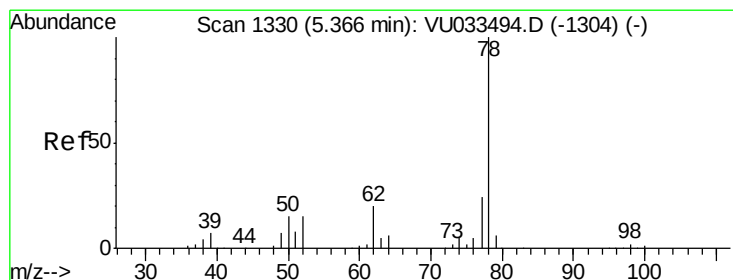
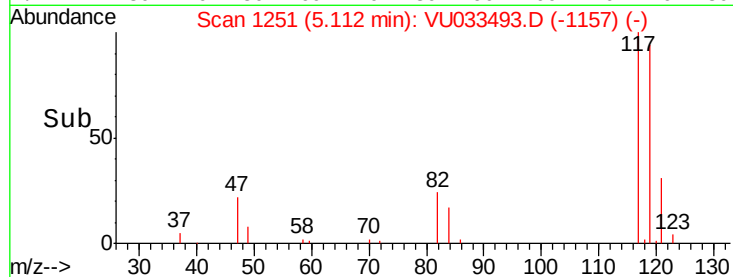
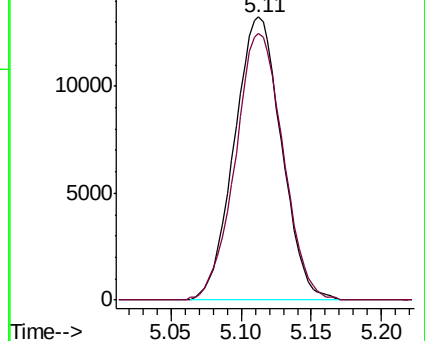
117 100

119 95.2 77.0 115.4



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#33

Benzene

Concen: 9.345 ug/L

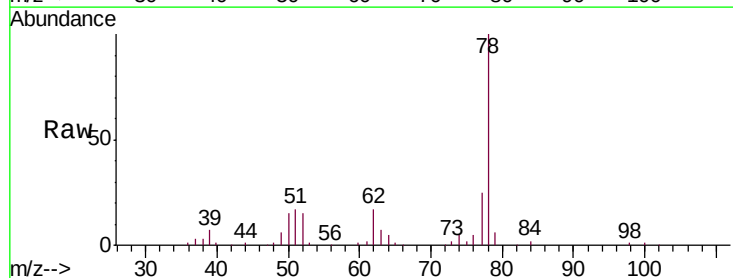
RT: 5.37 min Scan# 1330

Delta R.T. 0.00 min

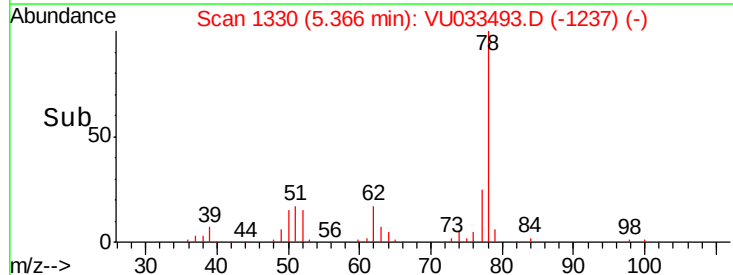
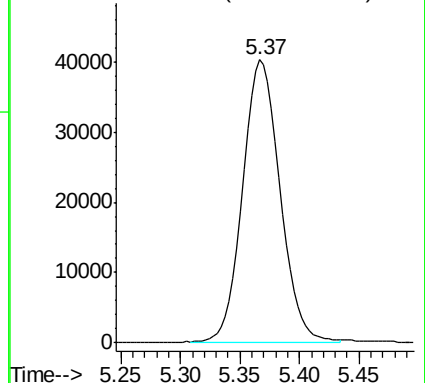
Lab File: VU033493.D

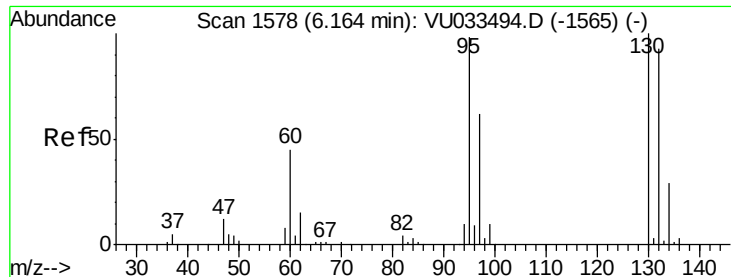
Acq: 30 Jul 2019 15:22

Tgt Ion: 78 Resp: 87482



Abundance Ion 78.00 (77.70 to 78.70): VU0

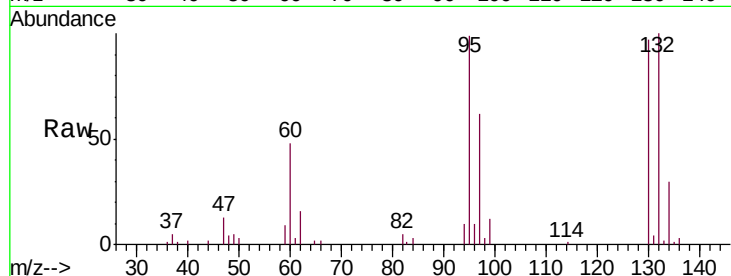




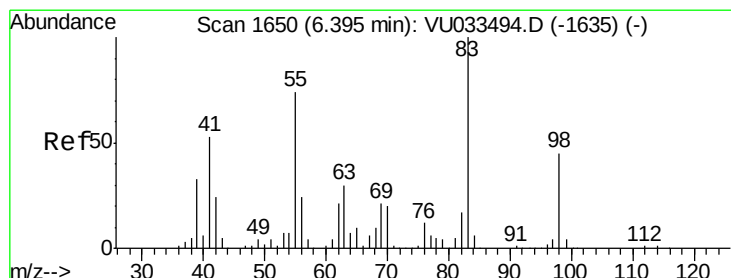
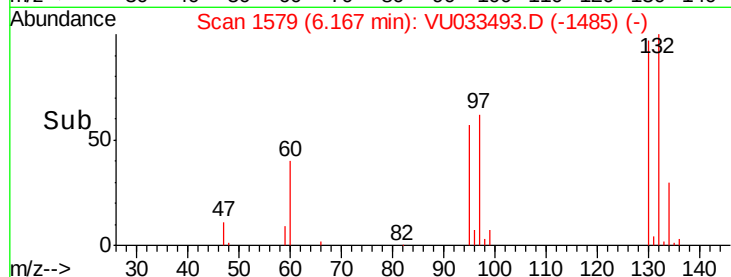
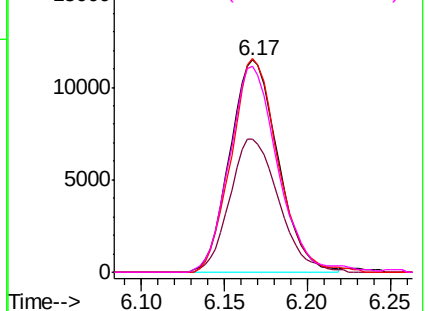
#34  
 Trichloroethene  
 Concen: 9.462 ug/L  
 RT: 6.17 min Scan# 1579  
 Delta R.T. 0.00 min  
 Lab File: VU033493.D  
 Acq: 30 Jul 2019 15:22

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01035

Tgt Ion: 95 Resp: 23130  
 Ion Ratio Lower Upper  
 95 100  
 97 62.8 44.7 83.1  
 132 100.5 66.8 124.0  
 130 97.2 71.6 133.0

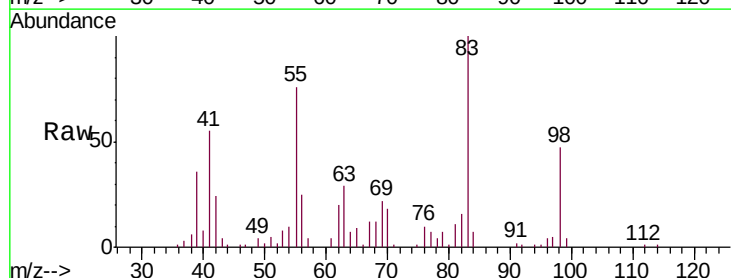


Abundance Ion 95.00 (94.70 to 95.70): VU0  
 Ion 97.00 (96.70 to 97.70): VU0  
 Ion 132.00 (131.70 to 132.70): V  
 Ion 130.00 (129.70 to 130.70): V

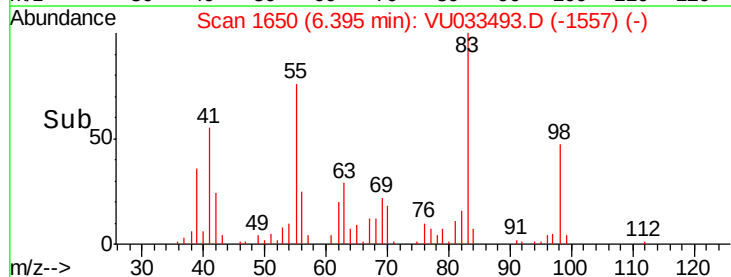
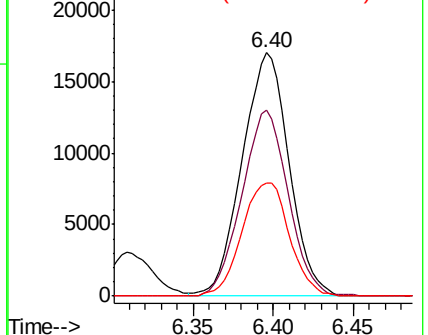


#35  
 Methylcyclohexane  
 Concen: 9.087 ug/L  
 RT: 6.40 min Scan# 1650  
 Delta R.T. 0.00 min  
 Lab File: VU033493.D  
 Acq: 30 Jul 2019 15:22

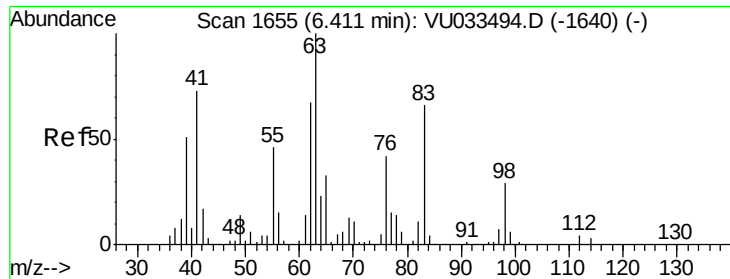
Tgt Ion: 83 Resp: 34206  
 Ion Ratio Lower Upper  
 83 100  
 55 75.1 60.2 90.4  
 98 47.1 36.5 54.7



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



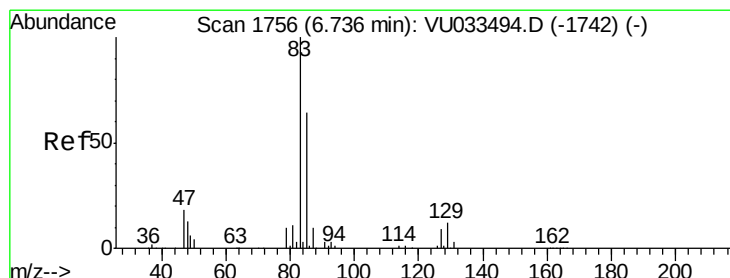
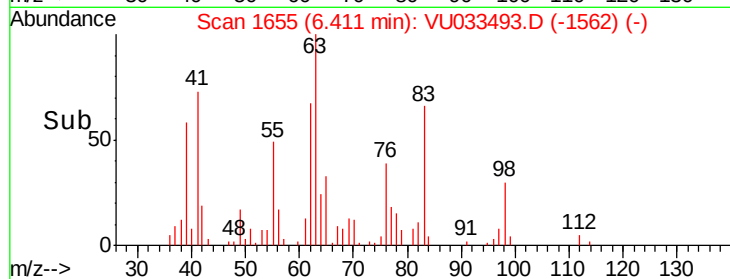
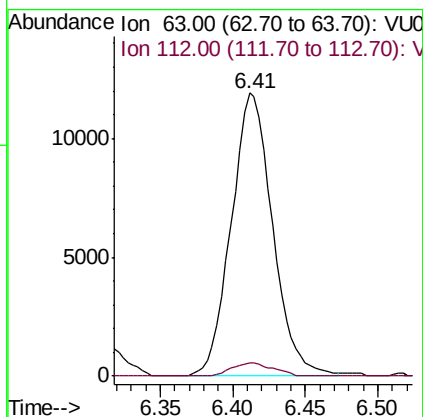
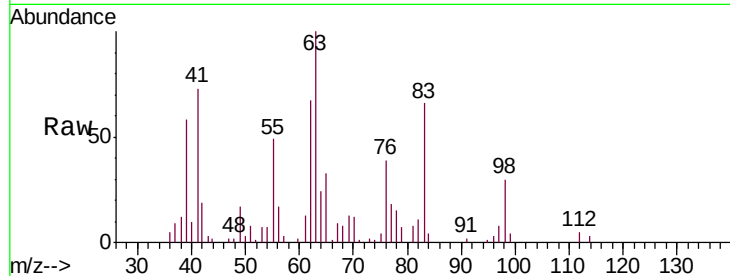




#37  
 1,2-Dichloropropane  
 Concen: 9.346 ug/L  
 RT: 6.41 min Scan# 1655  
 Delta R.T. 0.00 min  
 Lab File: VU033493.D  
 Acq: 30 Jul 2019 15:22

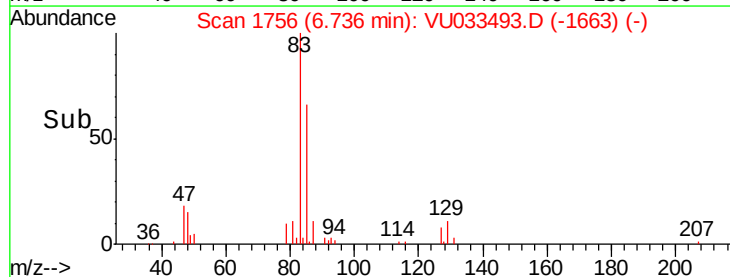
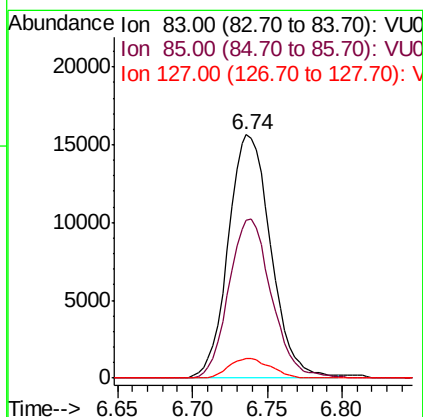
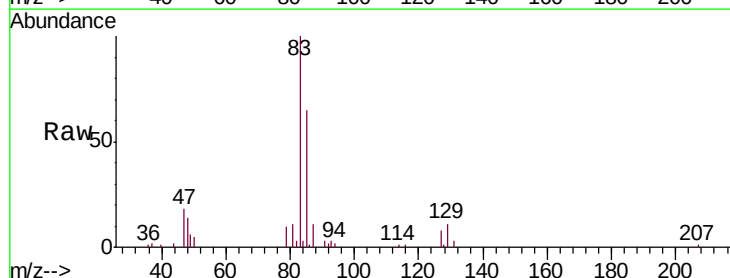
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01035

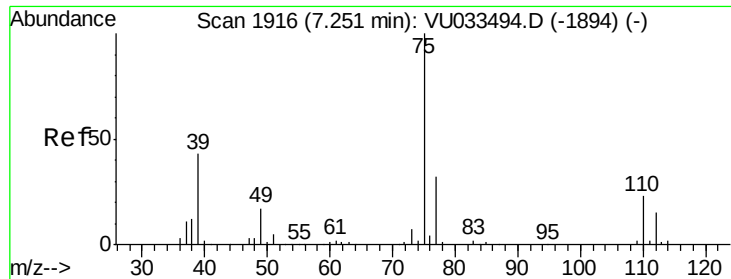
Tgt Ion: 63 Resp: 23643  
 Ion Ratio Lower Upper  
 63 100  
 112 4.6 3.0 4.6#



#38  
 Bromodichloromethane  
 Concen: 9.511 ug/L  
 RT: 6.74 min Scan# 1756  
 Delta R.T. 0.00 min  
 Lab File: VU033493.D  
 Acq: 30 Jul 2019 15:22

Tgt Ion: 83 Resp: 31005  
 Ion Ratio Lower Upper  
 83 100  
 85 64.8 45.1 83.9  
 127 8.2 7.2 10.8

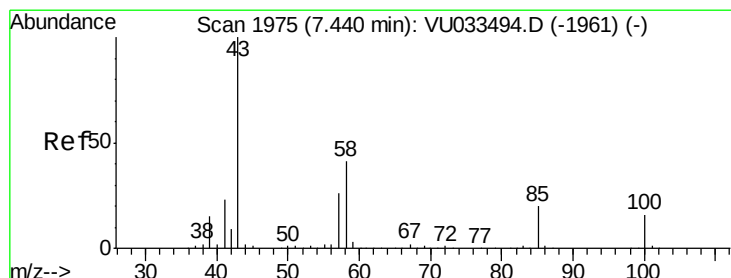
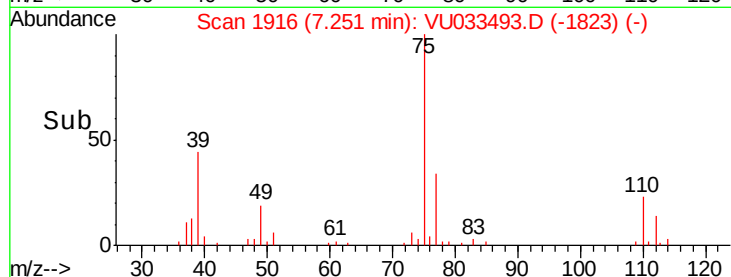
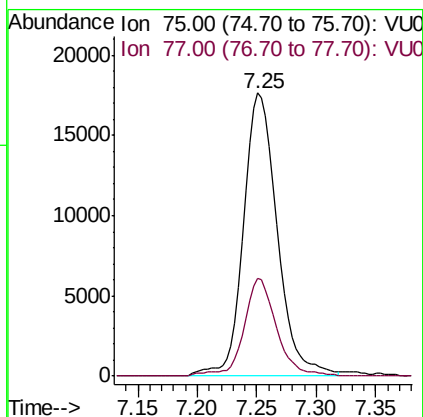
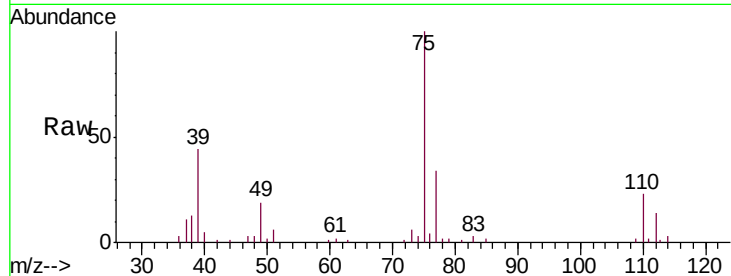




#39  
 cis-1,3-Dichloropropene  
 Concen: 8.885 ug/L  
 RT: 7.25 min Scan# 1916  
 Delta R.T. 0.00 min  
 Lab File: VU033493.D  
 Acq: 30 Jul 2019 15:22

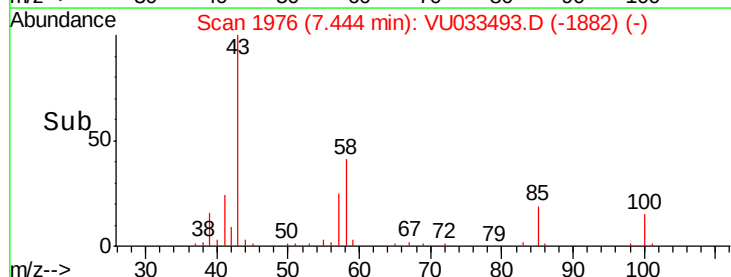
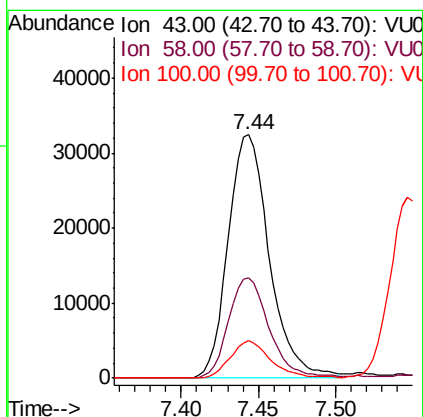
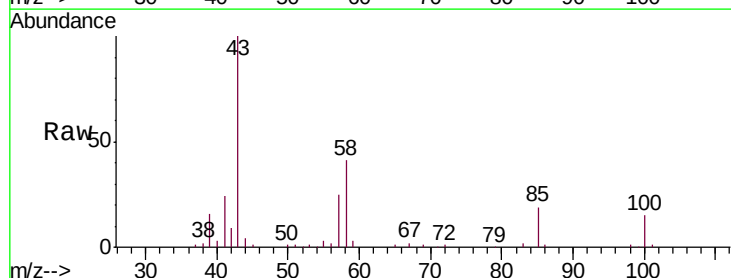
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01035

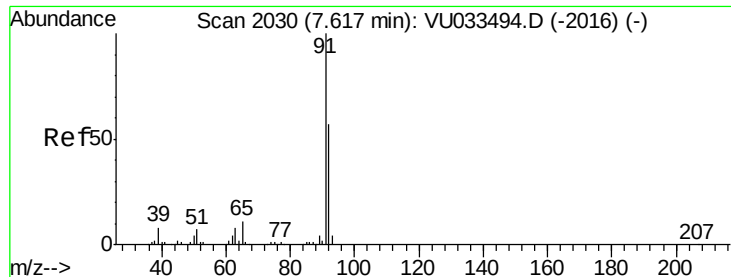
Tgt Ion: 75 Resp: 34845  
 Ion Ratio Lower Upper  
 75 100  
 77 34.5 22.3 41.5



#40  
 4-Methyl-2-pentanone  
 Concen: 17.496 ug/L  
 RT: 7.44 min Scan# 1976  
 Delta R.T. 0.00 min  
 Lab File: VU033493.D  
 Acq: 30 Jul 2019 15:22

Tgt Ion: 43 Resp: 60008  
 Ion Ratio Lower Upper  
 43 100  
 58 40.7 32.8 49.2  
 100 14.8 12.9 19.3





#42

Toluene

Concen: 9.124 ug/L

RT: 7.62 min Scan# 2031

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

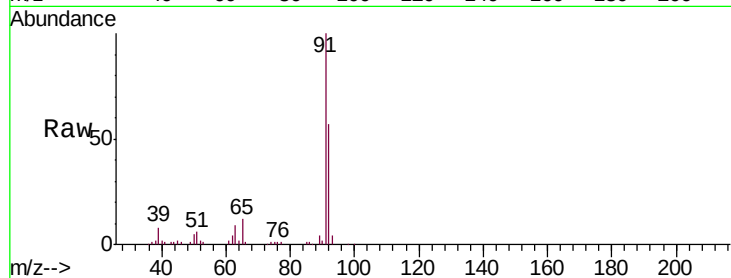
VSTD01035

Tgt Ion: 91 Resp: 91996

Ion Ratio Lower Upper

91 100

92 56.8 40.2 74.6



Abundance Ion 91.00 (90.70 to 91.70): VU033493.D (-2031) (-)

Ion 92.00 (91.70 to 92.70): VU033493.D (-2031) (-)

60000

50000

40000

30000

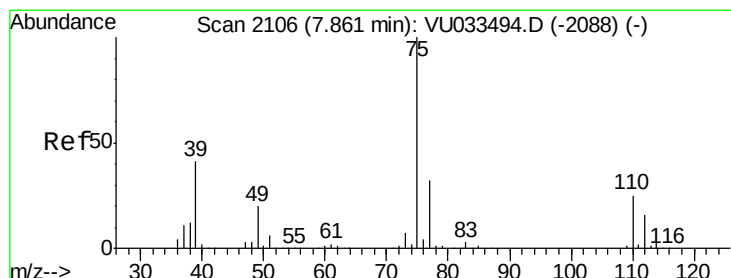
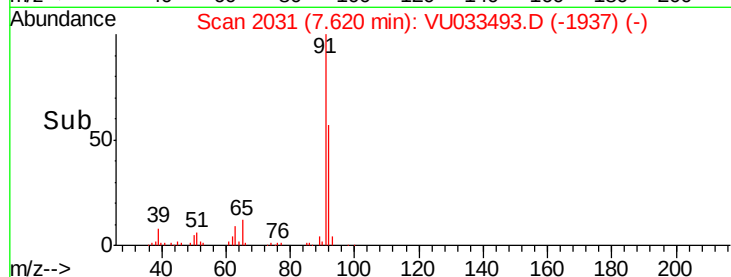
20000

10000

0

7.55 7.60 7.65 7.70

Time-->



#44

trans-1,3-Dichloropropene

Concen: 9.178 ug/L

RT: 7.86 min Scan# 2107

Delta R.T. 0.00 min

Lab File: VU033493.D

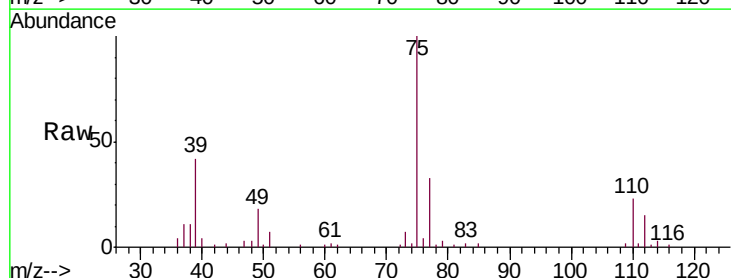
Acq: 30 Jul 2019 15:22

Tgt Ion: 75 Resp: 32134

Ion Ratio Lower Upper

75 100

77 33.0 22.7 42.1



Abundance Ion 75.00 (74.70 to 75.70): VU033493.D (-2107) (-)

Ion 77.00 (76.70 to 77.70): VU033493.D (-2107) (-)

20000

15000

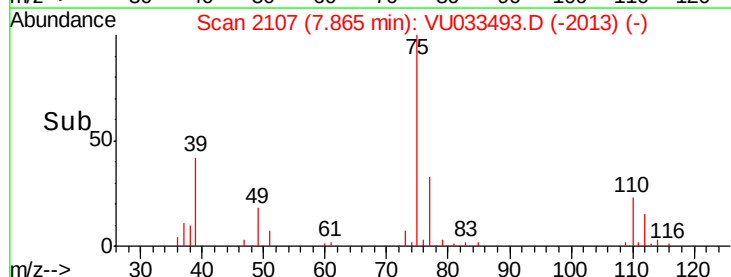
10000

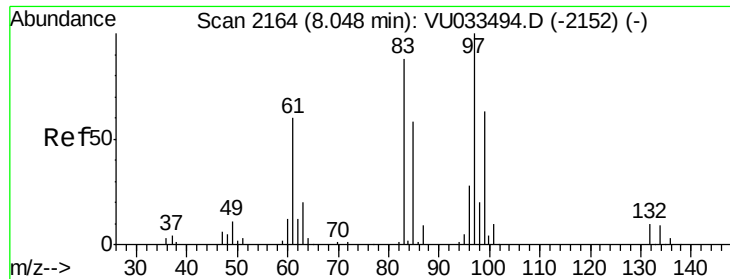
5000

0

7.80 7.85 7.90 7.95

Time-->

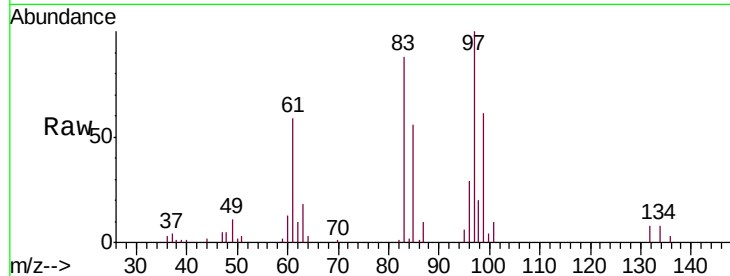




#45  
 1,1,2-Trichloroethane  
 Concen: 9.423 ug/L  
 RT: 8.05 min Scan# 2165  
 Delta R.T. 0.00 min  
 Lab File: VU033493.D  
 Acq: 30 Jul 2019 15:22

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01035

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 22571 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 61.3  | 44.4  | 82.4  |
| 83       | 87.9  | 61.5  | 114.1 |
| 85       | 56.4  | 40.4  | 75.0  |



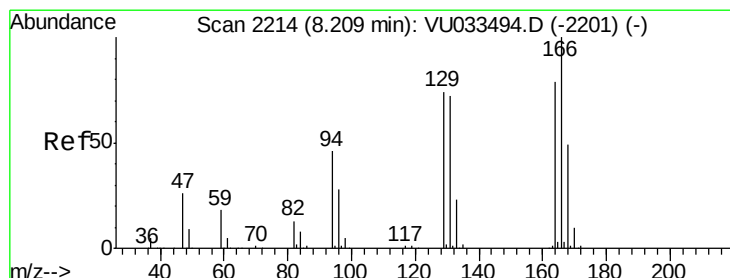
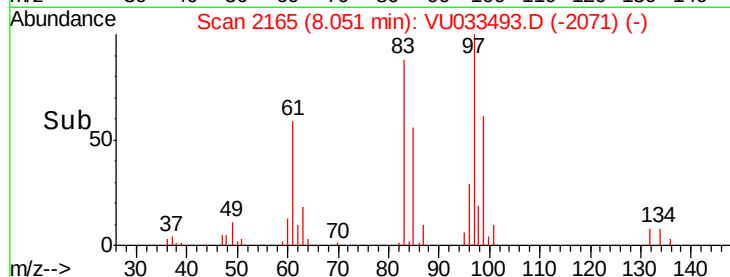
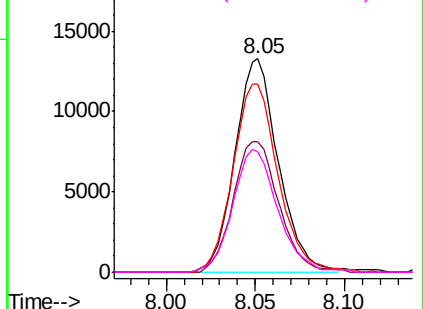
Abundance

Ion 97.00 (96.70 to 97.70): VU0

Ion 99.00 (98.70 to 99.70): VU0

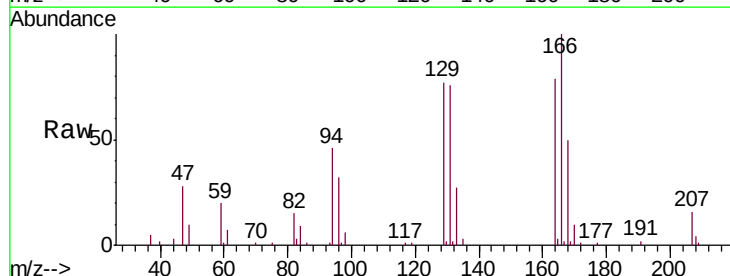
Ion 83.00 (82.70 to 83.70): VU0

Ion 85.00 (84.70 to 85.70): VU0



#46  
 Tetrachloroethene  
 Concen: 9.339 ug/L  
 RT: 8.21 min Scan# 2215  
 Delta R.T. 0.00 min  
 Lab File: VU033493.D  
 Acq: 30 Jul 2019 15:22

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 17921 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 97.3  | 65.5  | 121.7 |
| 131      | 96.2  | 63.3  | 117.7 |
| 166      | 126.2 | 88.2  | 163.8 |



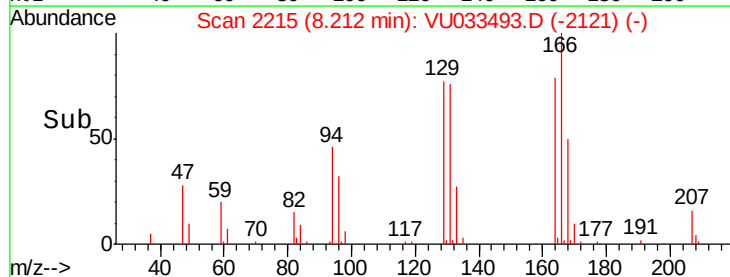
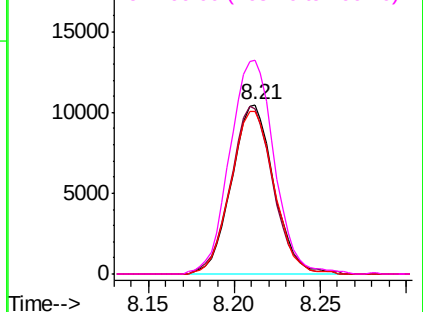
Abundance

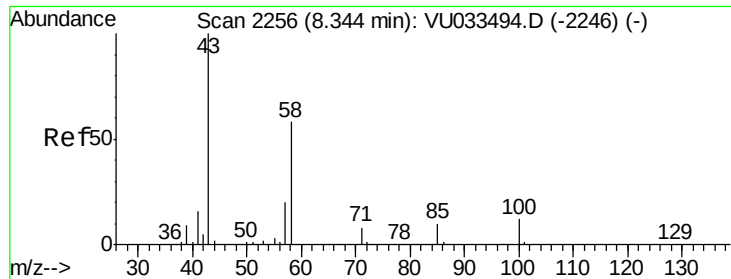
Ion 164.00 (163.70 to 164.70): V

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

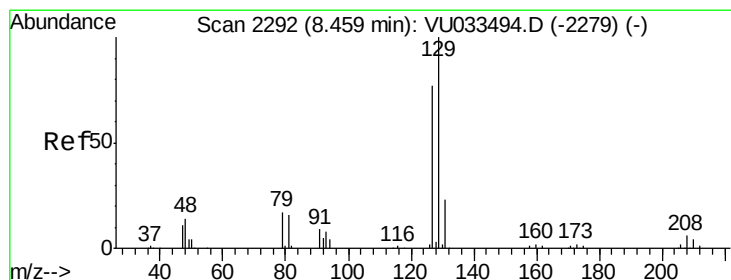
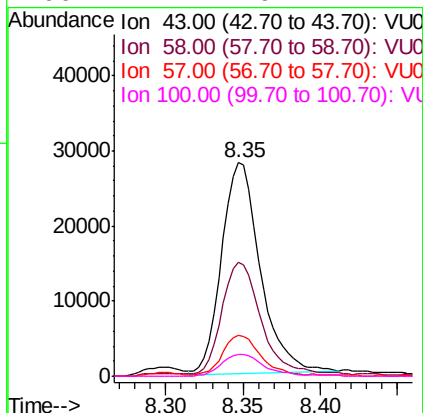
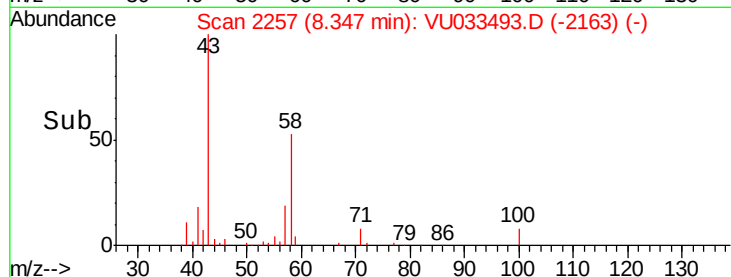
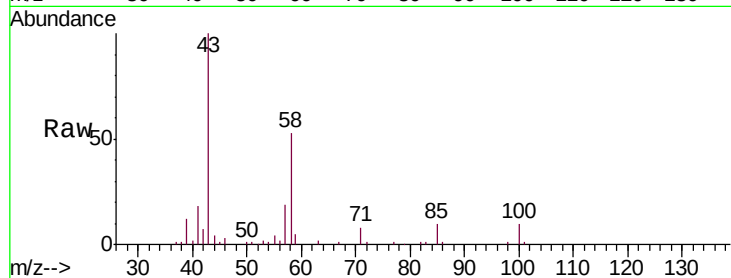




#48  
2-Hexanone  
Concen: 17.479 ug/L  
RT: 8.35 min Scan# 2257  
Delta R.T. 0.00 min  
Lab File: VU033493.D  
Acq: 30 Jul 2019 15:22

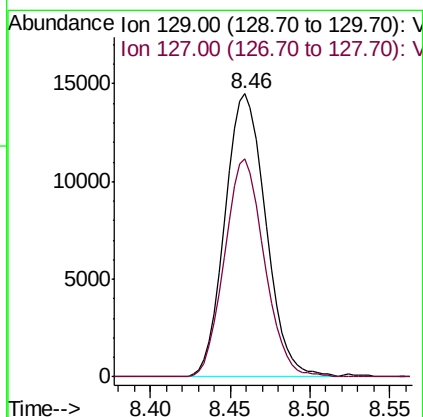
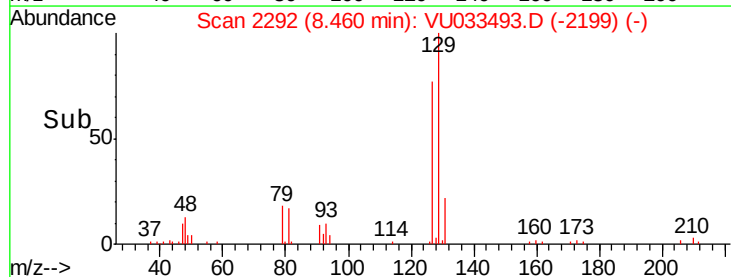
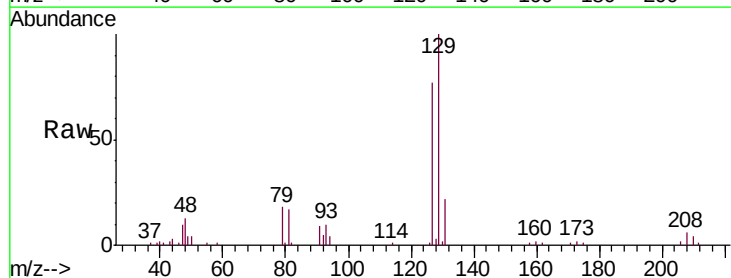
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01035

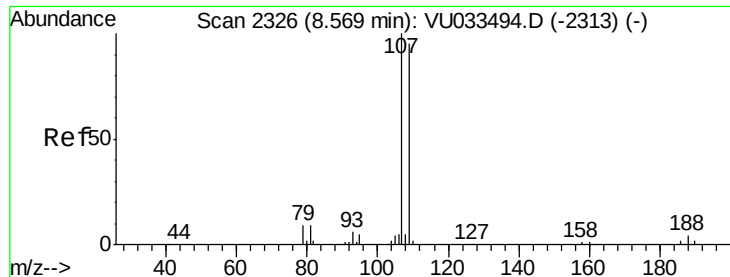
Tgt Ion: 43 Resp: 48811  
Ion Ratio Lower Upper  
43 100  
58 53.8 45.8 68.6  
57 18.1 15.8 23.6  
100 11.4 9.4 14.2



#49  
Dibromochloromethane  
Concen: 9.418 ug/L  
RT: 8.46 min Scan# 2292  
Delta R.T. 0.00 min  
Lab File: VU033493.D  
Acq: 30 Jul 2019 15:22

Tgt Ion: 129 Resp: 25319  
Ion Ratio Lower Upper  
129 100  
127 77.2 53.8 99.8

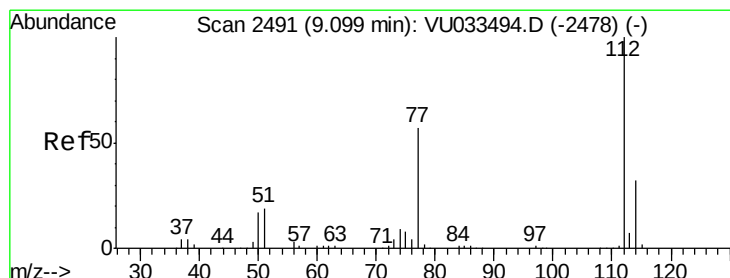
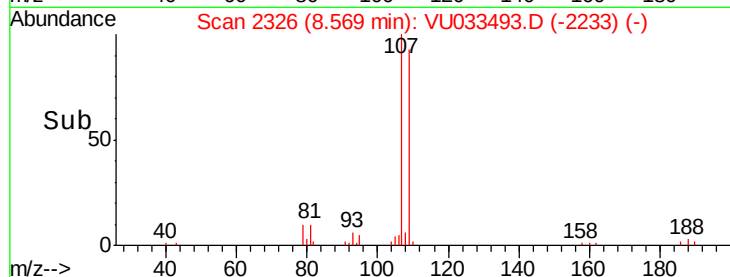
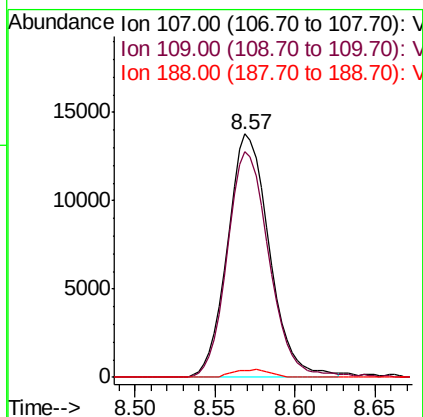
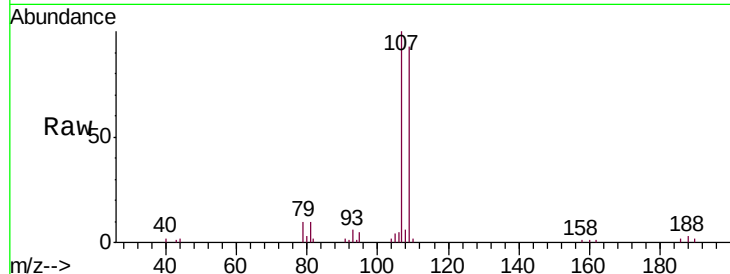




#50  
1,2-Dibromoethane  
Concen: 9.399 ug/L  
RT: 8.57 min Scan# 2326  
Delta R.T. 0.00 min  
Lab File: VU033493.D  
Acq: 30 Jul 2019 15:22

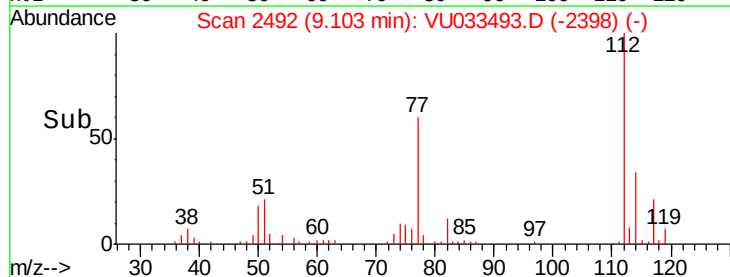
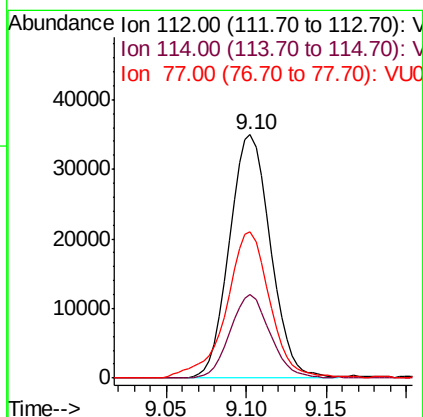
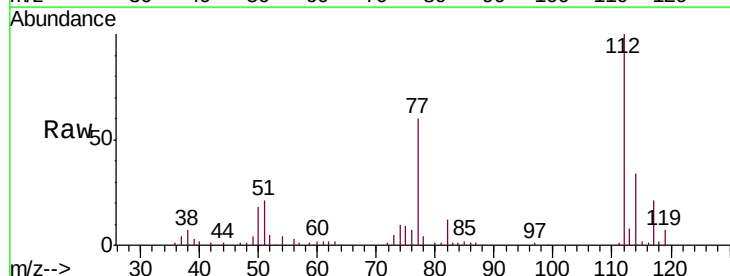
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01035

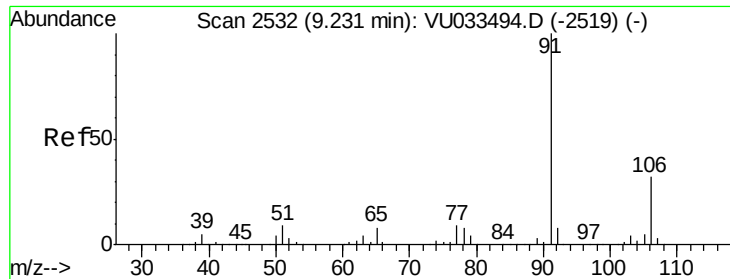
Tgt Ion:107 Resp: 24620  
Ion Ratio Lower Upper  
107 100  
109 92.6 66.8 124.0  
188 2.9 3.0 4.4#



#51  
Chlorobenzene  
Concen: 9.321 ug/L  
RT: 9.10 min Scan# 2492  
Delta R.T. 0.00 min  
Lab File: VU033493.D  
Acq: 30 Jul 2019 15:22

Tgt Ion:112 Resp: 61350  
Ion Ratio Lower Upper  
112 100  
114 34.3 22.3 41.5  
77 59.9 45.6 68.4





#52

Ethylbenzene

Concen: 8.986 ug/L

RT: 9.23 min Scan# 2533

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

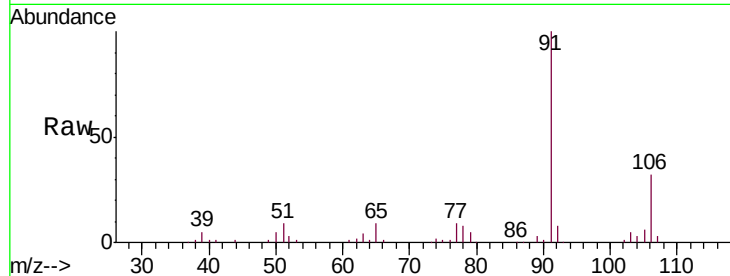
VSTD01035

Tgt Ion: 91 Resp: 96840

Ion Ratio Lower Upper

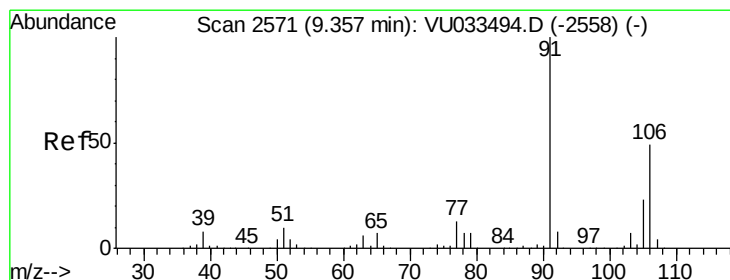
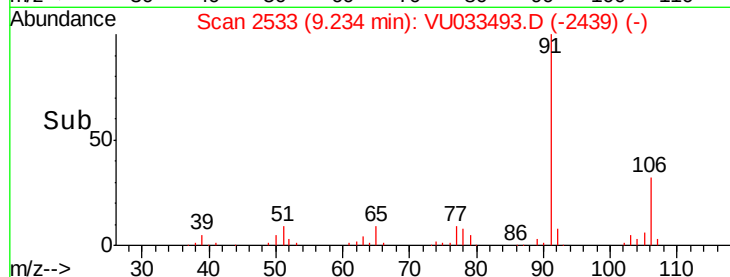
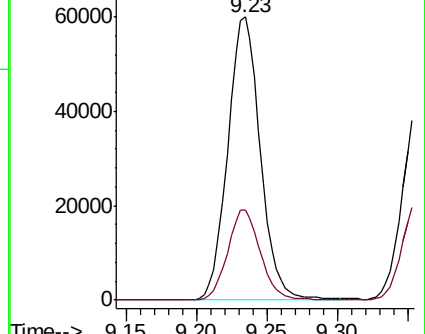
91 100

106 31.9 22.2 41.2



Abundance Ion 91.00 (90.70 to 91.70): VU033493.D (-2519) (-)

Ion 106.00 (105.70 to 106.70): VU033493.D (-2519) (-)



#53

m,p-Xylene

Concen: 9.041 ug/L

RT: 9.36 min Scan# 2571

Delta R.T. 0.00 min

Lab File: VU033493.D

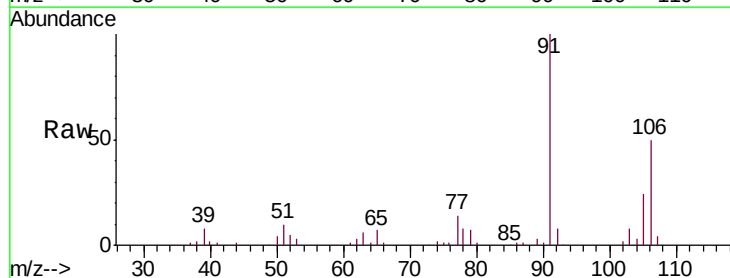
Acq: 30 Jul 2019 15:22

Tgt Ion: 106 Resp: 36904

Ion Ratio Lower Upper

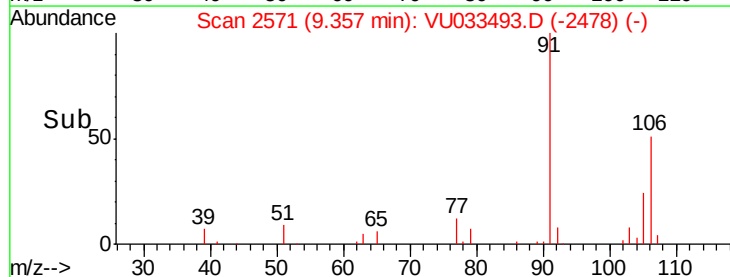
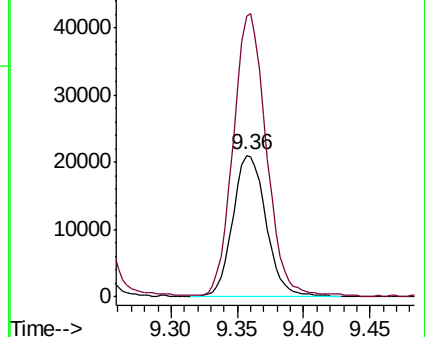
106 100

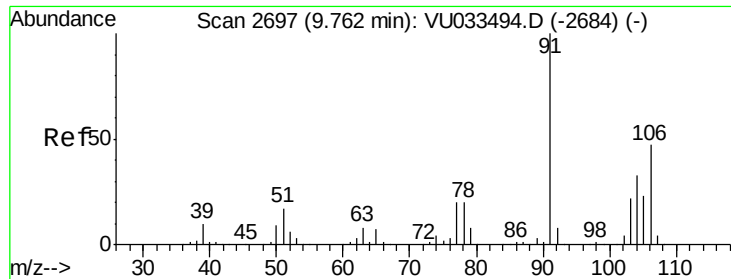
91 198.2 143.0 265.6



Abundance Ion 106.00 (105.70 to 106.70): VU033493.D (-2571) (-)

Ion 91.00 (90.70 to 91.70): VU033493.D (-2571) (-)





#54

o-xylene

Concen: 8.807 ug/L

RT: 9.76 min Scan# 2697

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

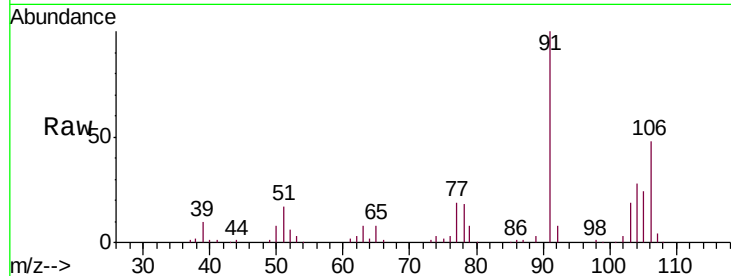
VSTD01035

Tgt Ion:106 Resp: 35757

Ion Ratio Lower Upper

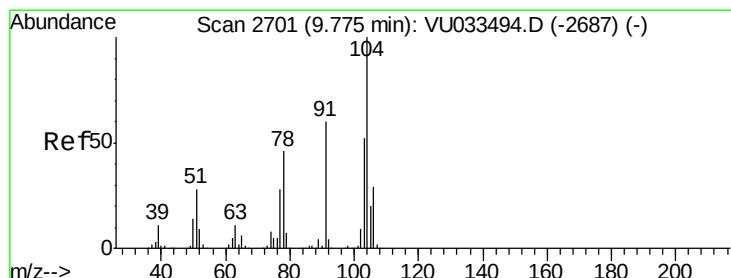
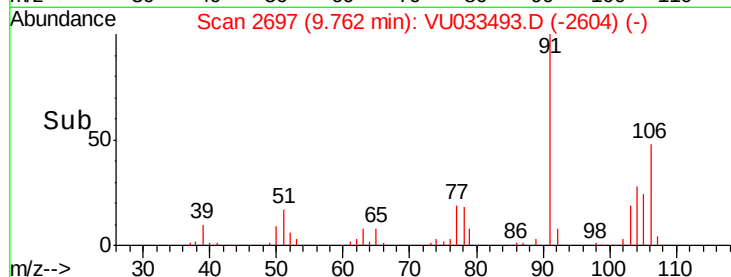
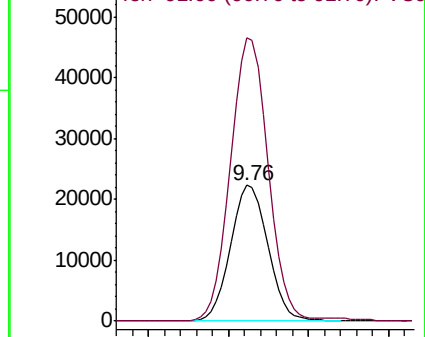
106 100

91 208.8 148.4 275.6



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0



#55

Styrene

Concen: 8.501 ug/L

RT: 9.78 min Scan# 2702

Delta R.T. 0.00 min

Lab File: VU033493.D

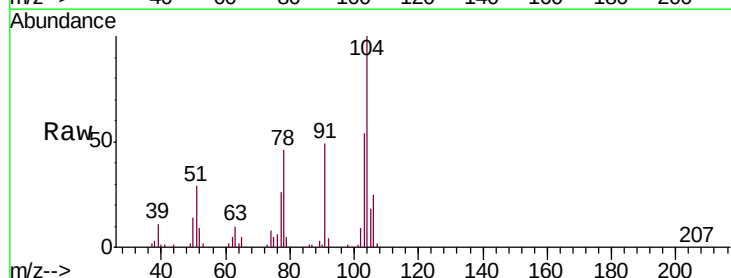
Acq: 30 Jul 2019 15:22

Tgt Ion:104 Resp: 58450

Ion Ratio Lower Upper

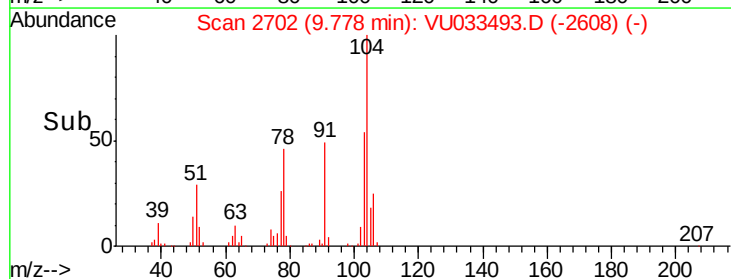
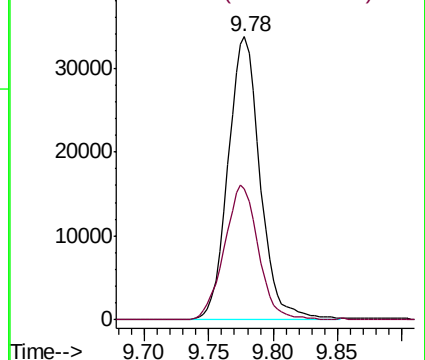
104 100

78 46.1 32.2 59.8

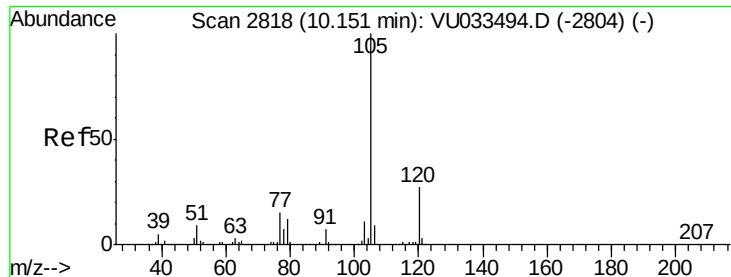


Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VU0







#56

Isopropylbenzene

Concen: 8.776 ug/L

RT: 10.15 min Scan# 2818

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01035

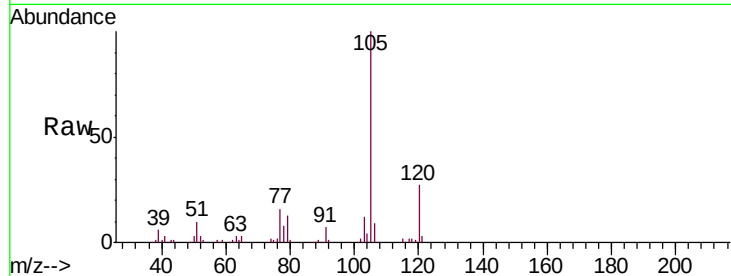
Tgt Ion:105 Resp: 91683

Ion Ratio Lower Upper

105 100

120 26.6 21.4 32.0

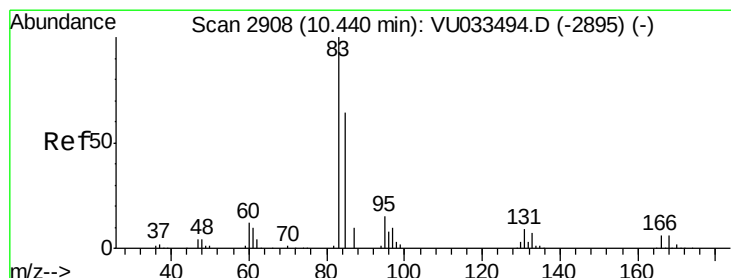
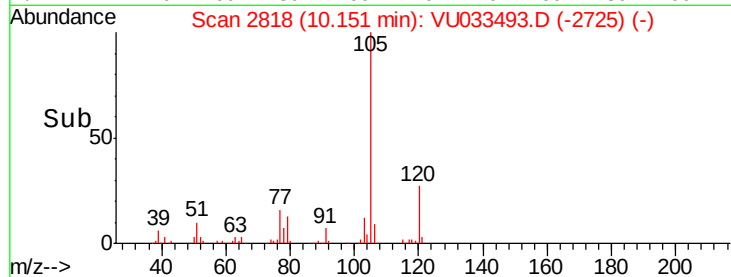
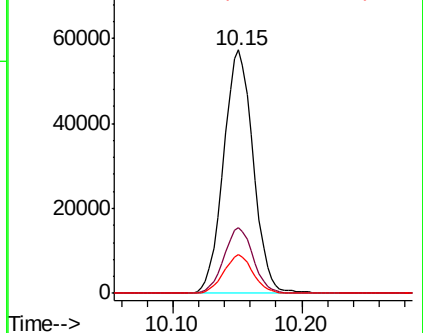
77 15.7 12.5 18.7



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: 9.606 ug/L

RT: 10.44 min Scan# 2908

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

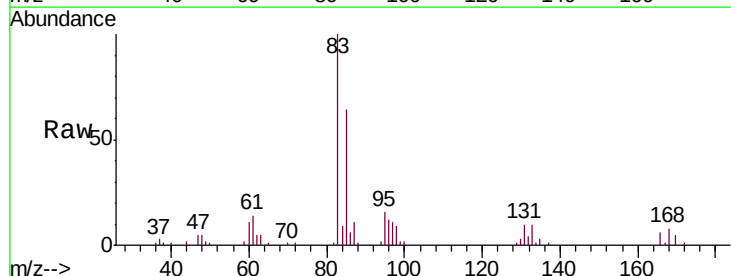
Tgt Ion: 83 Resp: 40595

Ion Ratio Lower Upper

83 100

85 63.7 45.4 84.4

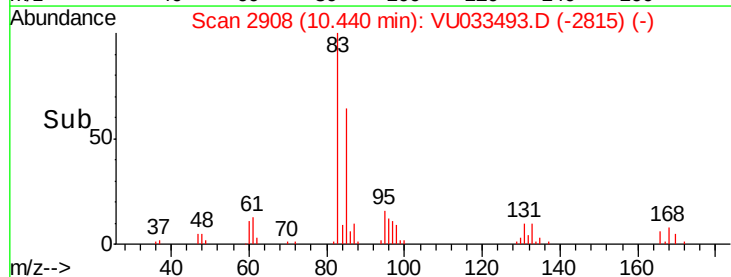
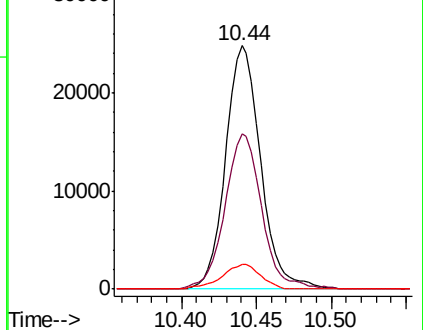
131 10.0 7.9 11.9

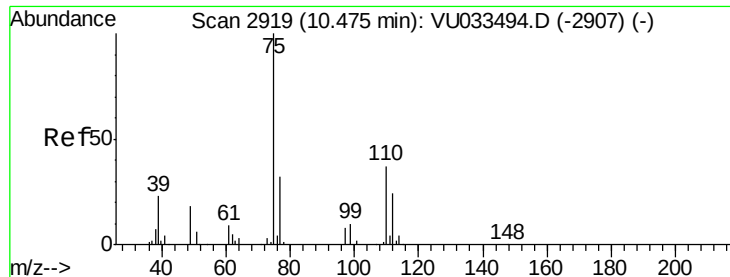


Abundance Ion 83.00 (82.70 to 83.70): VU

Ion 85.00 (84.70 to 85.70): VU

Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 9.550 ug/L

RT: 10.48 min Scan# 2919

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

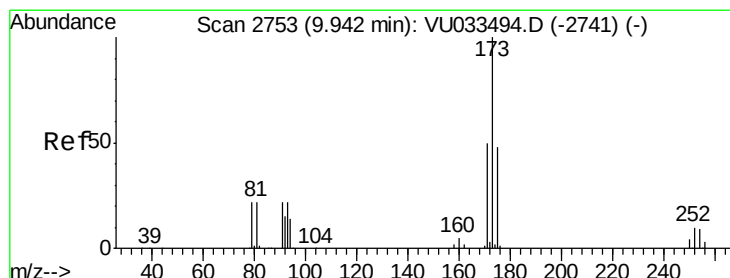
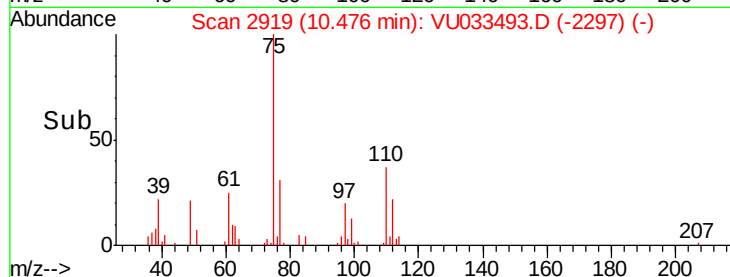
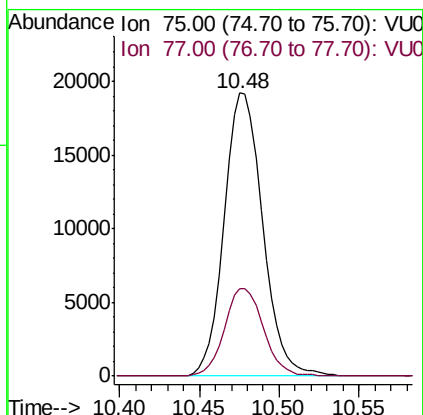
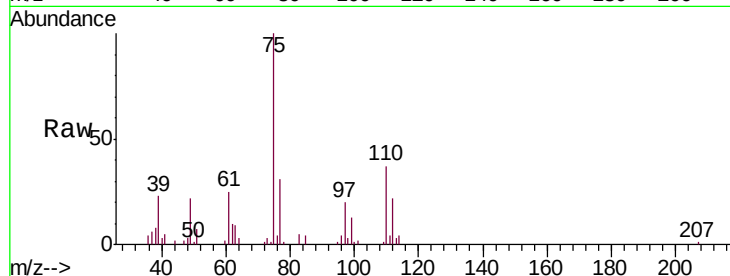
VSTD01035

Tgt Ion: 75 Resp: 31638

Ion Ratio Lower Upper

75 100

77 31.1 25.8 38.6



#61

Bromoform

Concen: 9.225 ug/L

RT: 9.94 min Scan# 2753

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

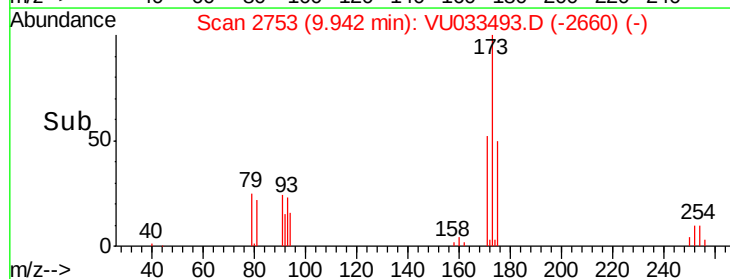
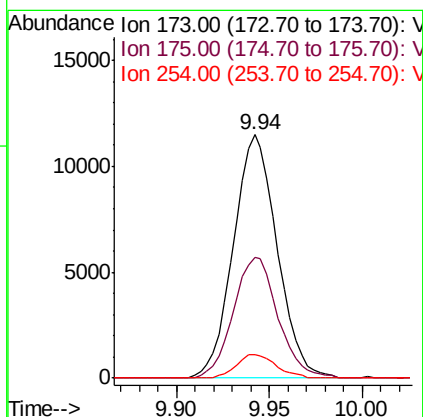
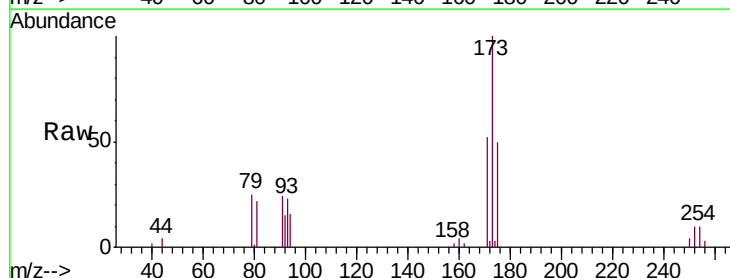
Tgt Ion: 173 Resp: 18850

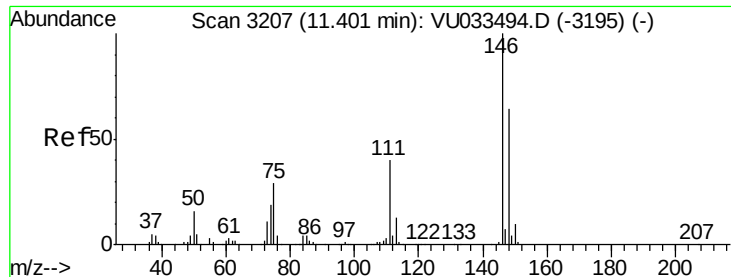
Ion Ratio Lower Upper

173 100

175 50.6 38.7 58.1

254 8.8 7.5 11.3





#62

1,3-Dichlorobenzene

Concen: 9.175 ug/L

RT: 11.40 min Scan# 3207

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01035

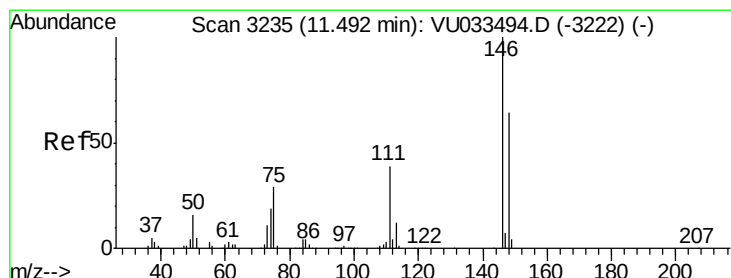
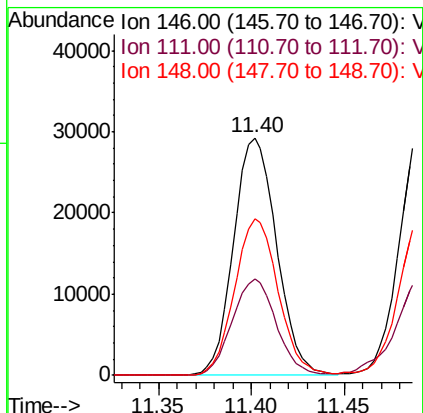
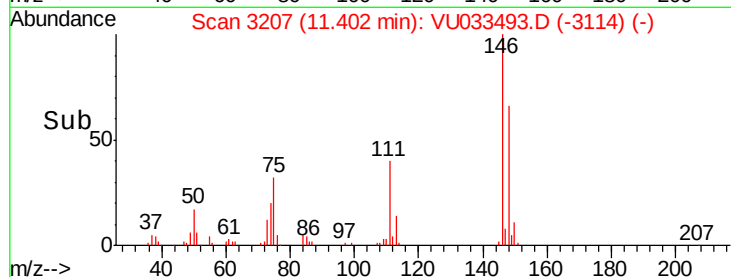
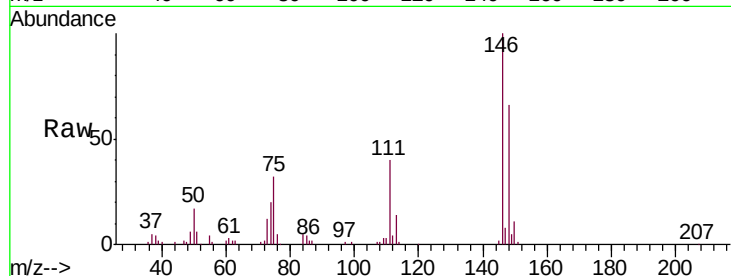
Tgt Ion:146 Resp: 47127

Ion Ratio Lower Upper

146 100

111 40.4 28.1 52.1

148 65.7 45.0 83.6



#63

1,4-Dichlorobenzene

Concen: 9.586 ug/L

RT: 11.49 min Scan# 3235

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

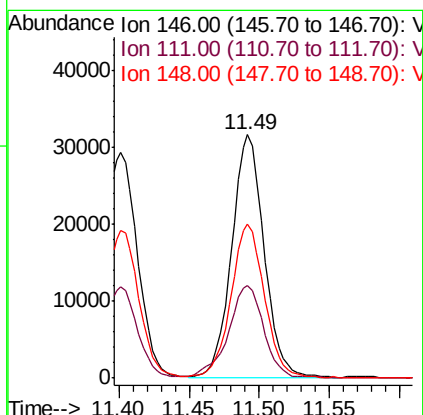
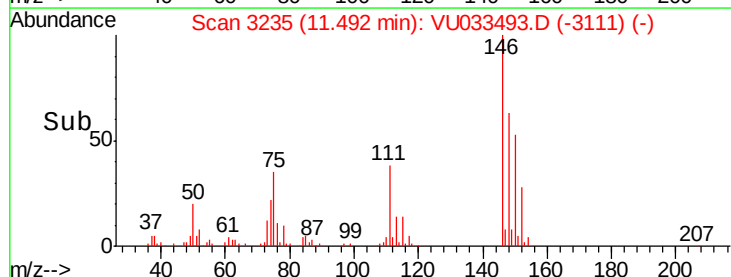
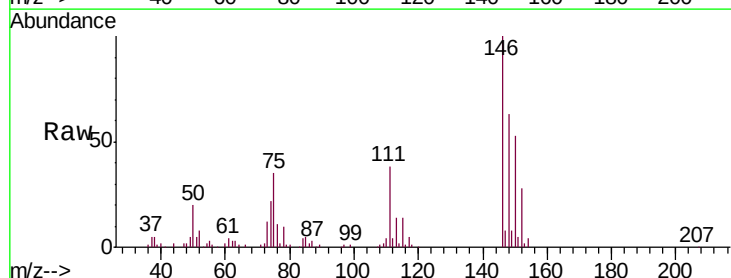
Tgt Ion:146 Resp: 51296

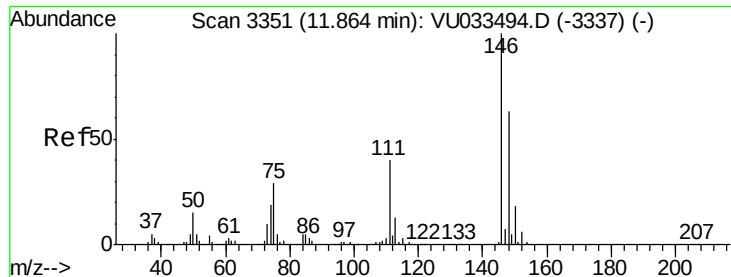
Ion Ratio Lower Upper

146 100

111 38.1 27.2 50.4

148 63.4 44.5 82.7





#65

1,2-Dichlorobenzene

Concen: 9.347 ug/L

RT: 11.86 min Scan# 3351

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01035

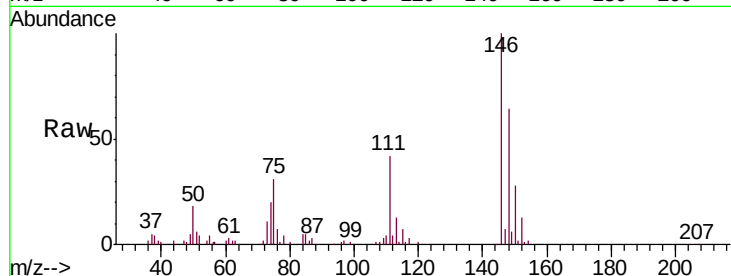
Tgt Ion:146 Resp: 49057

Ion Ratio Lower Upper

146 100

111 41.8 31.7 47.5

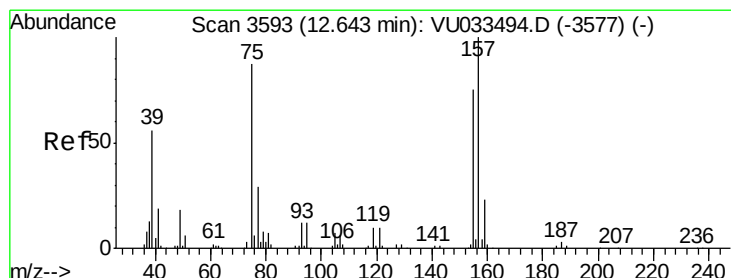
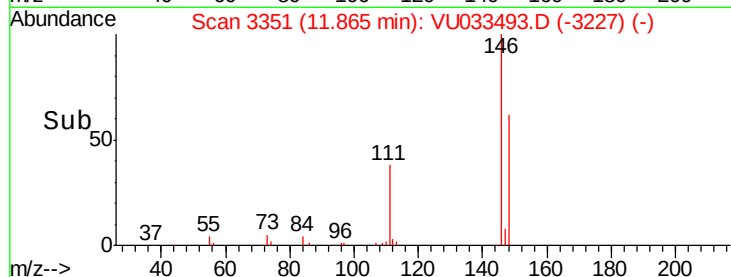
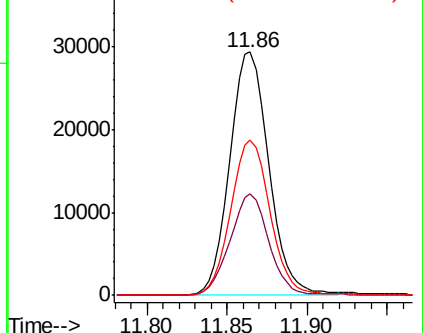
148 63.8 50.3 75.5



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 8.973 ug/L

RT: 12.64 min Scan# 3592

Delta R.T. -0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

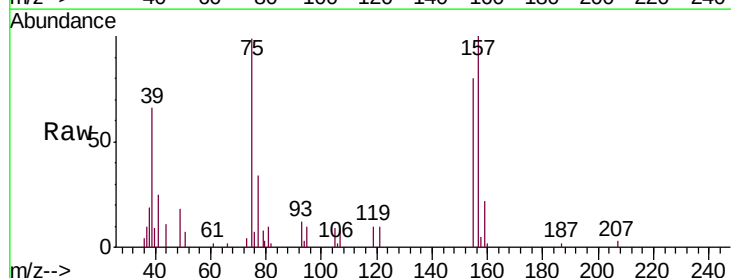
Tgt Ion: 75 Resp: 8969

Ion Ratio Lower Upper

75 100

155 80.6 69.4 104.0

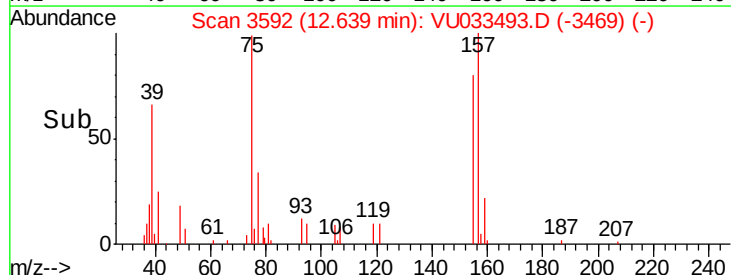
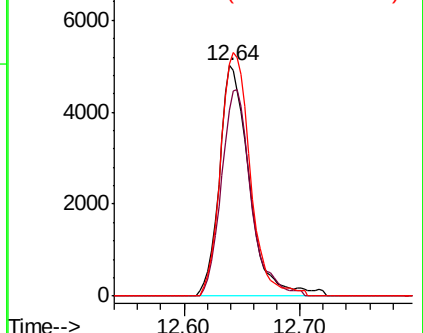
157 100.7 91.8 137.8

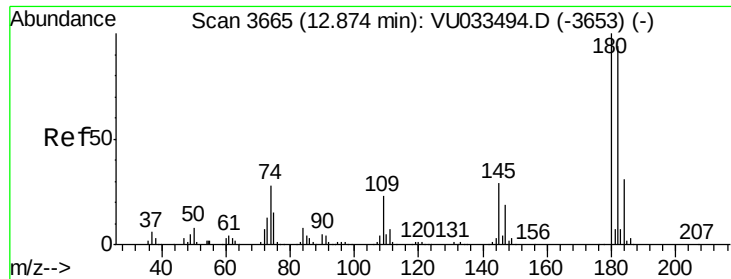


Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 155.00 (154.70 to 155.70): V

Ion 157.00 (156.70 to 157.70): V

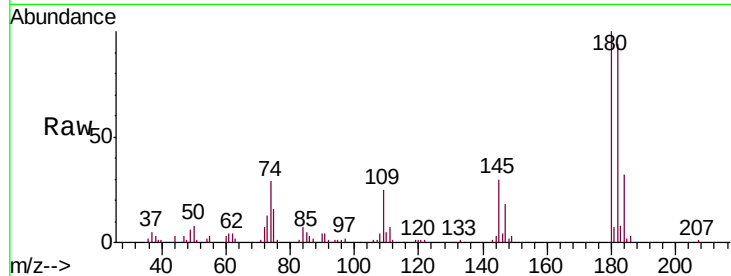




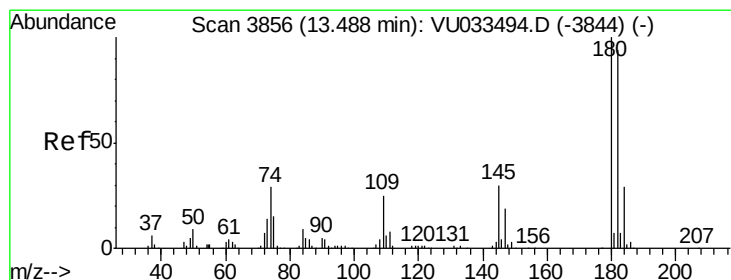
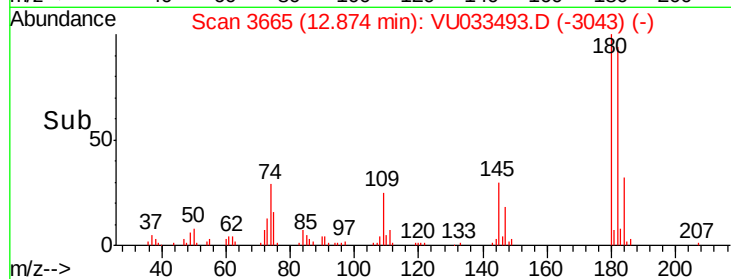
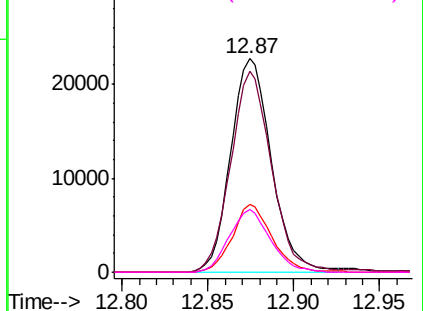
#67  
 1,3,5-Trichlorobenzene  
 Concen: 9.935 ug/L  
 RT: 12.87 min Scan# 3665  
 Delta R.T. 0.00 min  
 Lab File: VU033493.D  
 Acq: 30 Jul 2019 15:22

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01035

Tgt Ion:180 Resp: 37414  
 Ion Ratio Lower Upper  
 180 100  
 182 94.2 75.6 113.4  
 184 31.0 24.2 36.2  
 145 29.8 22.7 34.1

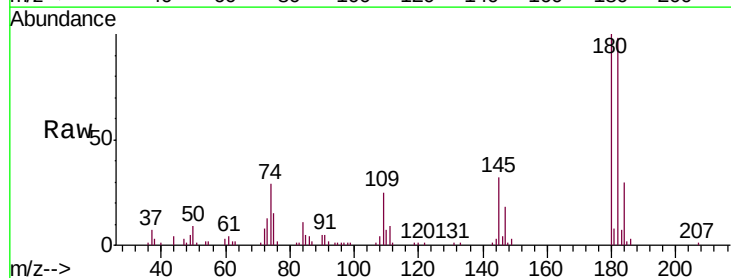


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

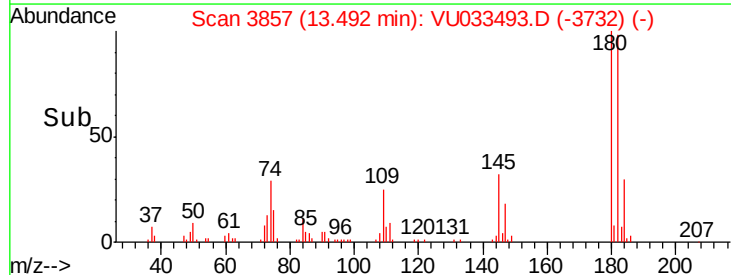
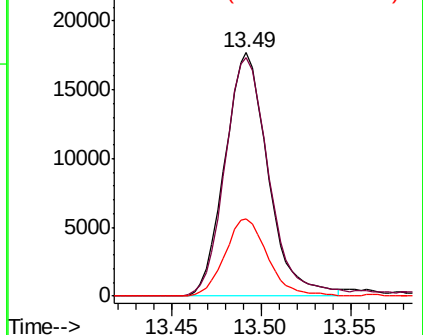


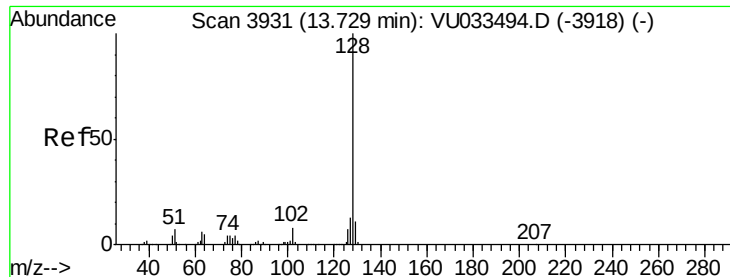
#68  
 1,2,4-trichlorobenzene  
 Concen: 9.043 ug/L  
 RT: 13.49 min Scan# 3857  
 Delta R.T. 0.00 min  
 Lab File: VU033493.D  
 Acq: 30 Jul 2019 15:22

Tgt Ion:180 Resp: 29765  
 Ion Ratio Lower Upper  
 180 100  
 182 99.6 75.8 113.8  
 145 31.4 24.3 36.5



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: 7.794 ug/L

RT: 13.73 min Scan# 3931

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01035

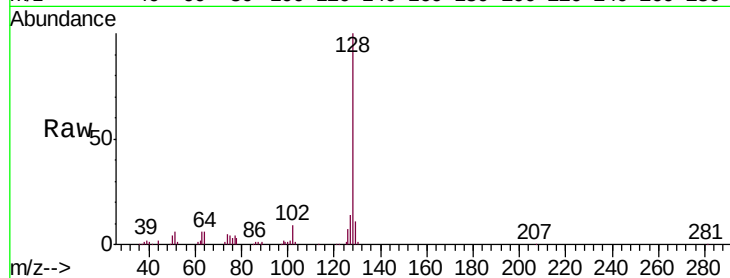
Tgt Ion:128 Resp: 80430

Ion Ratio Lower Upper

128 100

127 13.7 10.8 16.2

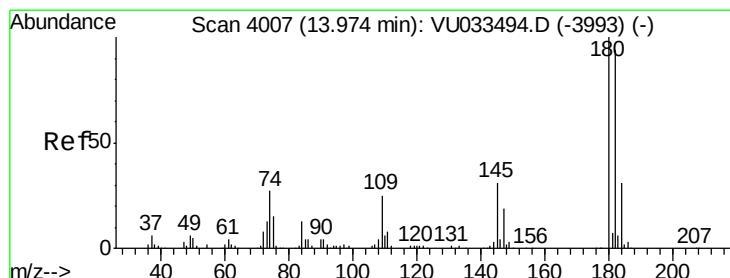
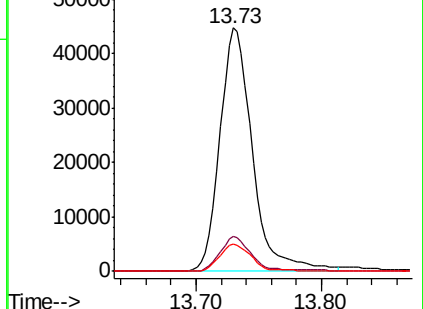
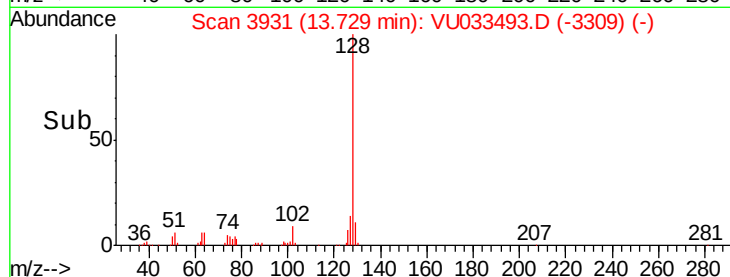
129 10.6 8.7 13.1



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



#70

1,2,3-Trichlorobenzene

Concen: 9.167 ug/L

RT: 13.97 min Scan# 4007

Delta R.T. 0.00 min

Lab File: VU033493.D

Acq: 30 Jul 2019 15:22

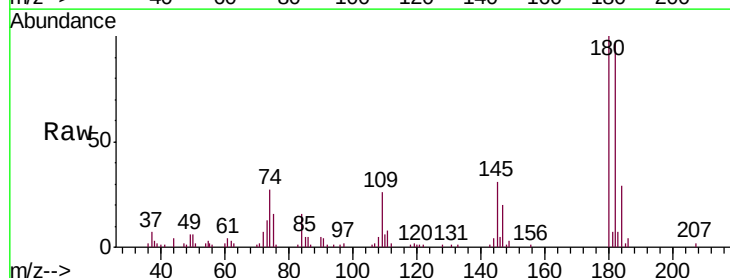
Tgt Ion:180 Resp: 32770

Ion Ratio Lower Upper

180 100

182 95.1 75.5 113.3

145 30.1 24.4 36.6



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

