

Data File : VU036151.D  
Acq On : 12 Dec 2019 15:31  
Operator : JC/MD  
Sample : VSTD00101  
Misc : 25.0mL/MSVOA\_U/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00101

Quant Time: Dec 13 01:24:00 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR121219WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Dec 13 01:21:02 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.29  | 114  | 283525   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.45  | 117  | 307309   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.84 | 152  | 119462   | 5.00 | ug/L  | 0.00     |

System Monitoring Compounds

|                                |       |     |       |      |      |      |
|--------------------------------|-------|-----|-------|------|------|------|
| 4) Vinyl Chloride-d3           | 1.61  | 65  | 30278 | 1.15 | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.93  | 69  | 25983 | 0.97 | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.59  | 63  | 38576 | 0.85 | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 4.70  | 46  | 42049 | 9.40 | ug/L | 0.00 |
| 24) Chloroform-d               | 5.11  | 84  | 42326 | 1.01 | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.75  | 65  | 21442 | 0.99 | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.77  | 84  | 76763 | 0.95 | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.73  | 67  | 24326 | 0.99 | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.93  | 98  | 64944 | 0.87 | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 8.21  | 79  | 9778  | 0.96 | ug/L | 0.00 |
| 46) 2-Hexanone-d5              | 8.68  | 63  | 28793 | 7.80 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.78 | 84  | 22749 | 1.00 | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 12.22 | 152 | 23553 | 1.00 | ug/L | 0.00 |

Target Compounds

|                                |      |     |       |            | Qvalue |
|--------------------------------|------|-----|-------|------------|--------|
| 2) Dichlorodifluoromethane     | 1.39 | 85  | 30566 | 1.057 ug/L | 97     |
| 3) Chloromethane               | 1.54 | 50  | 37871 | 1.268 ug/L | 99     |
| 5) Vinyl chloride              | 1.62 | 62  | 36818 | 1.189 ug/L | 89     |
| 6) Bromomethane                | 1.87 | 94  | 22765 | 0.980 ug/L | 99     |
| 8) Chloroethane                | 1.95 | 64  | 22770 | 1.013 ug/L | 100    |
| 9) Trichlorofluoromethane      | 2.16 | 101 | 45619 | 0.917 ug/L | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.61 | 101 | 22392 | 0.822 ug/L | 97     |
| 12) 1,1-Dichloroethene         | 2.61 | 96  | 21275 | 0.873 ug/L | 97     |
| 13) Acetone                    | 2.68 | 43  | 40411 | 7.497 ug/L | 97     |
| 14) Carbon disulfide           | 2.82 | 76  | 69294 | 0.963 ug/L | 99     |
| 15) Methyl Acetate             | 3.00 | 43  | 8721  | 1.043 ug/L | 92     |
| 16) Methylene chloride         | 3.08 | 84  | 31868 | 1.085 ug/L | 97     |
| 17) Methyl tert-butyl Ether    | 3.42 | 73  | 38371 | 0.877 ug/L | 96     |
| 18) trans-1,2-Dichloroethene   | 3.39 | 96  | 21532 | 0.994 ug/L | 95     |
| 19) 1,1-Dichloroethane         | 3.92 | 63  | 39184 | 1.002 ug/L | 98     |
| 21) 2-Butanone                 | 4.78 | 43  | 45876 | 8.123 ug/L | 96     |
| 22) cis-1,2-Dichloroethene     | 4.72 | 96  | 20128 | 0.891 ug/L | 93     |
| 23) Bromochloromethane         | 5.02 | 128 | 10572 | 0.908 ug/L | 92     |
| 25) Chloroform                 | 5.13 | 83  | 41601 | 0.966 ug/L | 88     |
| 27) 1,2-Dichloroethane         | 5.84 | 62  | 24517 | 0.961 ug/L | 96     |
| 29) 1,1,1-Trichloroethane      | 5.36 | 97  | 33761 | 0.930 ug/L | 97     |
| 30) Cyclohexane                | 5.43 | 56  | 25823 | 0.890 ug/L | 95     |
| 31) Carbon tetrachloride       | 5.57 | 117 | 30950 | 0.942 ug/L | 97     |
| 33) Benzene                    | 5.82 | 78  | 80396 | 0.903 ug/L | 100    |
| 34) Trichloroethene            | 6.58 | 95  | 21794 | 0.928 ug/L | 91     |
| 35) Methylcyclohexane          | 6.80 | 83  | 26680 | 0.837 ug/L | 95     |
| 37) 1,2-Dichloropropane        | 6.83 | 63  | 21367 | 0.952 ug/L | 98     |
| 38) Bromodichloromethane       | 7.14 | 83  | 29282 | 0.981 ug/L | 97     |
| 39) cis-1,3-Dichloropropene    | 7.64 | 75  | 26719 | 0.881 ug/L | 96     |
| 40) 4-Methyl-2-pentanone       | 7.84 | 43  | 96603 | 8.239 ug/L | 96     |

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Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00101

Quant Time: Dec 13 01:24:00 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR121219WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Dec 13 01:21:02 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| 42) Toluene                    | 8.00  | 91   | 80870    | 0.848 | ug/L   | 98       |
| 44) trans-1,3-Dichloropropene  | 8.24  | 75   | 22019    | 0.840 | ug/L   | 97       |
| 45) 1,1,2-Trichloroethane      | 8.44  | 97   | 16577    | 0.948 | ug/L   | 96       |
| 47) Tetrachloroethene          | 8.58  | 164  | 19727    | 0.896 | ug/L   | 94       |
| 48) 2-Hexanone                 | 8.73  | 43   | 69679    | 8.505 | ug/L # | 87       |
| 49) Dibromochloromethane       | 8.84  | 129  | 20206    | 0.904 | ug/L   | 99       |
| 50) 1,2-Dibromoethane          | 8.96  | 107  | 15562    | 0.941 | ug/L   | 99       |
| 51) Chlorobenzene              | 9.48  | 112  | 54809    | 0.850 | ug/L   | 98       |
| 52) Ethylbenzene               | 9.60  | 91   | 74223    | 0.770 | ug/L   | 96       |
| 53) m,p-Xylene                 | 9.72  | 106  | 28647    | 0.742 | ug/L   | 99       |
| 54) o-Xylene                   | 10.13 | 106  | 27851    | 0.755 | ug/L   | 97       |
| 55) Styrene                    | 10.14 | 104  | 49480    | 0.778 | ug/L   | 96       |
| 56) Isopropylbenzene           | 10.51 | 105  | 69085    | 0.709 | ug/L   | 98       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.81 | 83   | 19835    | 0.856 | ug/L   | 98       |
| 59) 1,2,3-Trichloropropane     | 10.85 | 75   | 14304    | 0.895 | ug/L   | 94       |
| 61) Bromoform                  | 10.32 | 173  | 11704    | 0.968 | ug/L   | 99       |
| 62) 1,3-Dichlorobenzene        | 11.77 | 146  | 35232    | 0.877 | ug/L   | 96       |
| 63) 1,4-Dichlorobenzene        | 11.86 | 146  | 33812    | 0.861 | ug/L   | 96       |
| 65) 1,2-Dichlorobenzene        | 12.24 | 146  | 35381    | 0.895 | ug/L   | 94       |
| 66) 1,2-Dibromo-3-chloropropan | 13.02 | 75   | 2475     | 1.007 | ug/L # | 77       |
| 67) 1,3,5-Trichlorobenzene     | 13.24 | 180  | 20365    | 0.775 | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.86 | 180  | 6894     | 0.496 | ug/L   | 97       |
| 69) Naphthalene                | 14.11 | 128  | 5588     | 0.409 | ug/L # | 91       |
| 70) 1,2,3-Trichlorobenzene     | 14.35 | 180  | 6441     | 0.474 | ug/L   | 89       |

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

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```
ALS Vial      : 5      Sample Multiplier: 1
```

**Instrument :**  
MSVOA\_U  
**ClientSampleId :**  
VSTD00101

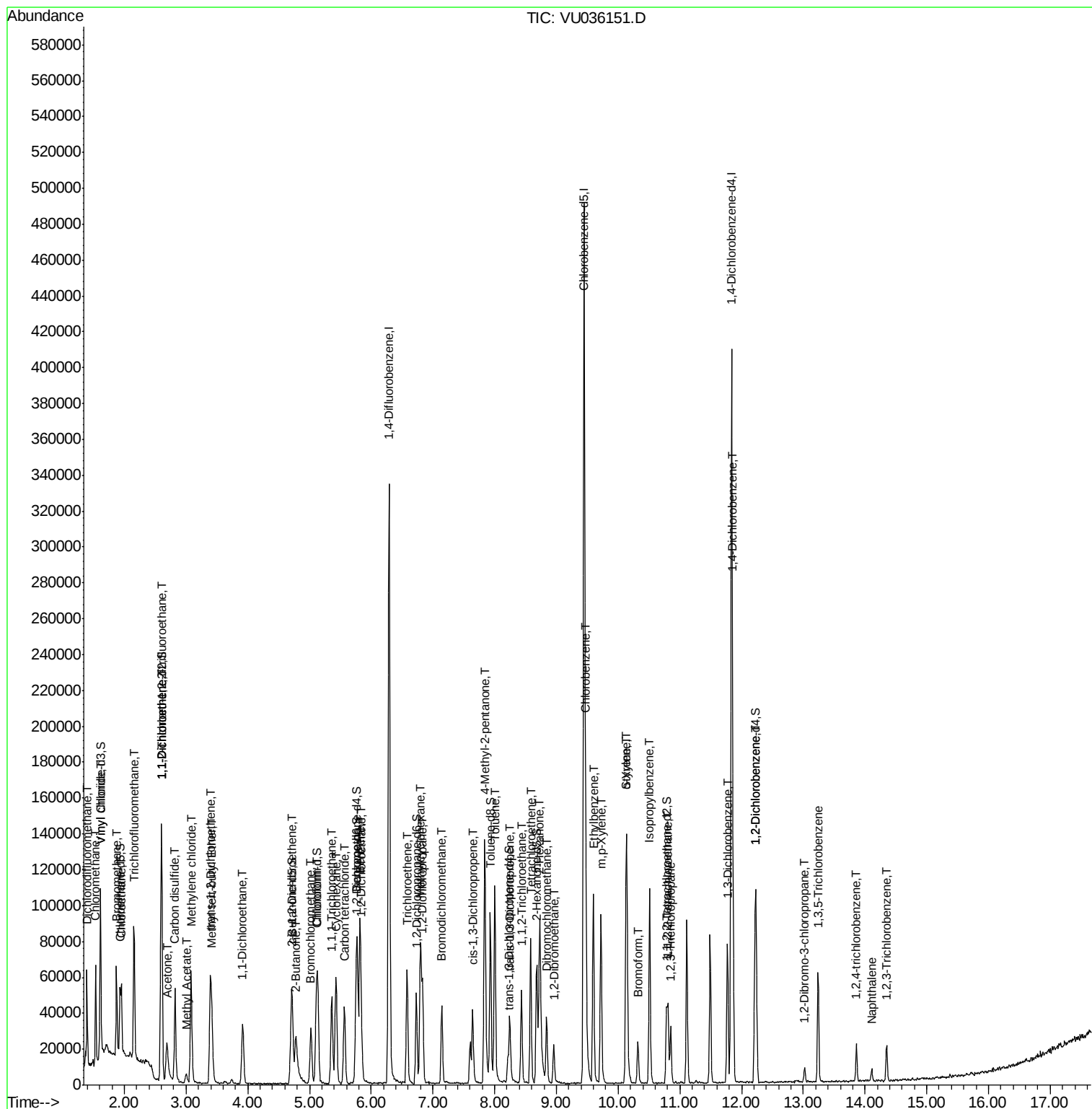
Quant Time: Dec 13 01:24:00 2019

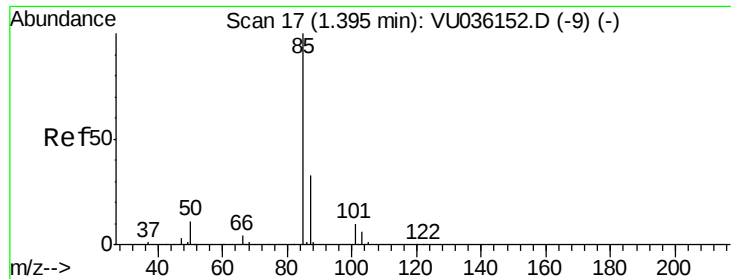
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A\_U\METHOD\SOMUTR121219WMA.M

Quant Title : TRACE VOA SOM01.0

QLast Update : Fri Dec 13 01:21:02 2019

Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 1.057 ug/L

RT: 1.39 min Scan# 17

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Instrument :

MSVOA\_U

ClientSampleId :

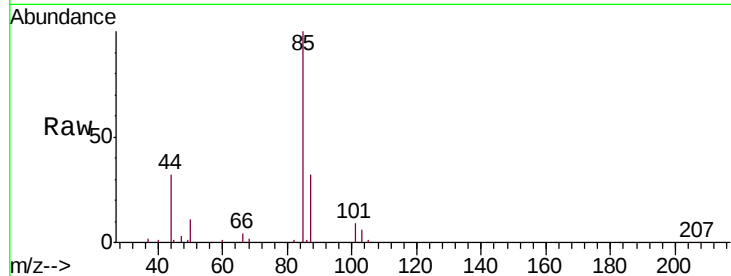
VSTD00101

Tgt Ion: 85 Resp: 30566

Ion Ratio Lower Upper

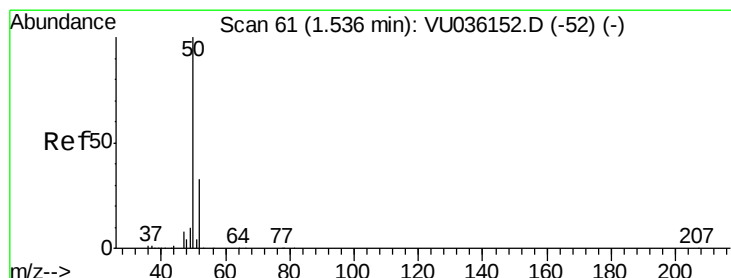
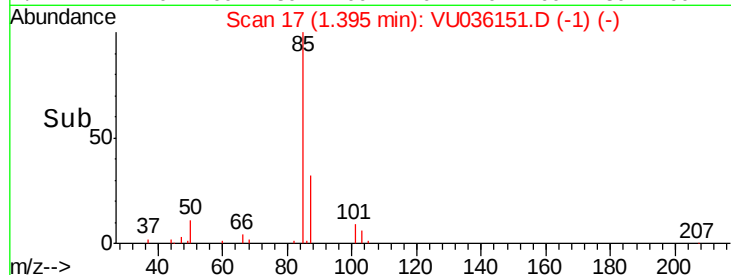
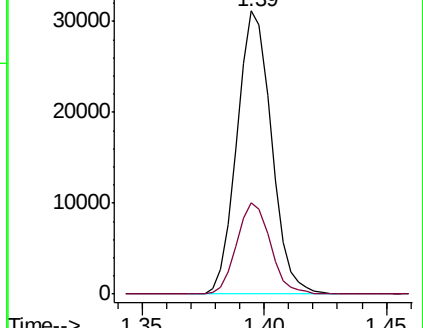
85 100

87 31.4 26.4 39.6



Abundance Ion 85.00 (84.70 to 85.70): VU036151.D (-1) (-)

Ion 87.00 (86.70 to 87.70): VU036151.D (-1) (-)



#3

Chloromethane

Concen: 1.268 ug/L

RT: 1.54 min Scan# 61

Delta R.T. 0.00 min

Lab File: VU036151.D

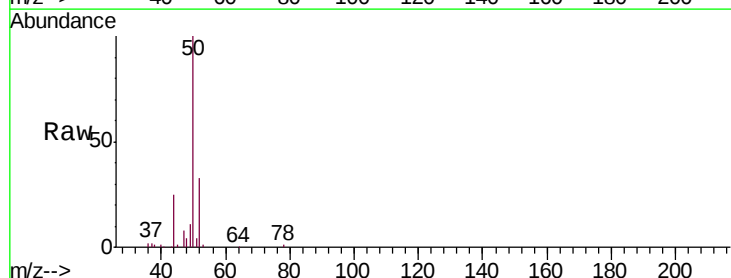
Acq: 12 Dec 2019 15:31

Tgt Ion: 50 Resp: 37871

Ion Ratio Lower Upper

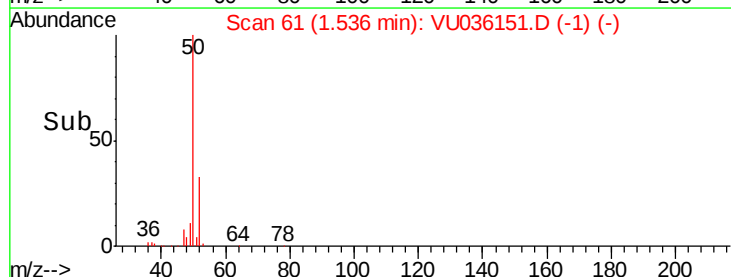
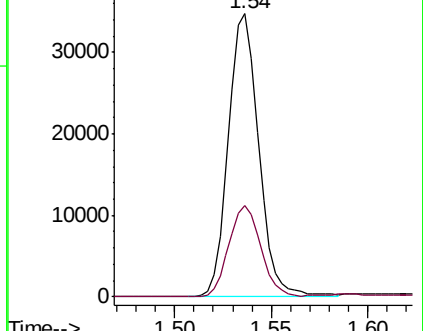
50 100

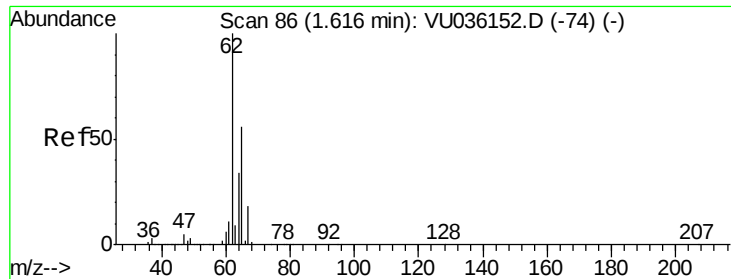
52 32.5 23.0 42.8



Abundance Ion 50.05 (49.75 to 50.75): VU036151.D (-1) (-)

Ion 52.05 (51.75 to 52.75): VU036151.D (-1) (-)





#5

Vinyl chloride

Concen: 1.189 ug/L

RT: 1.62 min Scan# 86

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Instrument :

MSVOA\_U

ClientSampleId :

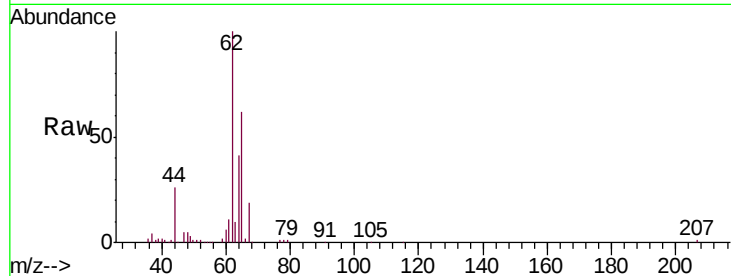
VSTD00101

Tgt Ion: 62 Resp: 36818

Ion Ratio Lower Upper

62 100

64 40.8 24.0 44.6



Abundance Ion 62.00 (61.70 to 62.70): VU036151.D (-1) (-)

Ion 64.10 (63.80 to 64.80): VU036151.D (-1) (-)

1.62

30000

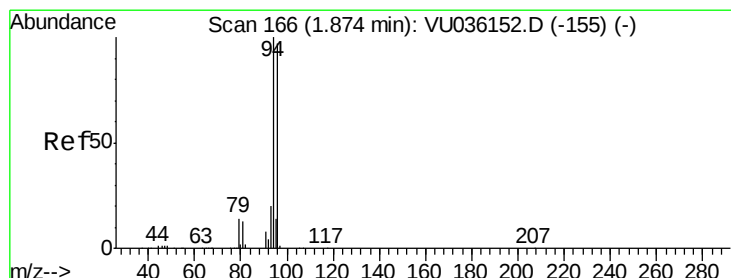
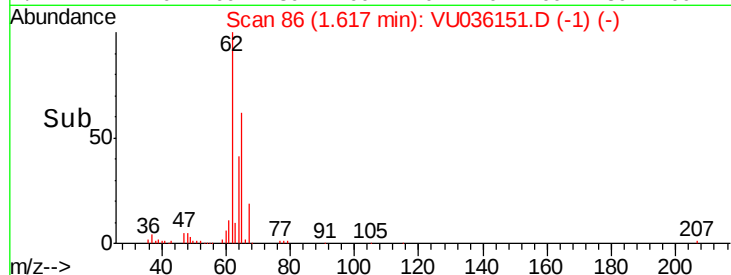
20000

10000

0

1.60 1.65

Time-->



#6

Bromomethane

Concen: 0.980 ug/L

RT: 1.87 min Scan# 166

Delta R.T. 0.00 min

Lab File: VU036151.D

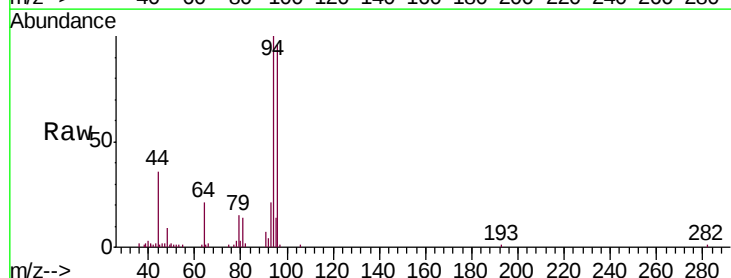
Acq: 12 Dec 2019 15:31

Tgt Ion: 94 Resp: 22765

Ion Ratio Lower Upper

94 100

96 95.9 67.7 125.7



Abundance Ion 94.00 (93.70 to 94.70): VU036151.D (-73) (-)

Ion 96.00 (95.70 to 96.70): VU036151.D (-73) (-)

1.87

20000

15000

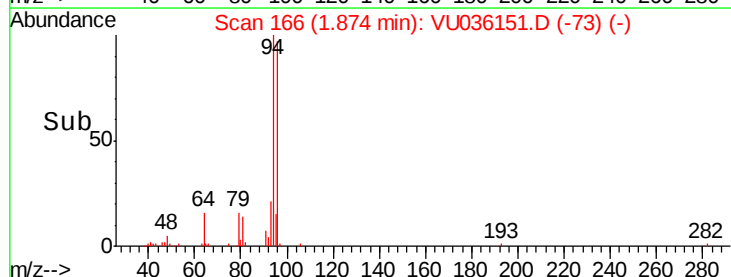
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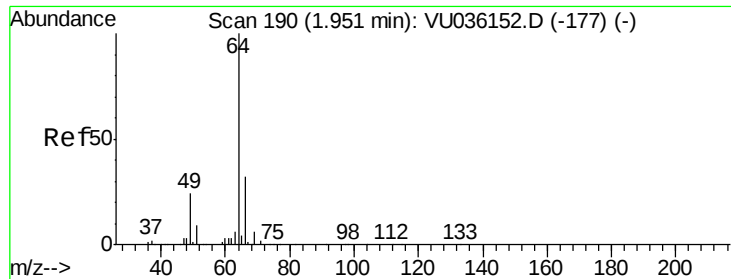
5000

0

1.80 1.85 1.90 1.95

Time-->

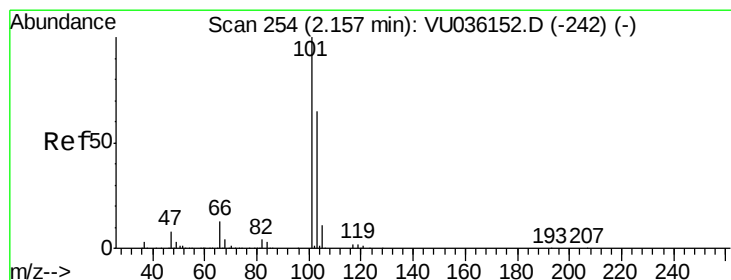
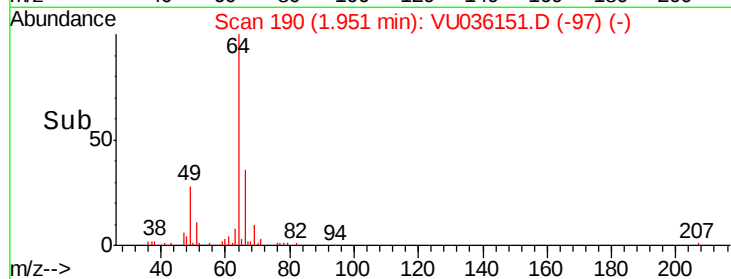
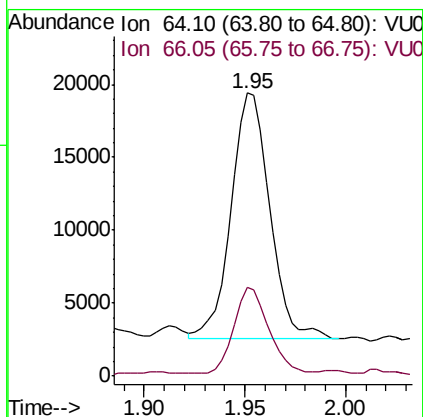
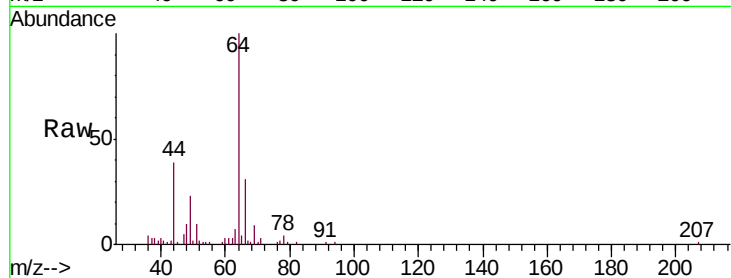




#8  
Chloroethane  
Concen: 1.013 ug/L  
RT: 1.95 min Scan# 190  
Delta R.T. 0.00 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

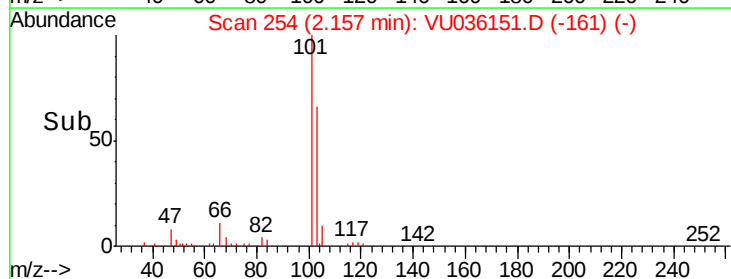
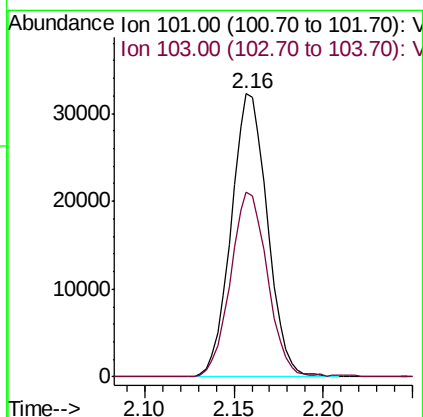
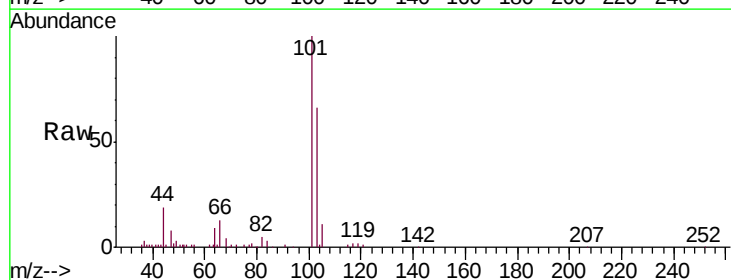
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00101

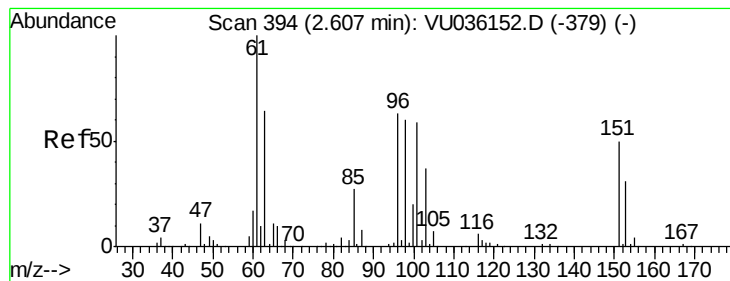
Tgt Ion: 64 Resp: 22770  
Ion Ratio Lower Upper  
64 100  
66 31.5 22.0 41.0



#9  
Trichlorofluoromethane  
Concen: 0.917 ug/L  
RT: 2.16 min Scan# 254  
Delta R.T. 0.00 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

Tgt Ion: 101 Resp: 45619  
Ion Ratio Lower Upper  
101 100  
103 66.5 52.6 78.8





#10

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

Concen: 0.822 ug/L

RT: 2.61 min Scan# 394

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00101

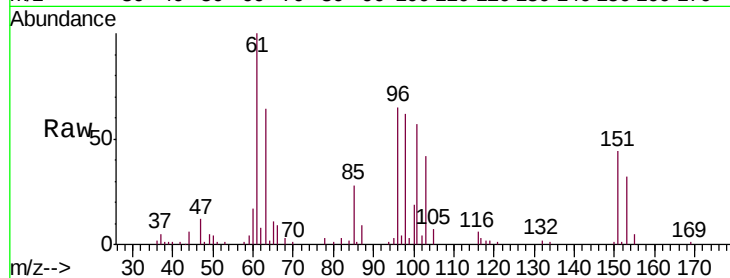
Tgt Ion: 101 Resp: 22392

Ion Ratio Lower Upper

101 100

85 48.2 34.2 51.4

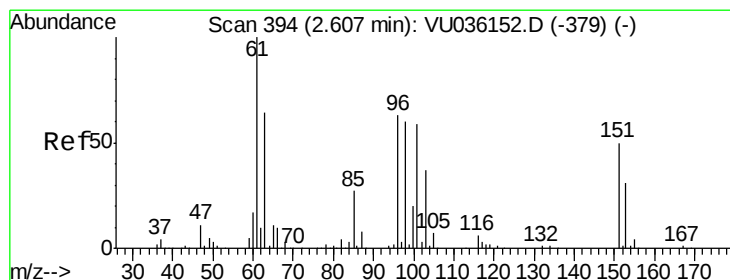
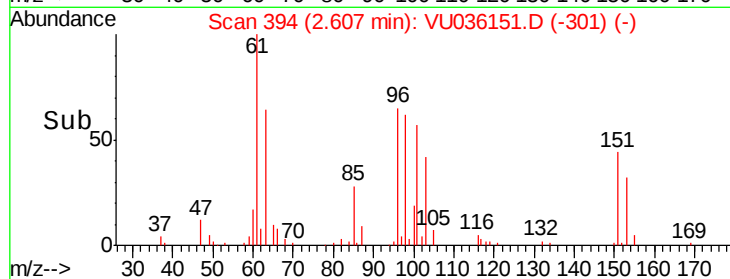
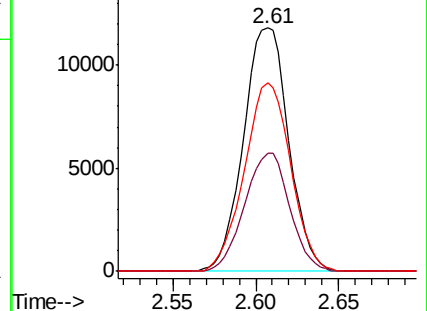
151 79.0 63.4 95.0



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VU0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 0.873 ug/L

RT: 2.61 min Scan# 394

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

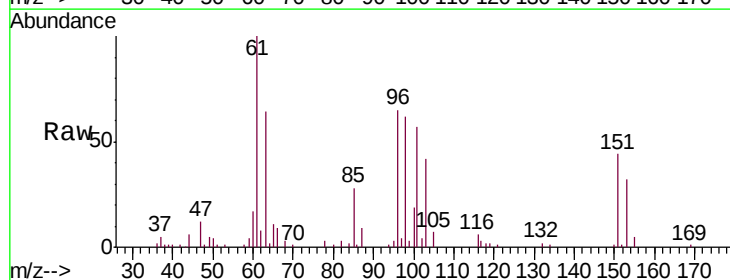
Tgt Ion: 96 Resp: 21275

Ion Ratio Lower Upper

96 100

61 154.4 110.6 205.4

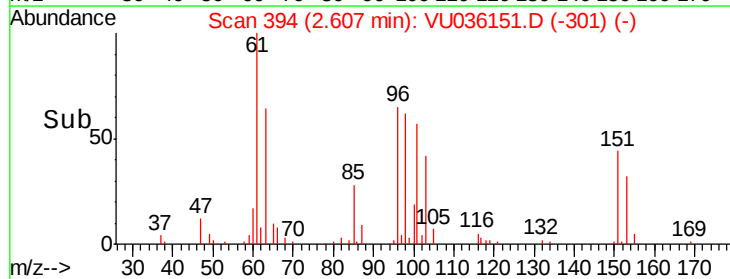
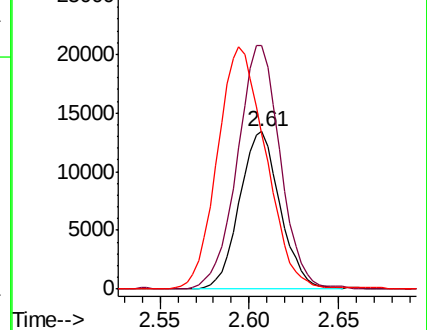
63 98.9 71.6 133.0

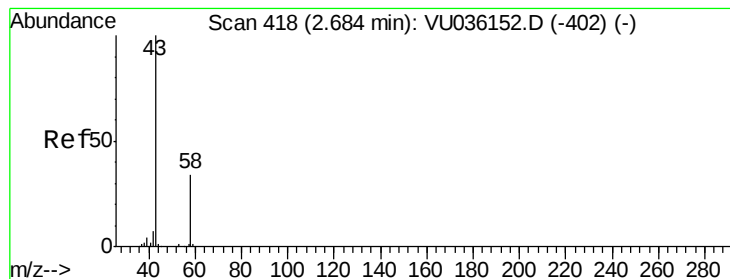


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 7.497 ug/L

RT: 2.68 min Scan# 418

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Instrument :

MSVOA\_U

ClientSampleId :

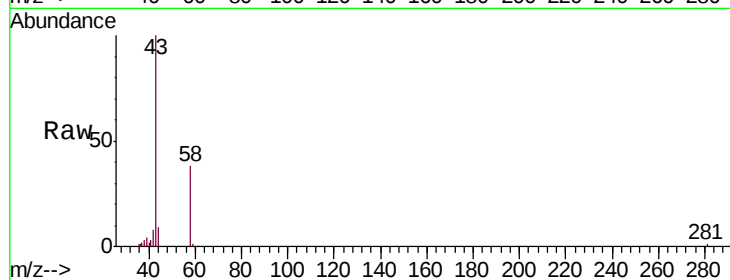
VSTD00101

Tgt Ion: 43 Resp: 40411

Ion Ratio Lower Upper

43 100

58 36.5 0.0 70.0



Abundance Ion 43.05 (42.75 to 43.75): VU036151.D (-325) (-)

Ion 58.05 (57.75 to 58.75): VU036151.D (-325) (-)

2.68

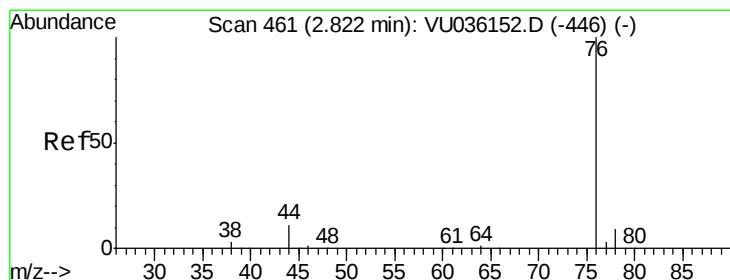
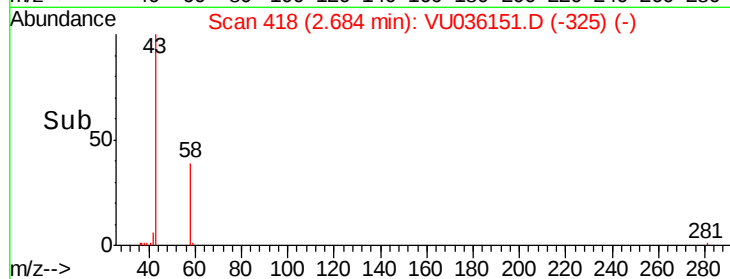
15000

10000

5000

0

Time-->



#14

Carbon disulfide

Concen: 0.963 ug/L

RT: 2.82 min Scan# 461

Delta R.T. 0.00 min

Lab File: VU036151.D

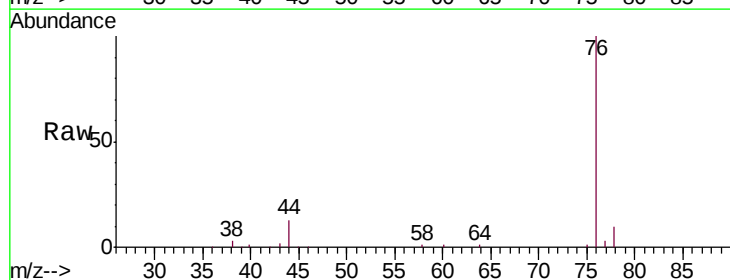
Acq: 12 Dec 2019 15:31

Tgt Ion: 76 Resp: 69294

Ion Ratio Lower Upper

76 100

78 9.5 7.2 10.8



Abundance Ion 76.05 (75.75 to 76.75): VU036151.D (-368) (-)

Ion 78.00 (77.70 to 78.70): VU036151.D (-368) (-)

2.82

40000

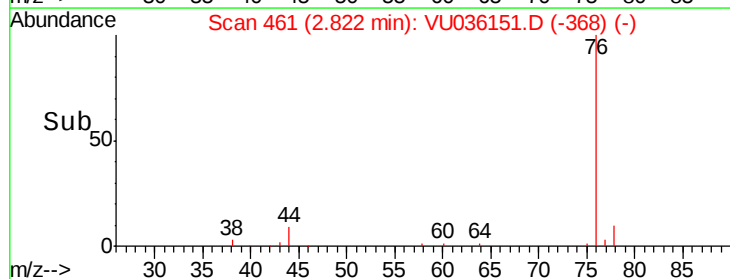
30000

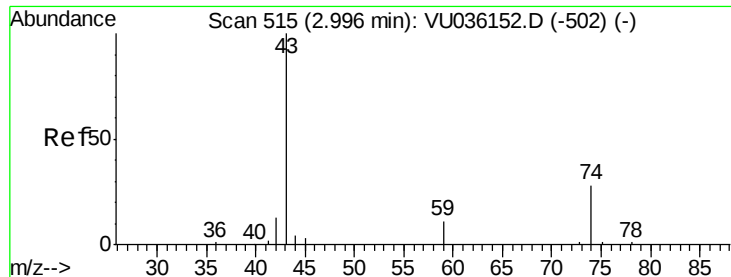
20000

10000

0

Time-->

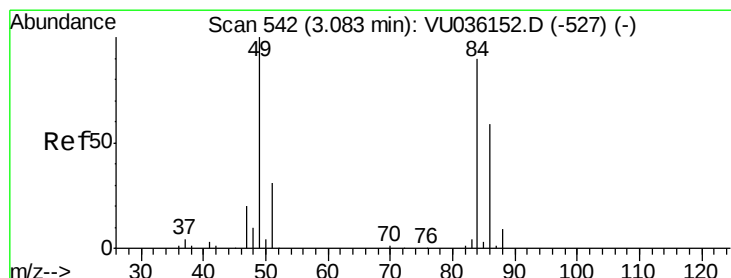
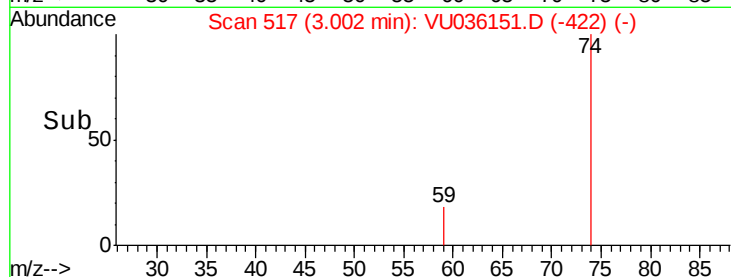
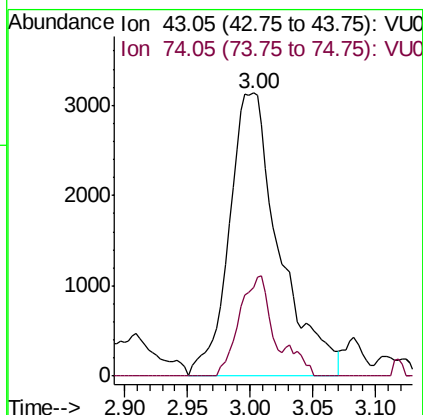
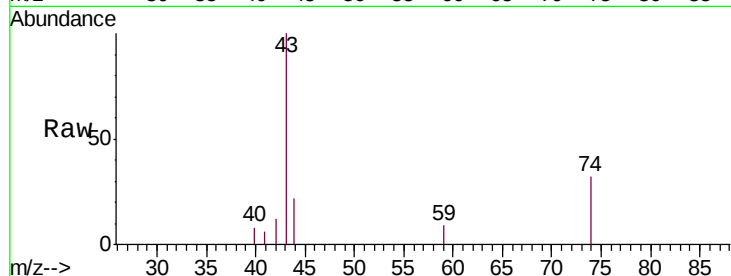




#15  
Methyl Acetate  
Concen: 1.043 ug/L  
RT: 3.00 min Scan# 517  
Delta R.T. 0.01 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

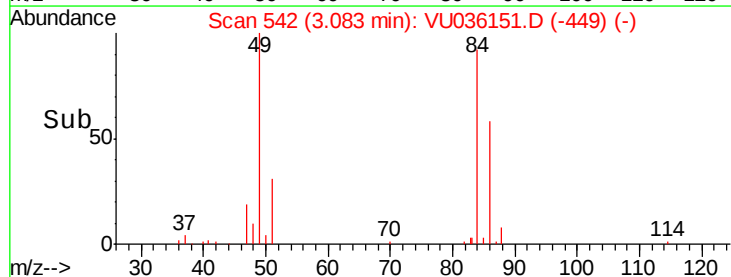
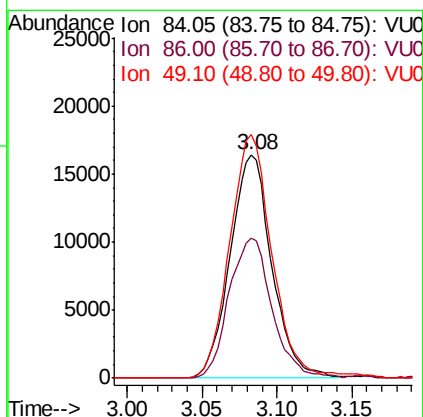
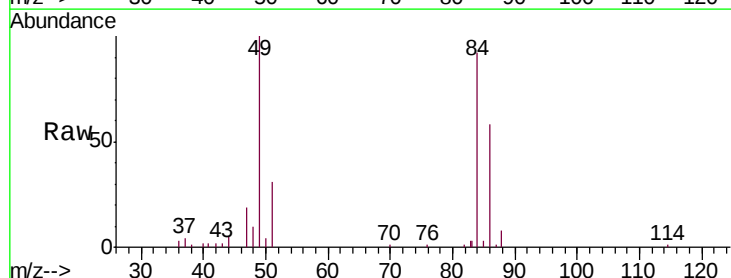
Instrument :  
MSVOA\_U  
ClientSampled :  
VSTD00101

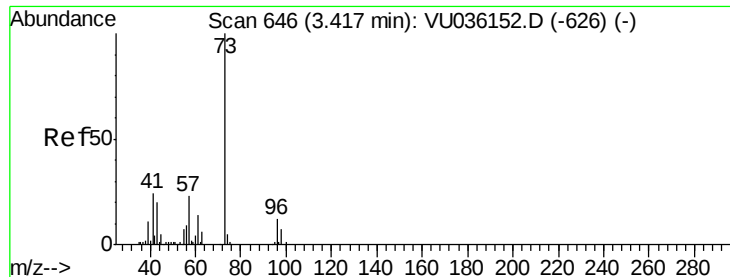
Tgt Ion: 43 Resp: 8721  
Ion Ratio Lower Upper  
43 100  
74 21.7 20.6 30.8



#16  
Methylene chloride  
Concen: 1.085 ug/L  
RT: 3.08 min Scan# 542  
Delta R.T. 0.00 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

Tgt Ion: 84 Resp: 31868  
Ion Ratio Lower Upper  
84 100  
86 62.8 46.1 85.5  
49 109.0 77.7 144.3

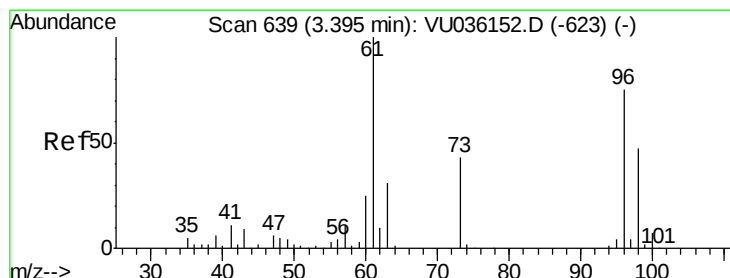
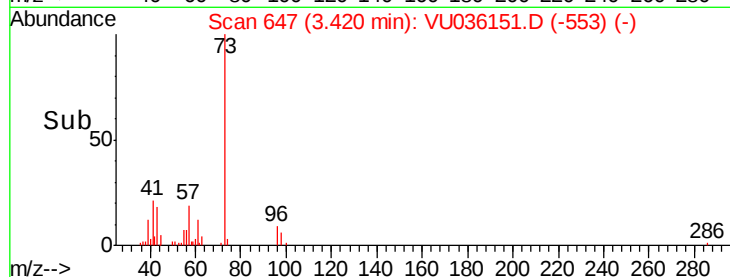
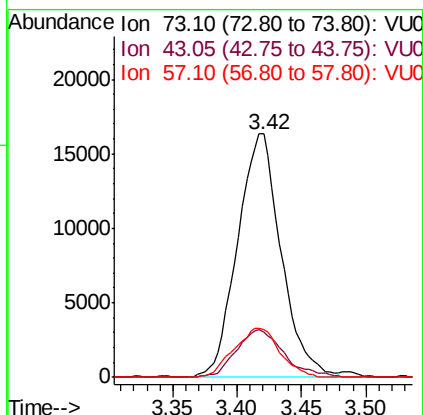
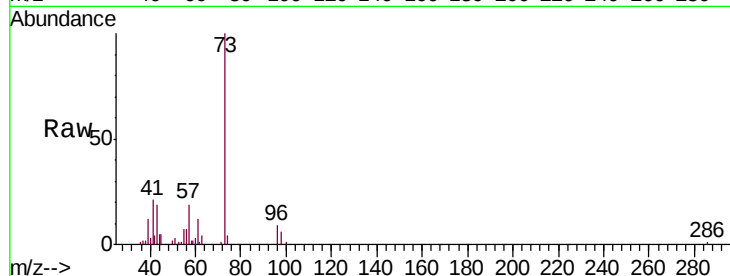




#17  
Methyl tert-butyl Ether  
Concen: 0.877 ug/L  
RT: 3.42 min Scan# 647  
Delta R.T. 0.00 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

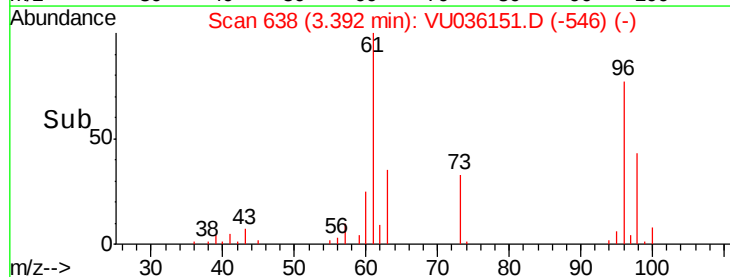
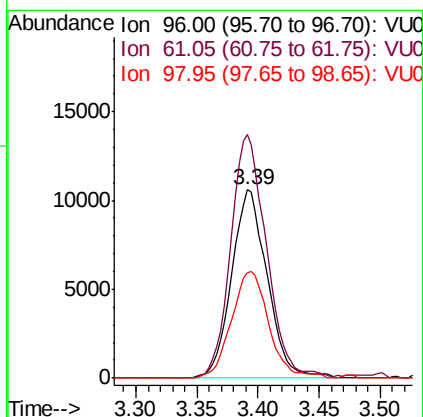
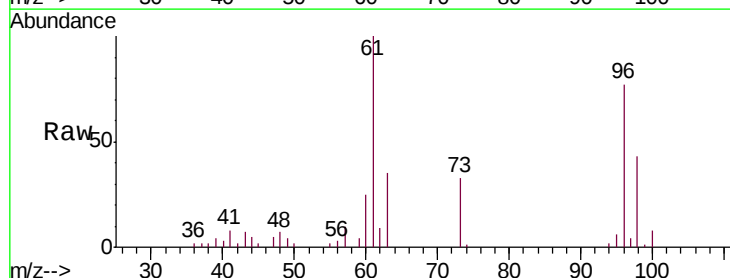
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00101

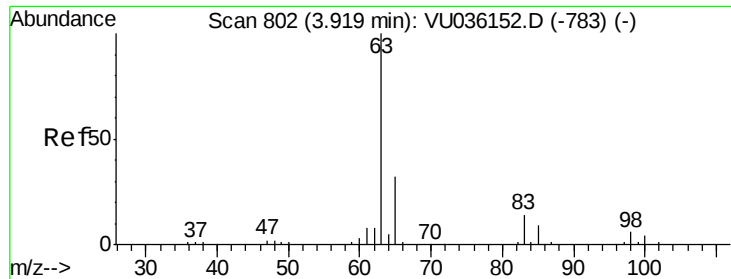
Tgt Ion: 73 Resp: 38371  
Ion Ratio Lower Upper  
73 100  
43 21.4 15.3 22.9  
57 21.2 18.3 27.5



#18  
trans-1,2-Dichloroethene  
Concen: 0.994 ug/L  
RT: 3.39 min Scan# 638  
Delta R.T. -0.00 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

Tgt Ion: 96 Resp: 21532  
Ion Ratio Lower Upper  
96 100  
61 129.3 93.2 173.2  
98 56.0 43.5 80.9

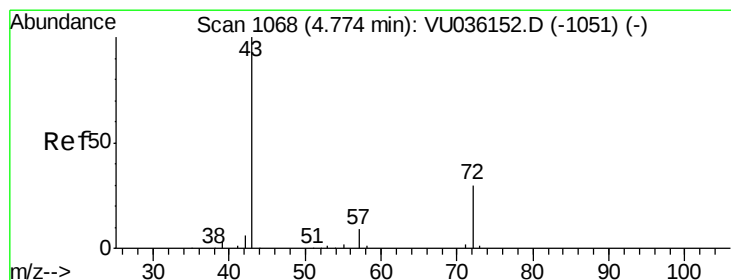
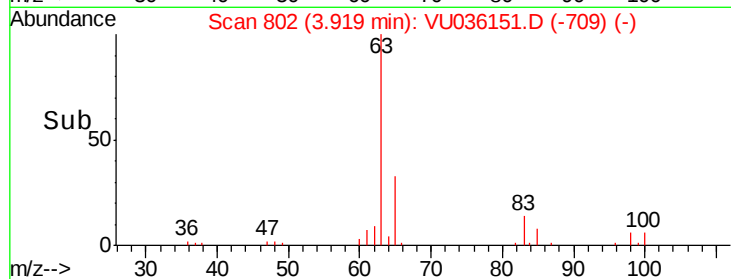
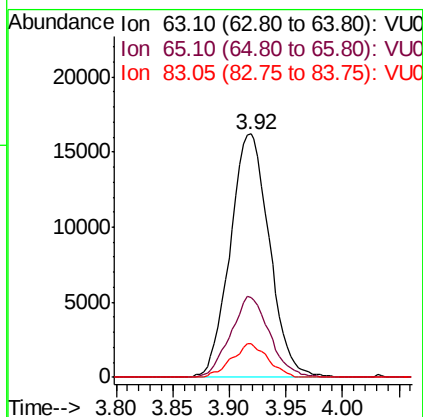
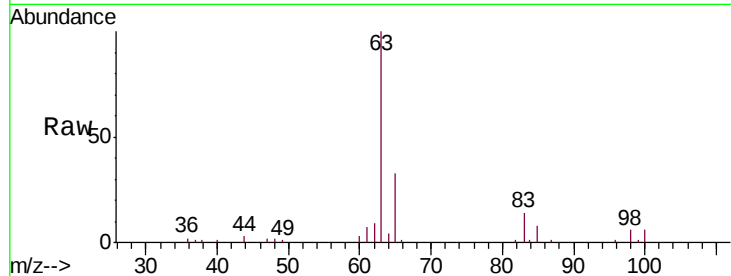




#19  
 1,1-Dichloroethane  
 Concen: 1.002 ug/L  
 RT: 3.92 min Scan# 802  
 Delta R.T. 0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

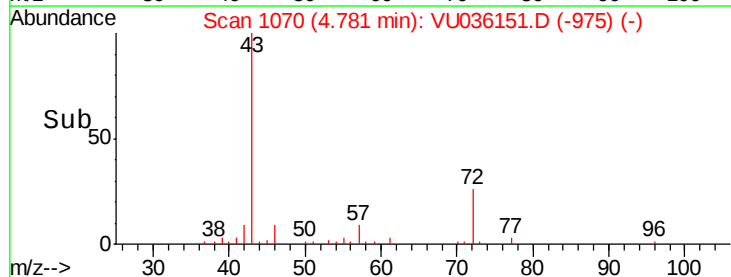
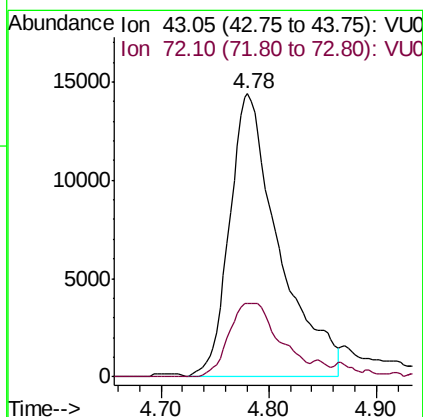
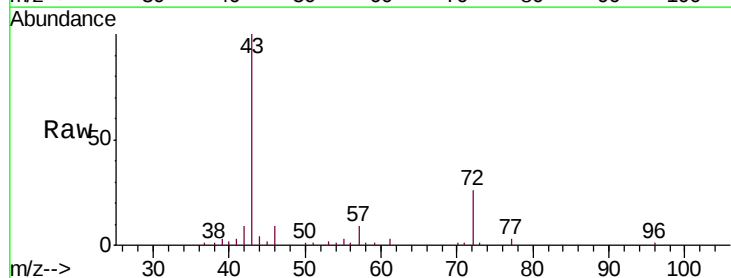
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00101

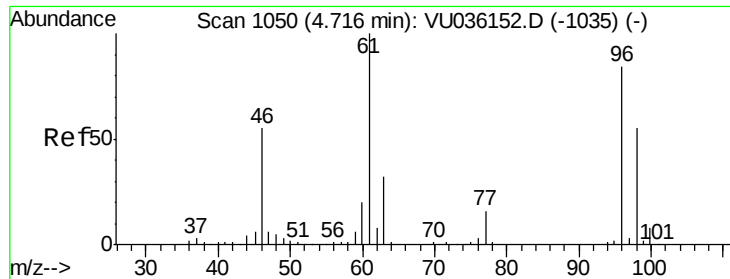
Tgt Ion: 63 Resp: 39184  
 Ion Ratio Lower Upper  
 63 100  
 65 32.9 22.2 41.2  
 83 14.0 9.8 18.2



#21  
 2-Butanone  
 Concen: 8.123 ug/L  
 RT: 4.78 min Scan# 1070  
 Delta R.T. 0.01 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

Tgt Ion: 43 Resp: 45876  
 Ion Ratio Lower Upper  
 43 100  
 72 26.6 14.4 43.2





#22

cis-1,2-Dichloroethene

Concen: 0.891 ug/L

RT: 4.72 min Scan# 1051

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00101

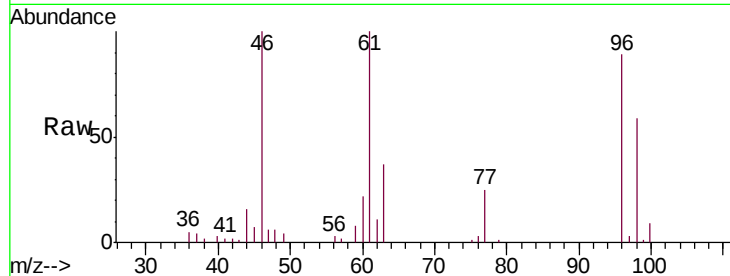
Tgt Ion: 96 Resp: 20128

Ion Ratio Lower Upper

96 100

61 111.9 83.8 155.6

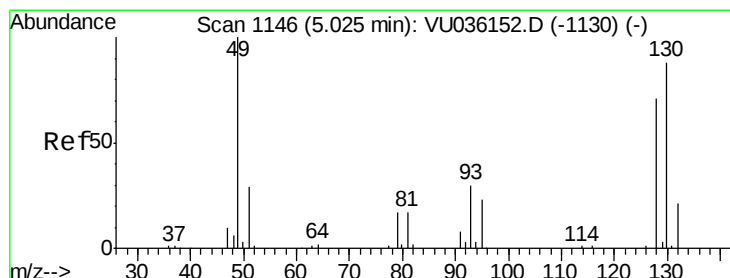
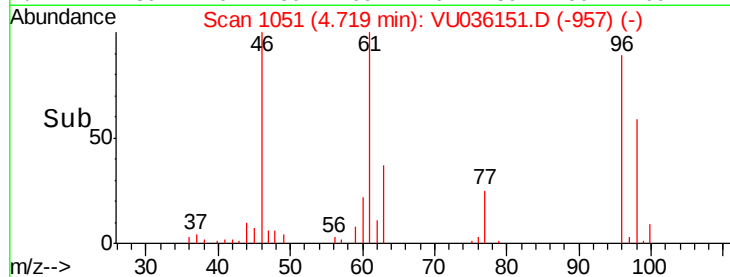
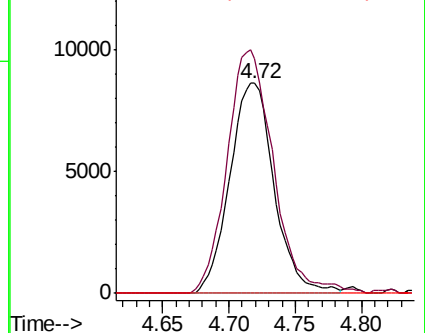
68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU036151.D (-957) (-)

Ion 61.05 (60.75 to 61.75): VU036151.D (-957) (-)

Ion 68.15 (67.85 to 68.85): VU036151.D (-957) (-)



#23

Bromochloromethane

Concen: 0.908 ug/L

RT: 5.02 min Scan# 1145

Delta R.T. -0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Tgt Ion: 128 Resp: 10572

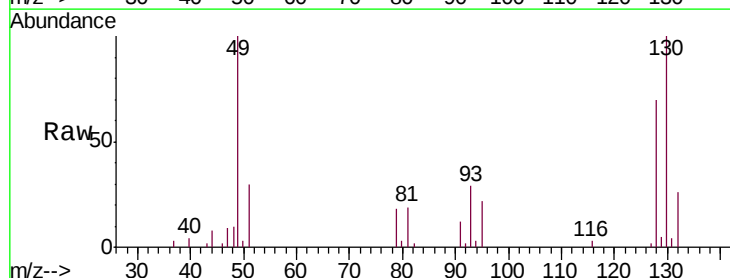
Ion Ratio Lower Upper

128 100

49 143.1 98.3 182.7

130 142.8 86.0 159.6

51 42.5 33.0 49.4

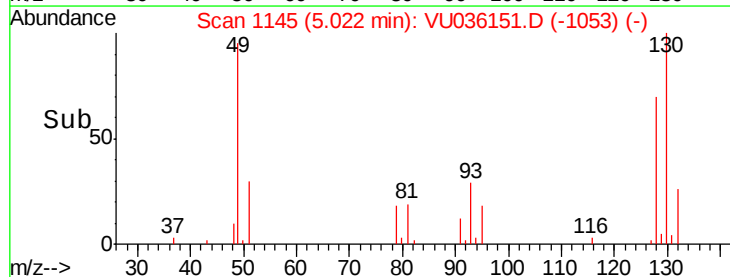
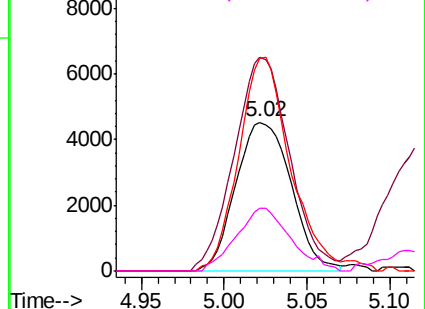


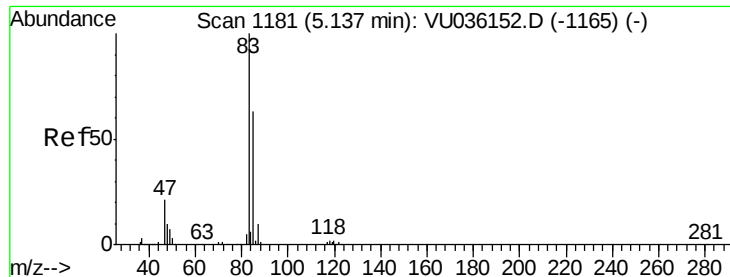
Abundance Ion 127.90 (127.60 to 128.60): VU036151.D (-1053) (-)

Ion 49.10 (48.80 to 49.80): VU036151.D (-1053) (-)

Ion 129.95 (129.65 to 130.65): VU036151.D (-1053) (-)

Ion 51.05 (50.75 to 51.75): VU036151.D (-1053) (-)

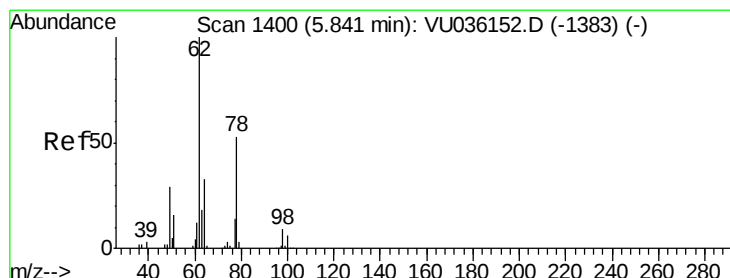
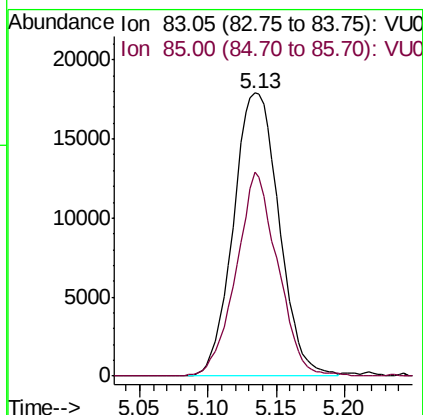
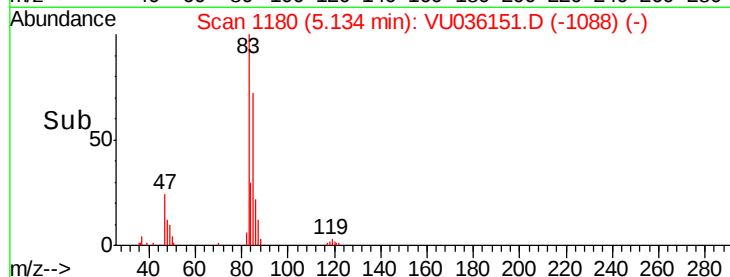
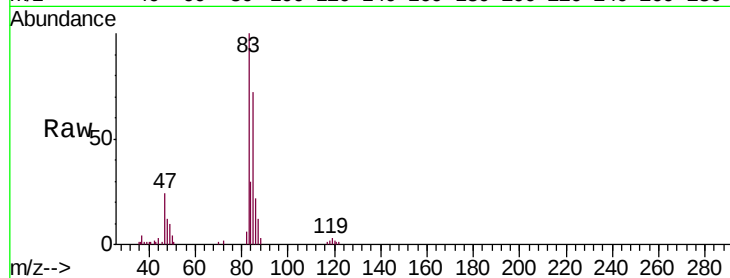




#25  
Chloroform  
Concen: 0.966 ug/L  
RT: 5.13 min Scan# 1180  
Delta R.T. -0.00 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

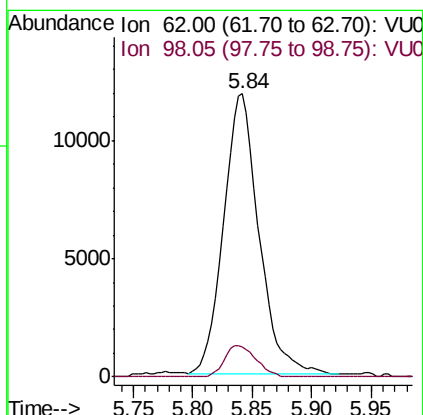
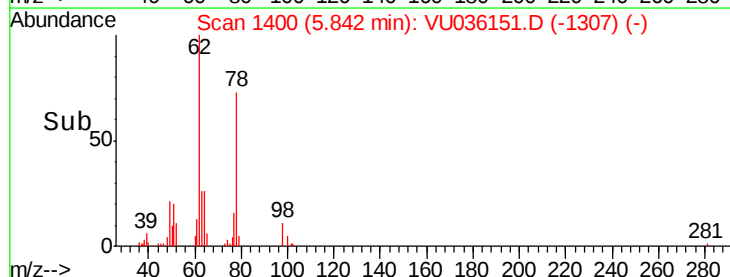
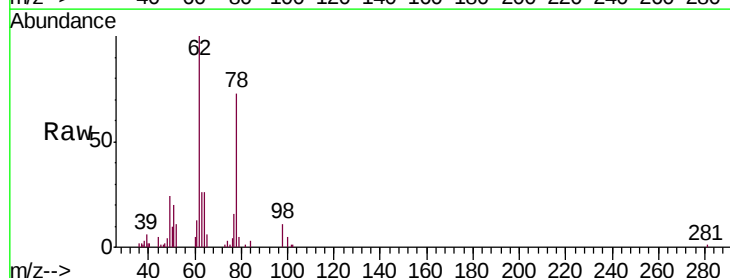
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00101

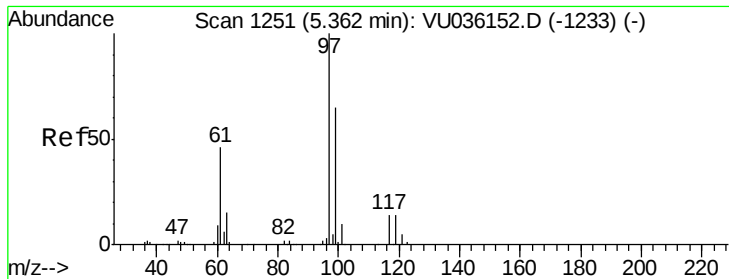
Tgt Ion: 83 Resp: 41601  
Ion Ratio Lower Upper  
83 100  
85 72.2 44.2 82.0



#27  
1,2-Dichloroethane  
Concen: 0.961 ug/L  
RT: 5.84 min Scan# 1400  
Delta R.T. 0.00 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

Tgt Ion: 62 Resp: 24517  
Ion Ratio Lower Upper  
62 100  
98 10.7 7.3 10.9

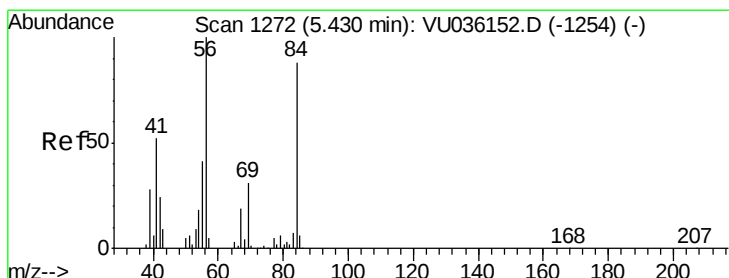
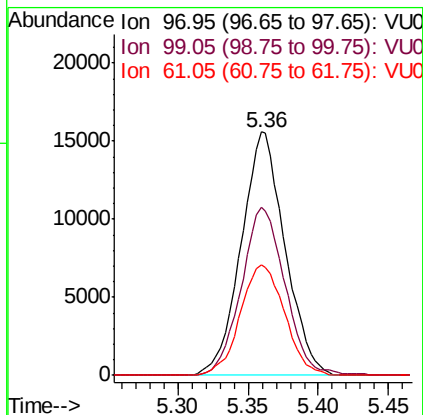
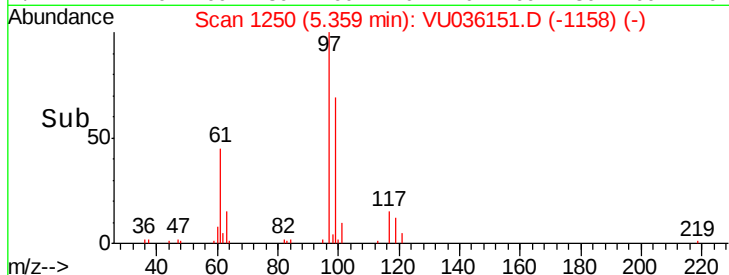
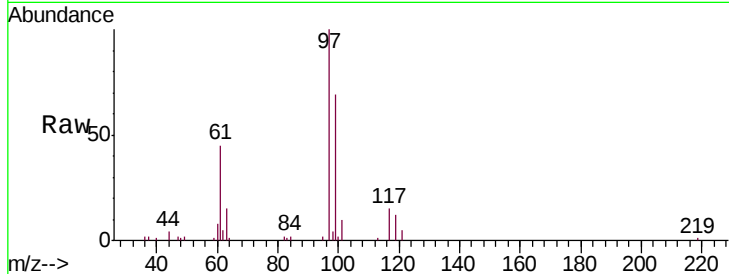




#29  
 1,1,1-Trichloroethane  
 Concen: 0.930 ug/L  
 RT: 5.36 min Scan# 1250  
 Delta R.T. -0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

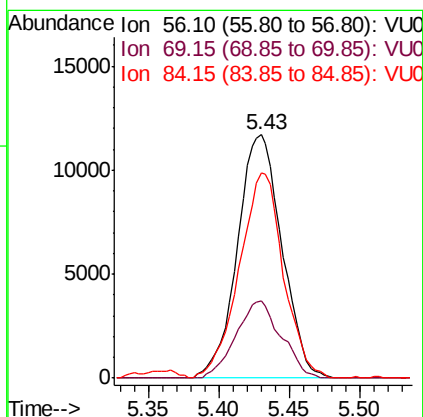
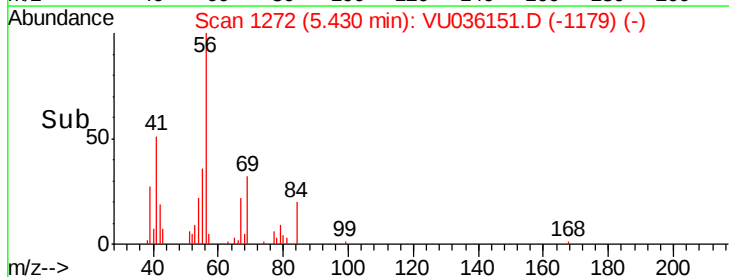
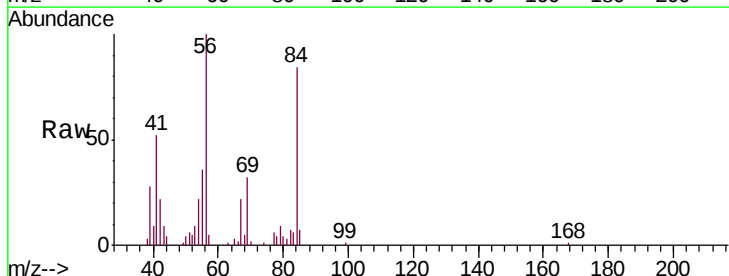
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00101

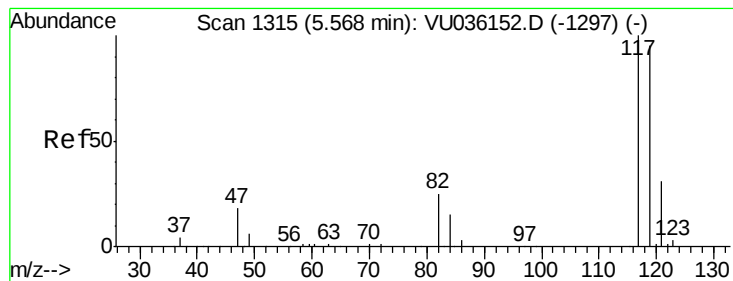
Tgt Ion: 97 Resp: 33761  
 Ion Ratio Lower Upper  
 97 100  
 99 69.0 52.6 79.0  
 61 45.9 35.4 53.2



#30  
 Cyclohexane  
 Concen: 0.890 ug/L  
 RT: 5.43 min Scan# 1272  
 Delta R.T. 0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

Tgt Ion: 56 Resp: 25823  
 Ion Ratio Lower Upper  
 56 100  
 69 32.1 24.7 37.1  
 84 83.6 71.4 107.2





#31

Carbon tetrachloride

Concen: 0.942 ug/L

RT: 5.57 min Scan# 1314

Delta R.T. -0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Instrument :

MSVOA\_U

ClientSampleId :

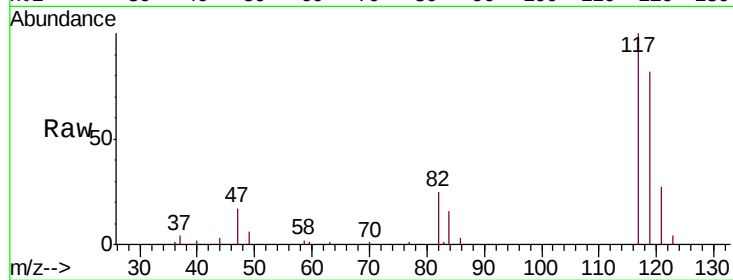
VSTD00101

Tgt Ion:117 Resp: 30950

Ion Ratio Lower Upper

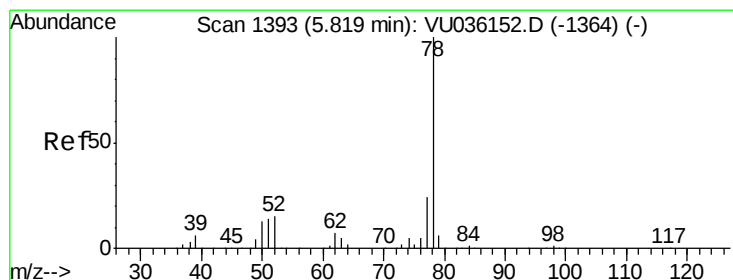
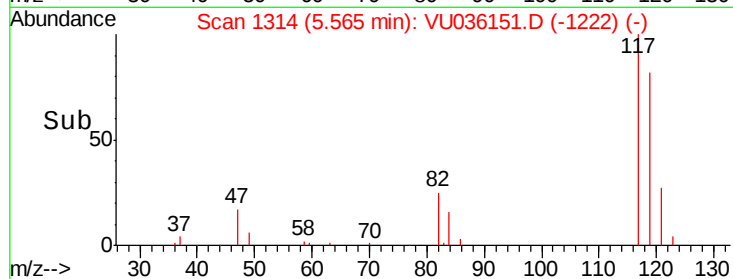
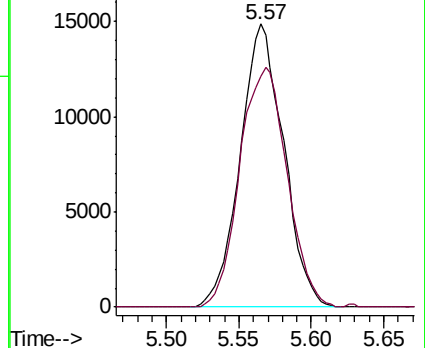
117 100

119 92.3 76.6 114.8



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 0.903 ug/L

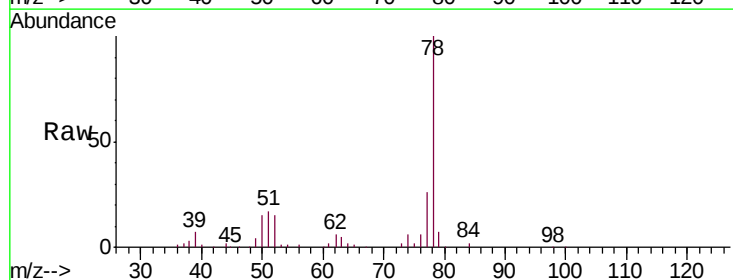
RT: 5.82 min Scan# 1392

Delta R.T. -0.00 min

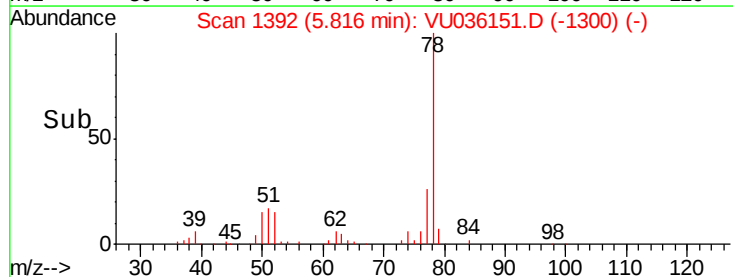
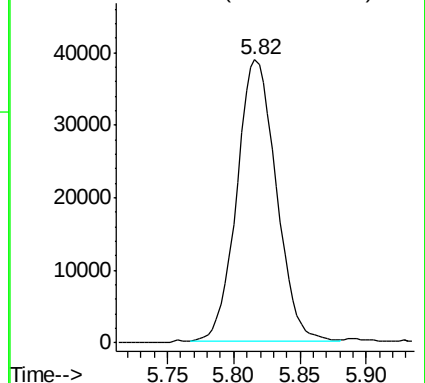
Lab File: VU036151.D

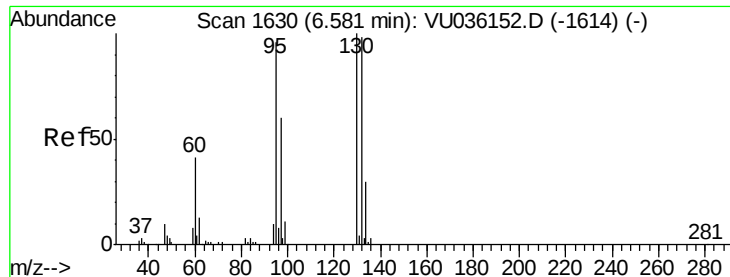
Acq: 12 Dec 2019 15:31

Tgt Ion: 78 Resp: 80396



Abundance Ion 78.10 (77.80 to 78.80): VU0





#34

Trichloroethene

Concen: 0.928 ug/L

RT: 6.58 min Scan# 1629

Delta R.T. -0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00101

Tgt Ion: 95 Resp: 21794

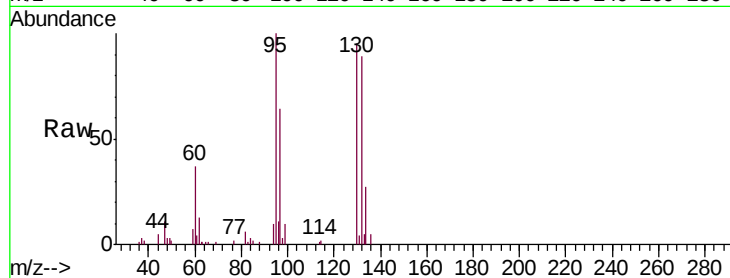
Ion Ratio Lower Upper

95 100

97 64.4 43.7 81.1

132 89.4 71.7 133.3

130 95.4 73.1 135.7

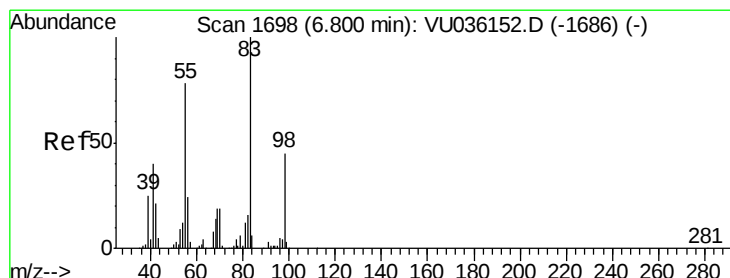
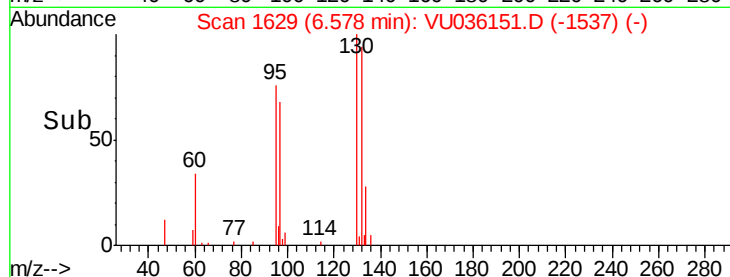
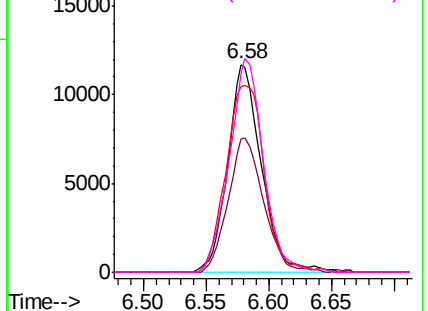


Abundance Ion 95.00 (94.70 to 95.70): VU0

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: 0.837 ug/L

RT: 6.80 min Scan# 1697

Delta R.T. -0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

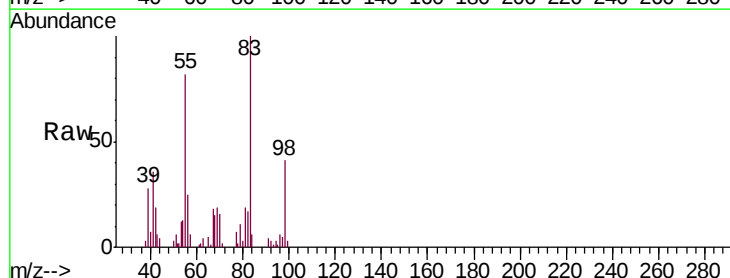
Tgt Ion: 83 Resp: 26680

Ion Ratio Lower Upper

83 100

55 84.2 61.9 92.9

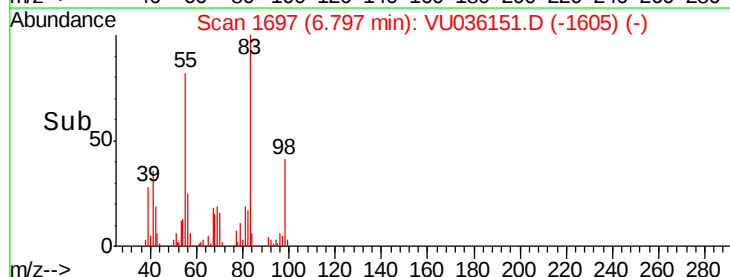
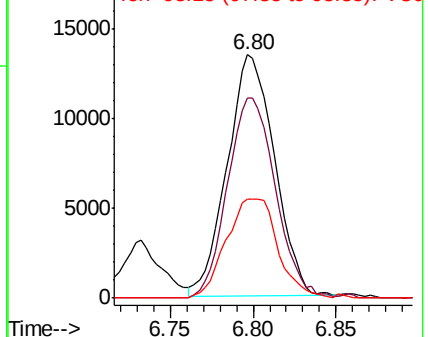
98 44.6 35.8 53.6

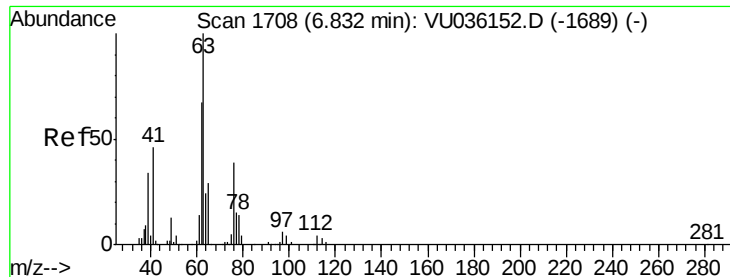


Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0





#37

1,2-Dichloropropane

Concen: 0.952 ug/L

RT: 6.83 min Scan# 1708

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Instrument :

MSVOA\_U

ClientSampleId :

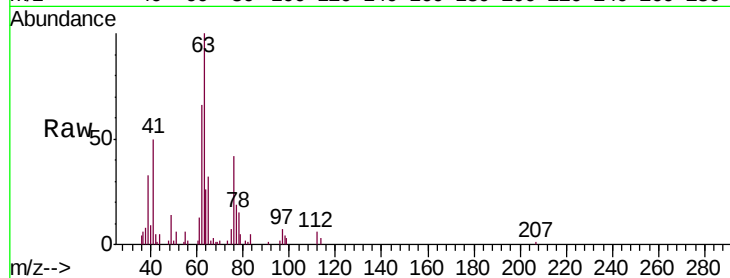
VSTD00101

Tgt Ion: 63 Resp: 21367

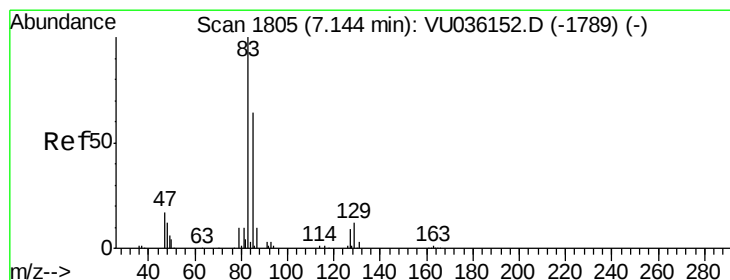
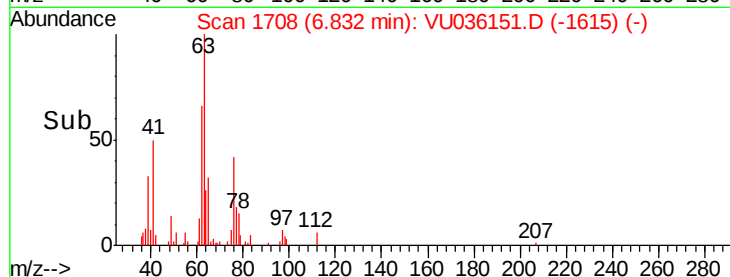
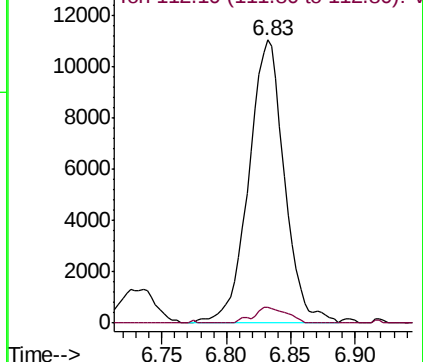
Ion Ratio Lower Upper

63 100

112 5.2 3.6 5.4



Abundance Ion 63.10 (62.80 to 63.80): VU036151.D (-1615) (-)



#38

Bromodichloromethane

Concen: 0.981 ug/L

RT: 7.14 min Scan# 1805

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

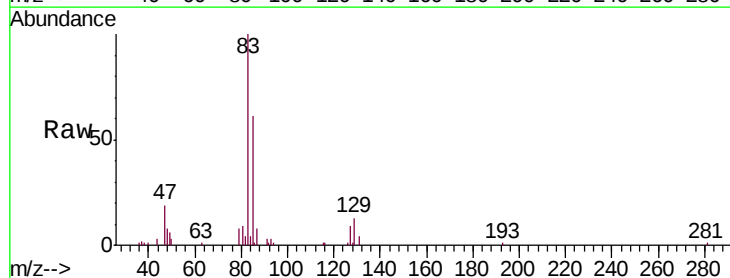
Tgt Ion: 83 Resp: 29282

Ion Ratio Lower Upper

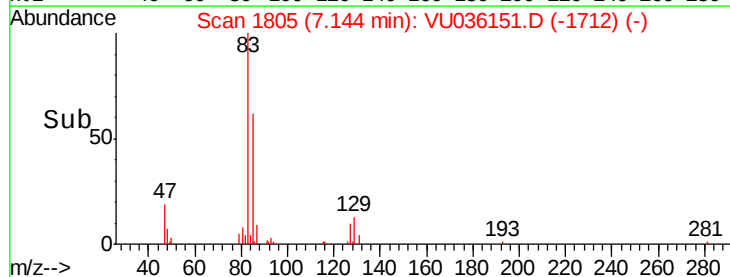
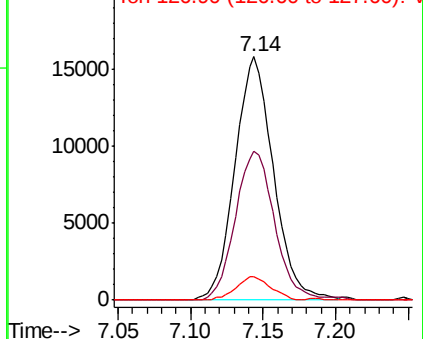
83 100

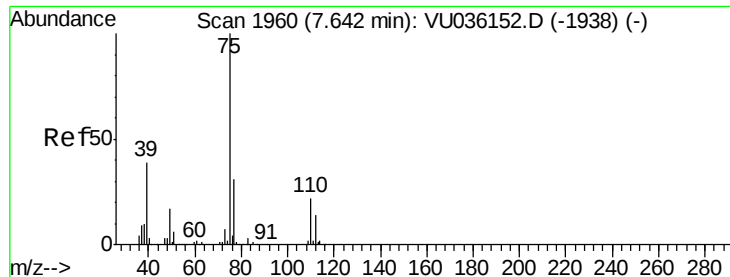
85 61.0 44.7 83.1

127 9.5 7.4 11.0



Abundance Ion 82.95 (82.65 to 83.65): VU036151.D (-1712) (-)



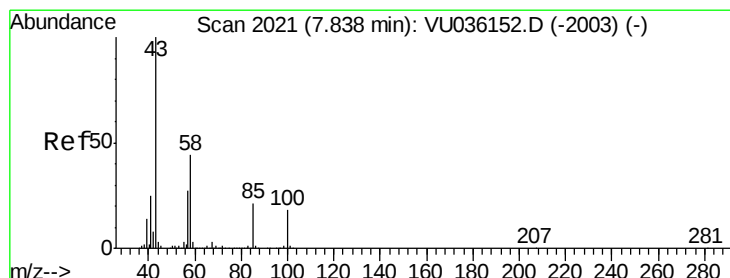
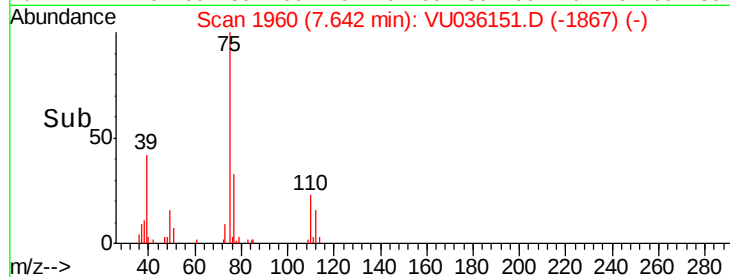
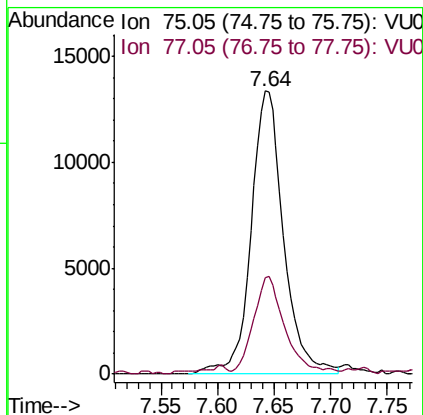
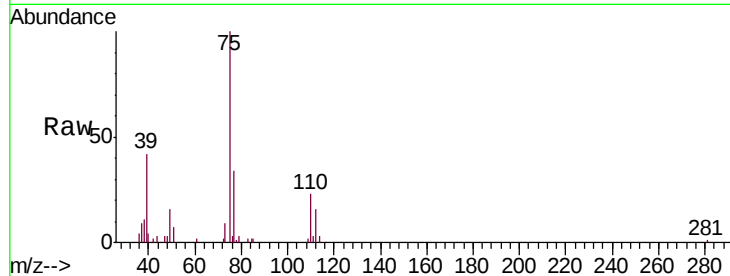


#39

cis-1,3-Dichloropropene  
 Concen: 0.881 ug/L  
 RT: 7.64 min Scan# 1960  
 Delta R.T. 0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

Instrument :  
 MSVOA\_U  
 ClientSampled :  
 VSTD00101

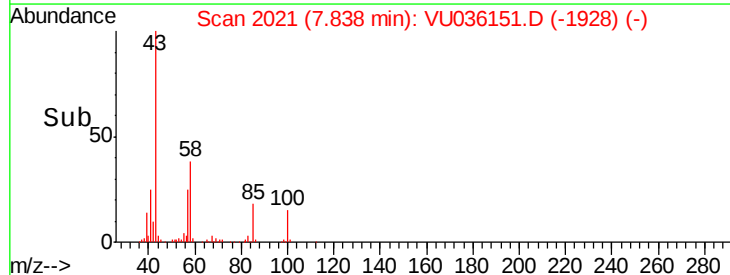
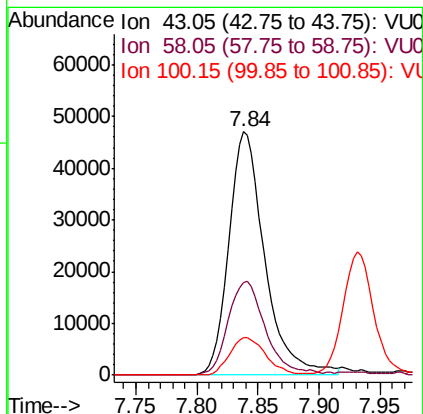
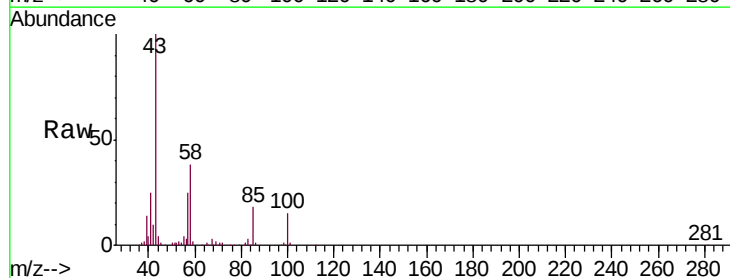
Tgt Ion: 75 Resp: 26719  
 Ion Ratio Lower Upper  
 75 100  
 77 34.0 22.3 41.5

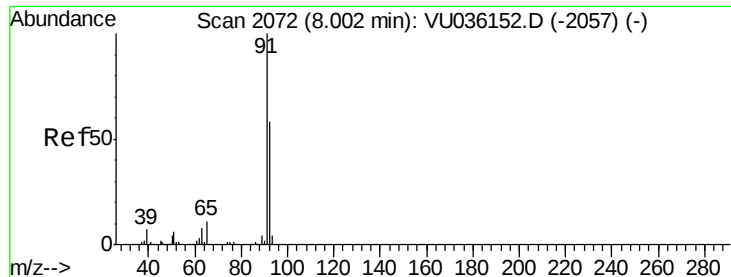


#40

4-Methyl-2-pentanone  
 Concen: 8.239 ug/L  
 RT: 7.84 min Scan# 2021  
 Delta R.T. 0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

Tgt Ion: 43 Resp: 96603  
 Ion Ratio Lower Upper  
 43 100  
 58 40.2 34.4 51.6  
 100 15.4 13.4 20.2





#42

Toluene

Concen: 0.848 ug/L

RT: 8.00 min Scan# 2072

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Instrument :

MSVOA\_U

ClientSampleId :

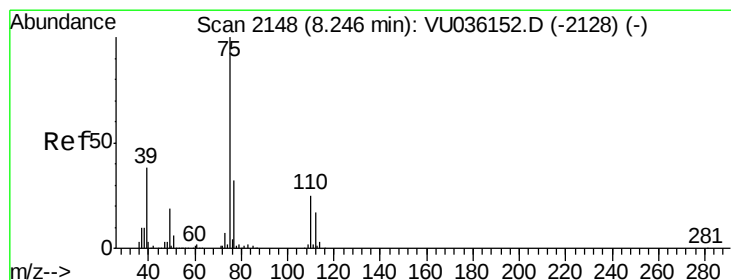
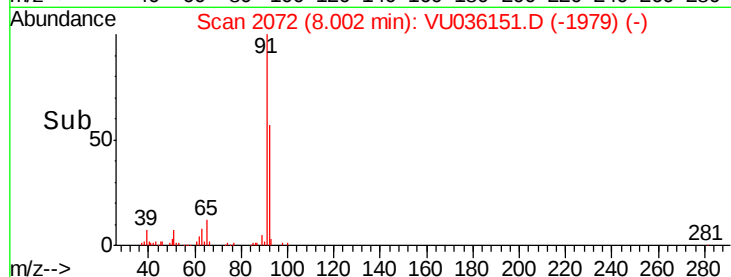
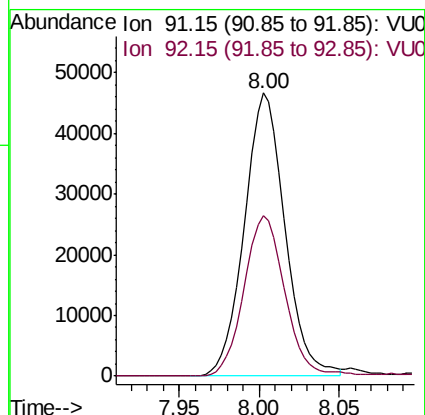
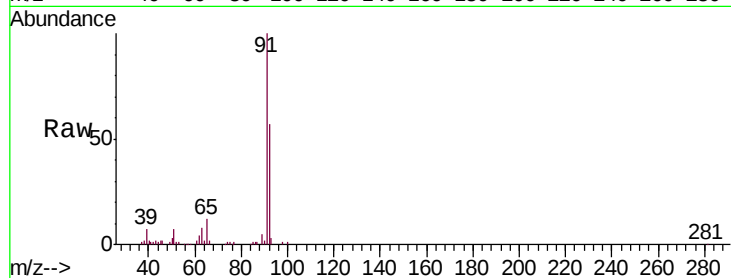
VSTD00101

Tgt Ion: 91 Resp: 80870

Ion Ratio Lower Upper

91 100

92 56.7 40.7 75.7



#44

trans-1,3-Dichloropropene

Concen: 0.840 ug/L

RT: 8.24 min Scan# 2147

Delta R.T. -0.00 min

Lab File: VU036151.D

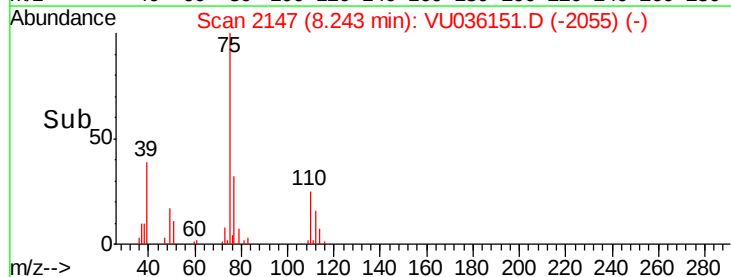
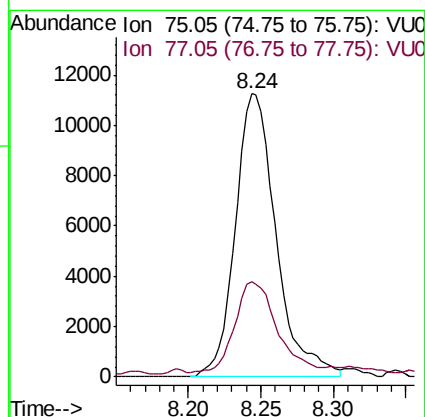
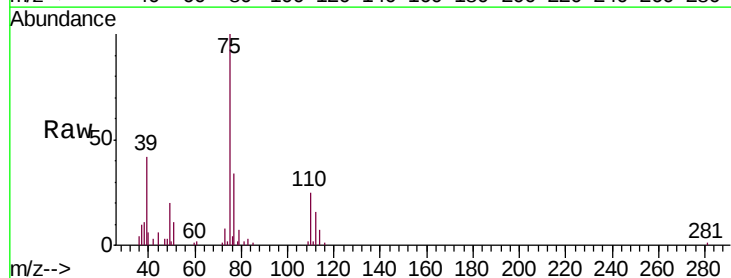
Acq: 12 Dec 2019 15:31

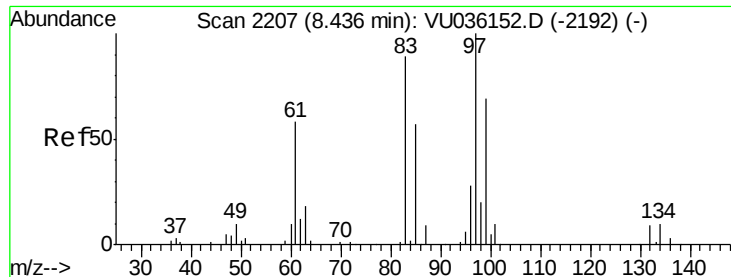
Tgt Ion: 75 Resp: 22019

Ion Ratio Lower Upper

75 100

77 33.8 22.6 42.0

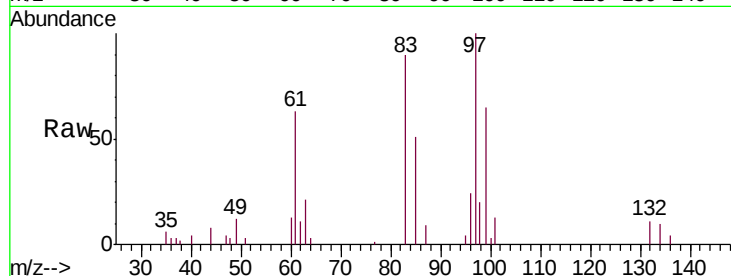




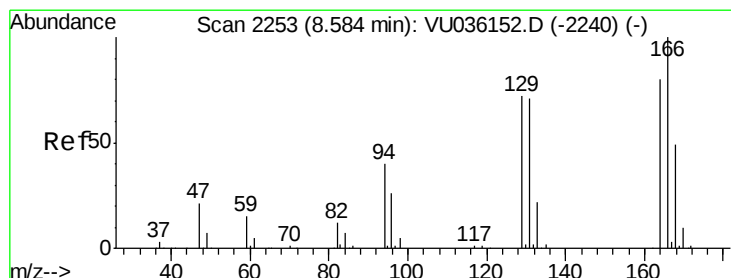
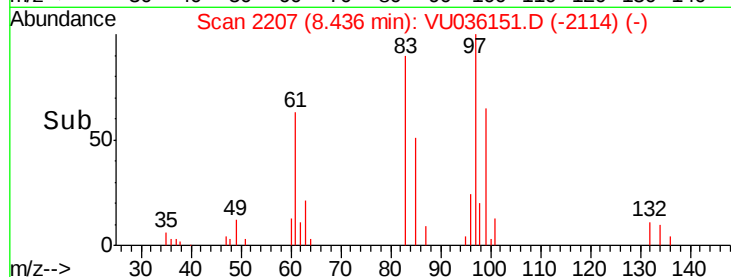
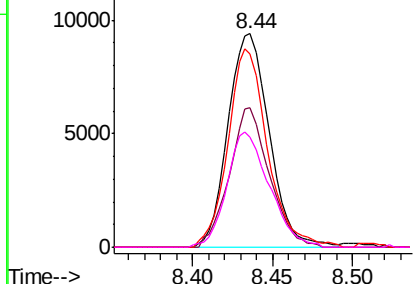
#45  
 1,1,2-Trichloroethane  
 Concen: 0.948 ug/L  
 RT: 8.44 min Scan# 2207  
 Delta R.T. 0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00101

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 16577 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 65.2  | 48.4  | 90.0  |
| 83       | 90.4  | 62.2  | 115.4 |
| 85       | 51.3  | 40.1  | 74.5  |

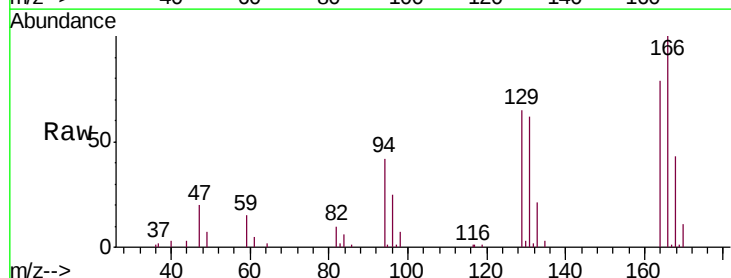


Abundance Ion 96.95 (96.65 to 97.65): VU0  
 Ion 99.05 (98.75 to 99.75): VU0  
 Ion 82.95 (82.65 to 83.65): VU0  
 Ion 85.00 (84.70 to 85.70): VU0

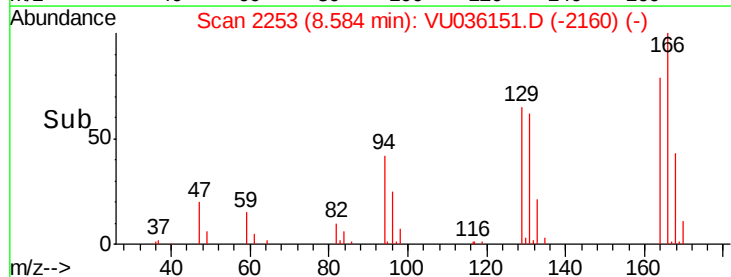
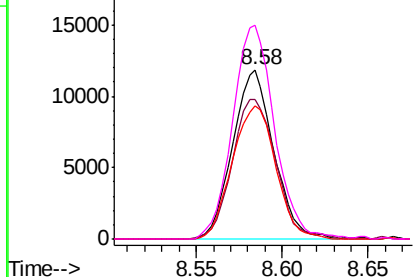


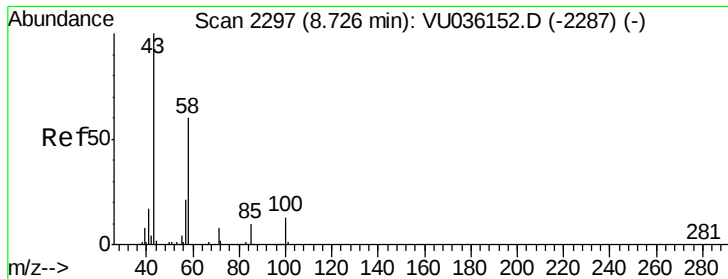
#47  
 Tetrachloroethene  
 Concen: 0.896 ug/L  
 RT: 8.58 min Scan# 2253  
 Delta R.T. 0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 19727 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 82.3  | 63.1  | 117.3 |
| 131      | 78.7  | 61.4  | 114.0 |
| 166      | 126.1 | 87.1  | 161.7 |



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

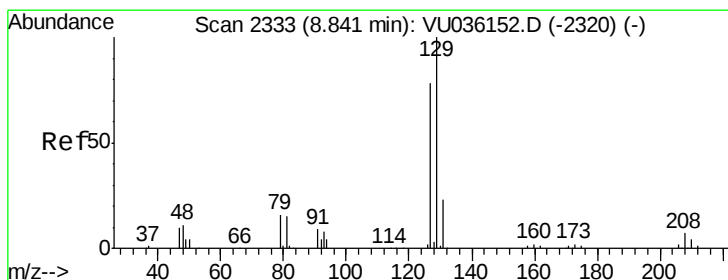
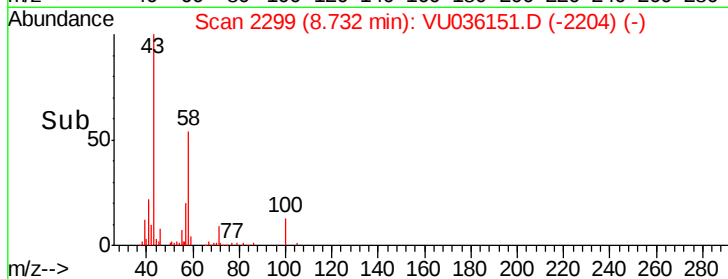
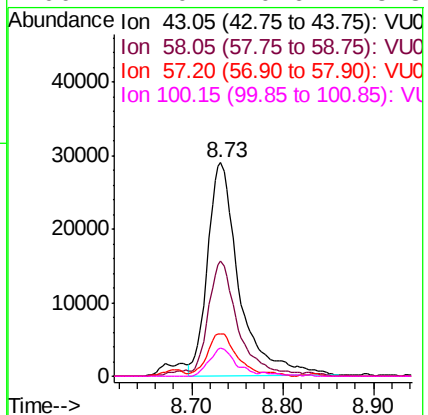
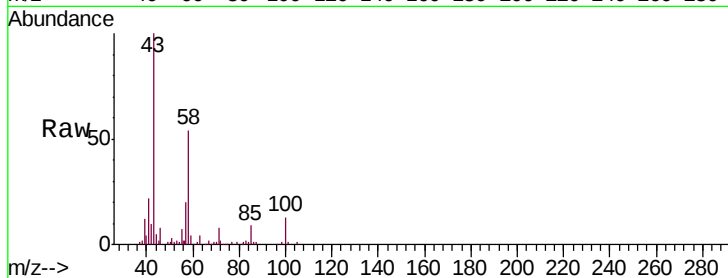




#48  
2-Hexanone  
Concen: 8.505 ug/L  
RT: 8.73 min Scan# 2299  
Delta R.T. 0.01 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

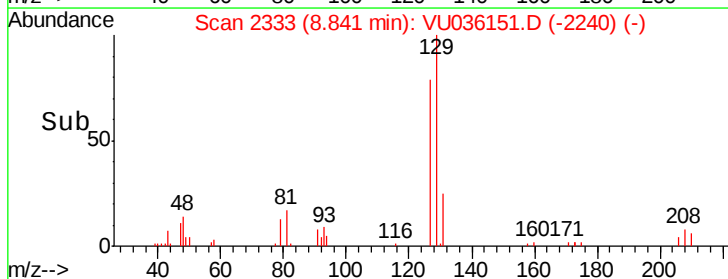
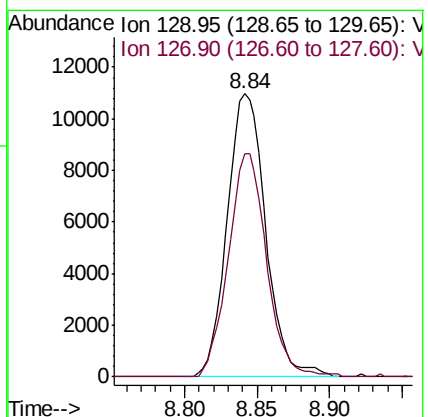
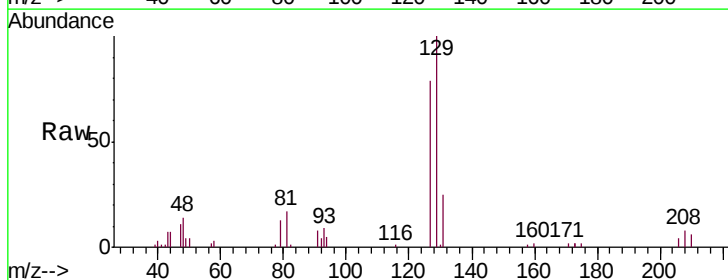
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00101

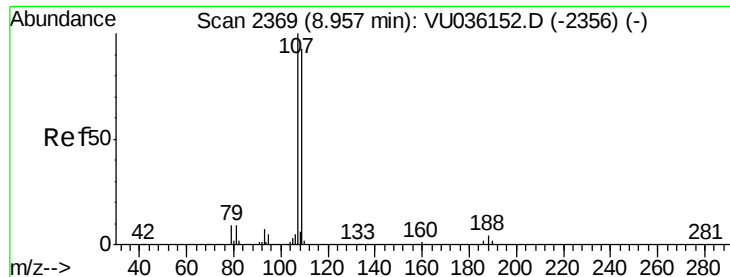
Tgt Ion: 43 Resp: 69679  
Ion Ratio Lower Upper  
43 100  
58 48.3 48.6 72.8#  
57 16.8 16.7 25.1  
100 11.0 10.6 15.8



#49  
Dibromochloromethane  
Concen: 0.904 ug/L  
RT: 8.84 min Scan# 2333  
Delta R.T. 0.00 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

Tgt Ion: 129 Resp: 20206  
Ion Ratio Lower Upper  
129 100  
127 78.8 54.7 101.5

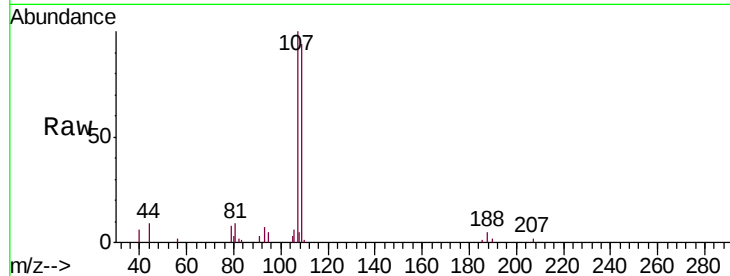




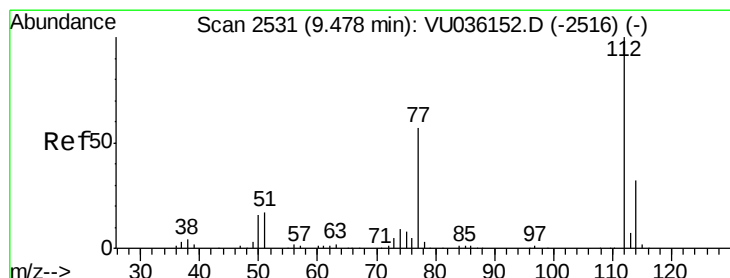
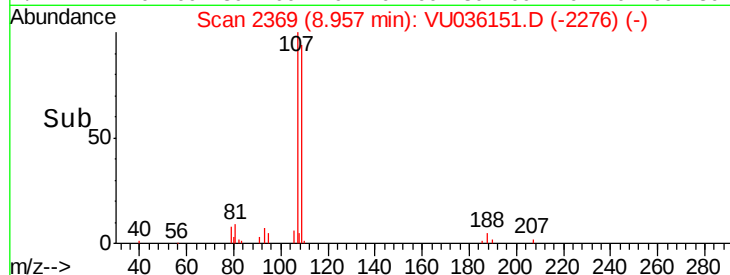
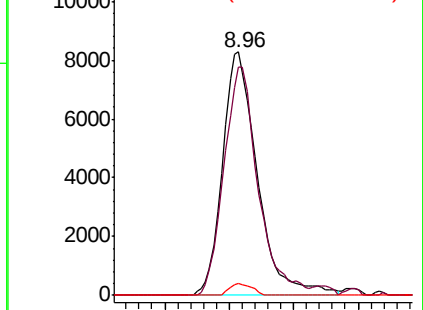
#50  
1,2-Dibromoethane  
Concen: 0.941 ug/L  
RT: 8.96 min Scan# 2369  
Delta R.T. 0.00 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

Instrument :  
MSVOA\_U  
ClientSampled :  
VSTD00101

Tgt Ion:107 Resp: 15562  
Ion Ratio Lower Upper  
107 100  
109 93.9 65.4 121.4  
188 4.8 3.4 5.2

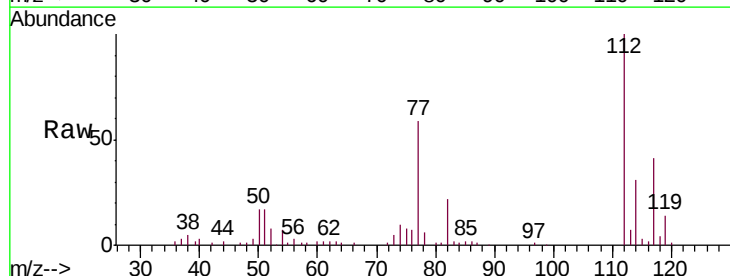


Abundance Ion 106.95 (106.65 to 107.65): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 187.90 (187.60 to 188.60): V

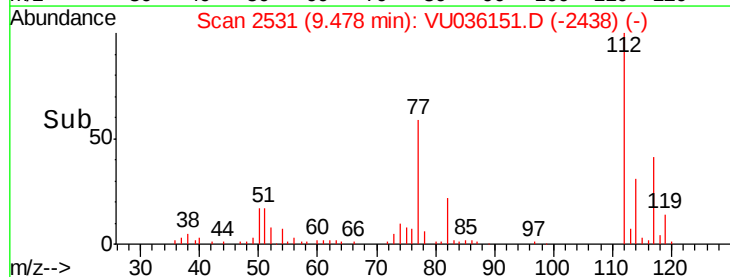
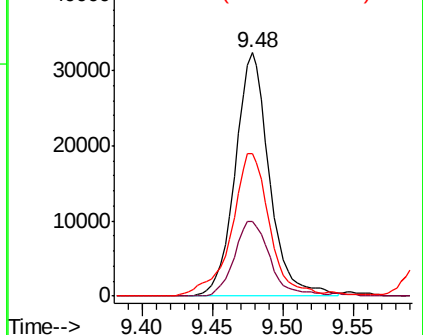


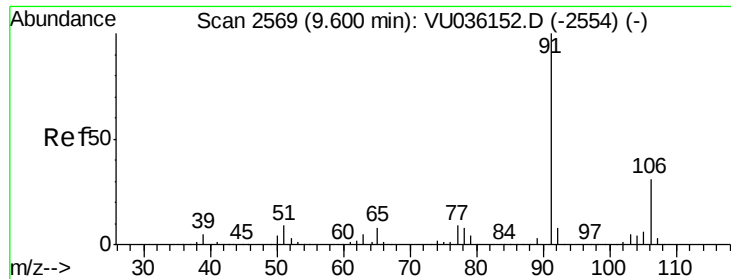
#51  
Chlorobenzene  
Concen: 0.850 ug/L  
RT: 9.48 min Scan# 2531  
Delta R.T. 0.00 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

Tgt Ion:112 Resp: 54809  
Ion Ratio Lower Upper  
112 100  
114 30.5 22.2 41.2  
77 58.7 45.7 68.5



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): V





#52

Ethylbenzene

Concen: 0.770 ug/L

RT: 9.60 min Scan# 2568

Delta R.T. -0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Instrument :

MSVOA\_U

ClientSampleId :

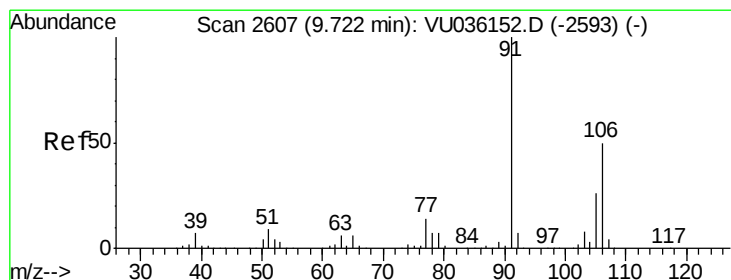
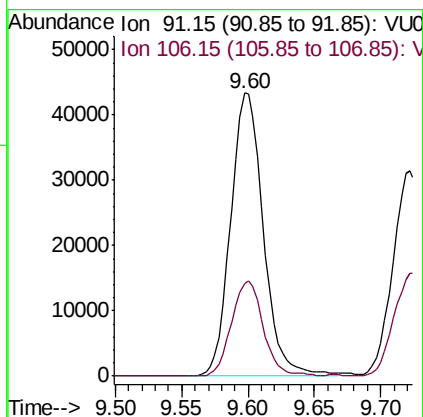
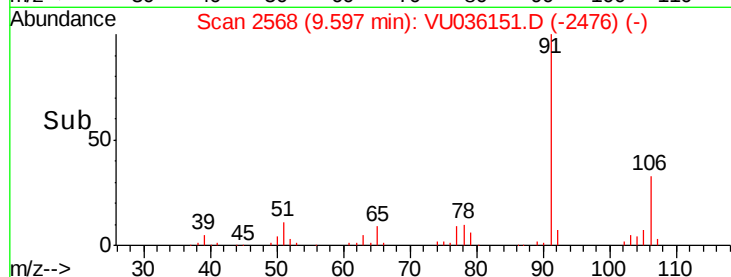
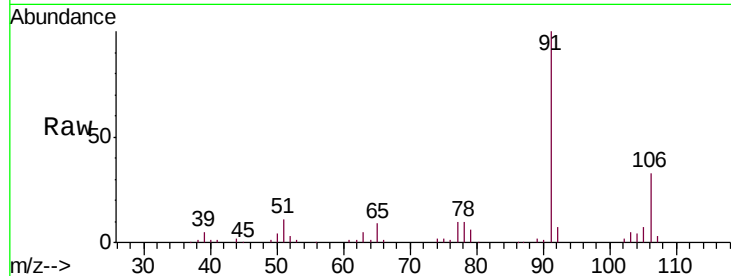
VSTD00101

Tgt Ion: 91 Resp: 74223

Ion Ratio Lower Upper

91 100

106 32.8 21.6 40.2



#53

m,p-Xylene

Concen: 0.742 ug/L

RT: 9.72 min Scan# 2607

Delta R.T. 0.00 min

Lab File: VU036151.D

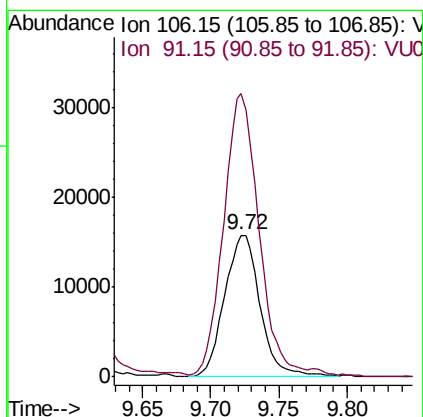
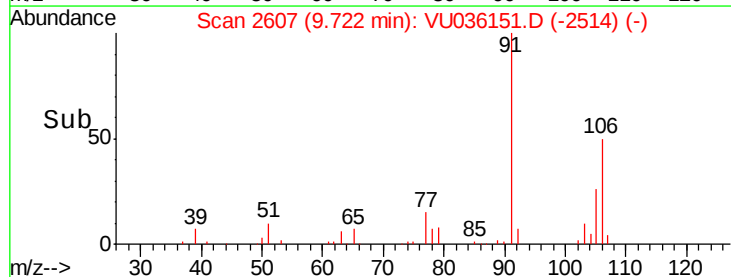
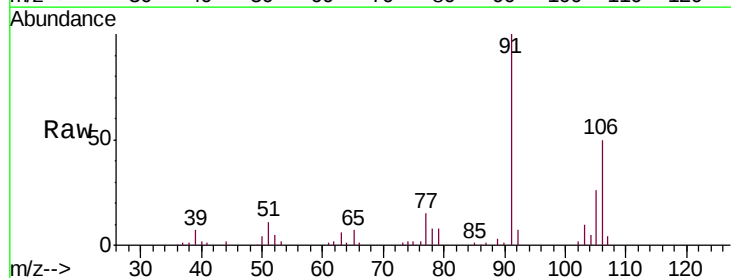
Acq: 12 Dec 2019 15:31

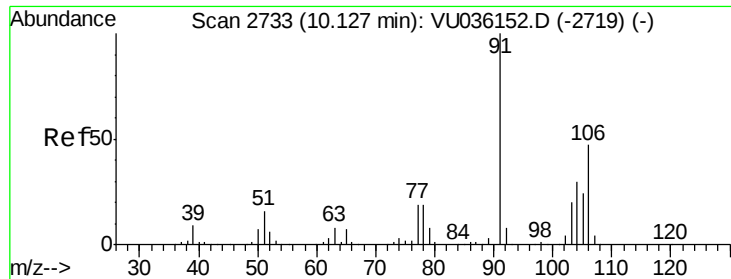
Tgt Ion: 106 Resp: 28647

Ion Ratio Lower Upper

106 100

91 199.5 140.4 260.8

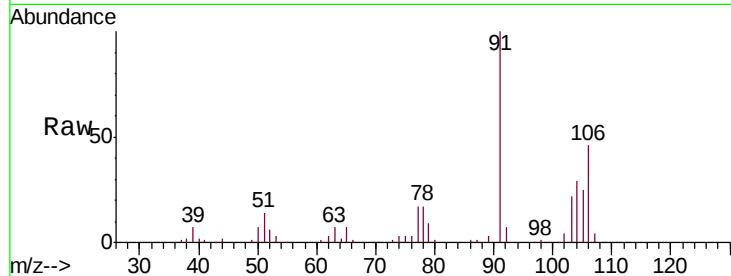




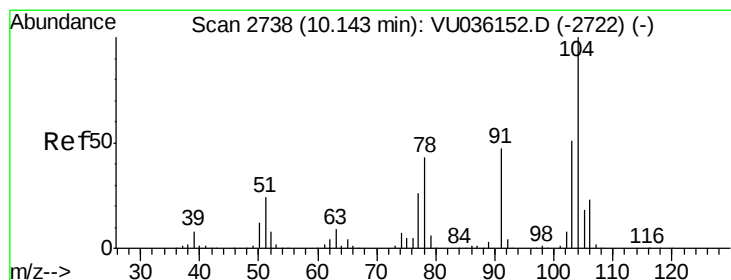
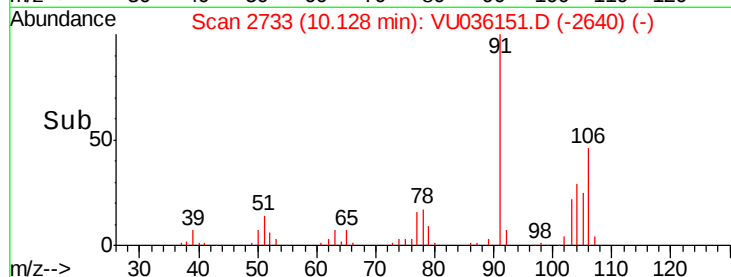
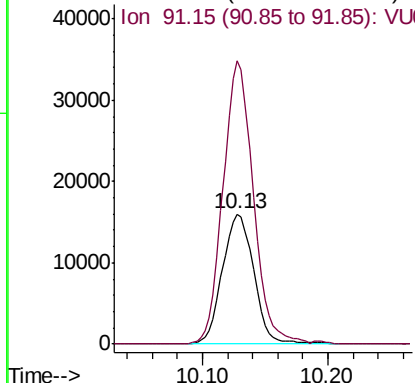
#54  
o-Xylene  
Concen: 0.755 ug/L  
RT: 10.13 min Scan# 2733  
Delta R.T. 0.00 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00101

Tgt Ion:106 Resp: 27851  
Ion Ratio Lower Upper  
106 100  
91 217.2 148.5 275.7

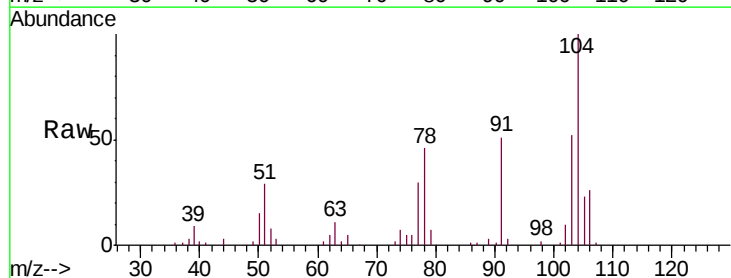


Abundance Ion 106.15 (105.85 to 106.85): V  
Ion 91.15 (90.85 to 91.85): VU0

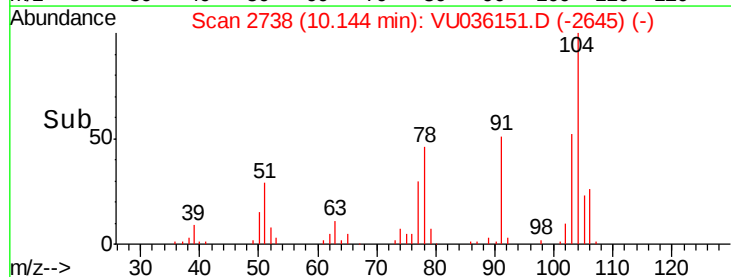
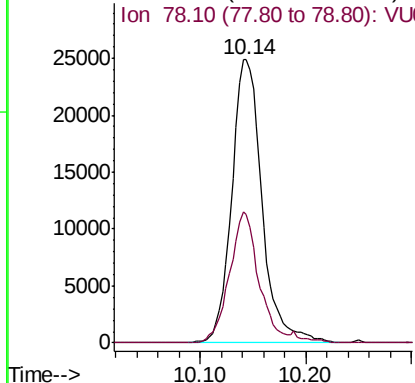


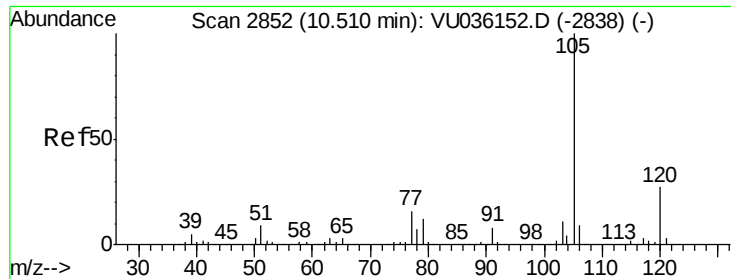
#55  
Styrene  
Concen: 0.778 ug/L  
RT: 10.14 min Scan# 2738  
Delta R.T. 0.00 min  
Lab File: VU036151.D  
Acq: 12 Dec 2019 15:31

Tgt Ion:104 Resp: 49480  
Ion Ratio Lower Upper  
104 100  
78 45.6 30.0 55.8



Abundance Ion 104.10 (103.80 to 104.80): V  
Ion 78.10 (77.80 to 78.80): VU0





#56

Isopropylbenzene

Concen: 0.709 ug/L

RT: 10.51 min Scan# 2852

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

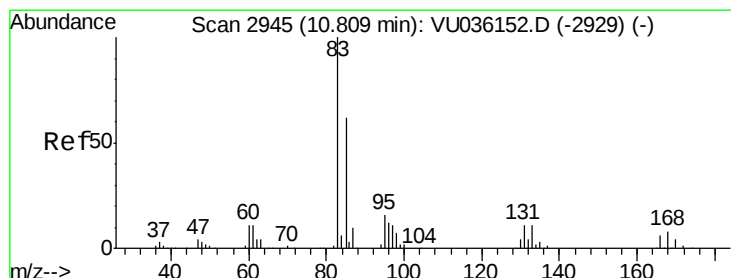
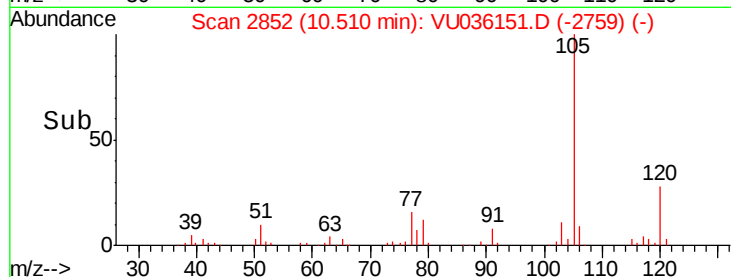
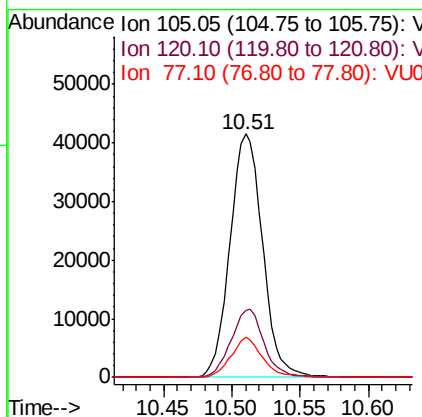
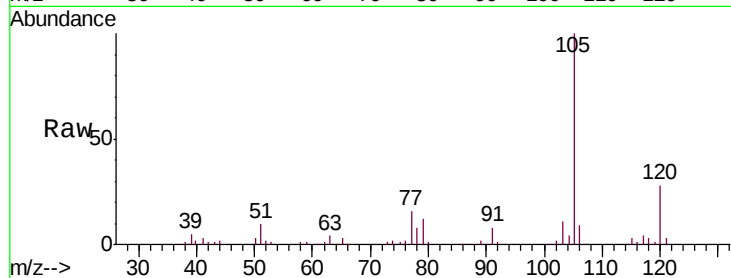
Instrument :

MSVOA\_U

ClientSampleId :

VSTD00101

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 69085 |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 27.8  | 21.2  | 31.8  |
| 77       | 15.9  | 12.6  | 18.8  |



#58

1,1,2,2-Tetrachloroethane

Concen: 0.856 ug/L

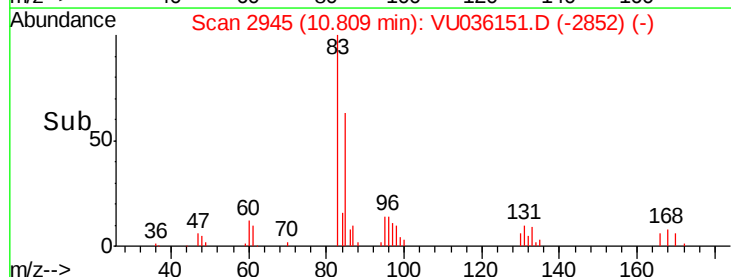
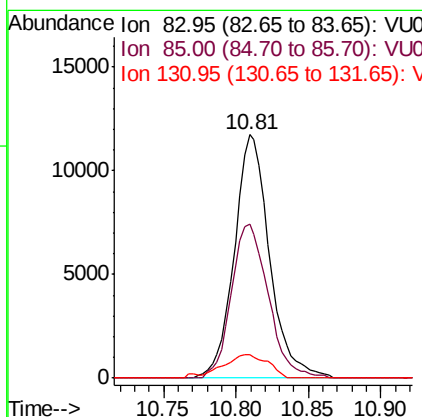
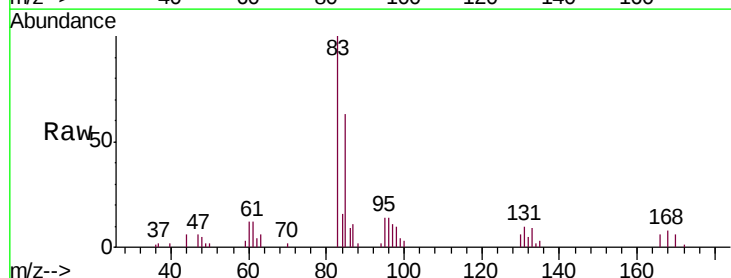
RT: 10.81 min Scan# 2945

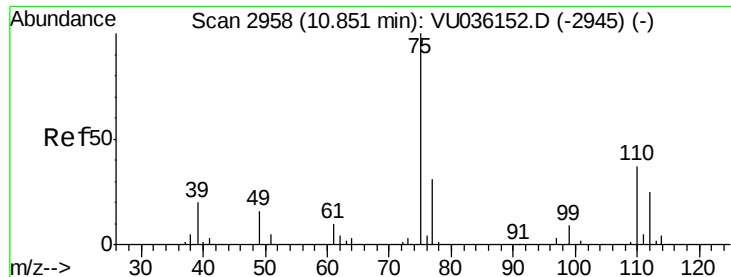
Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 19835 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 63.3  | 43.2  | 80.2  |
| 131      | 9.7   | 8.6   | 12.8  |

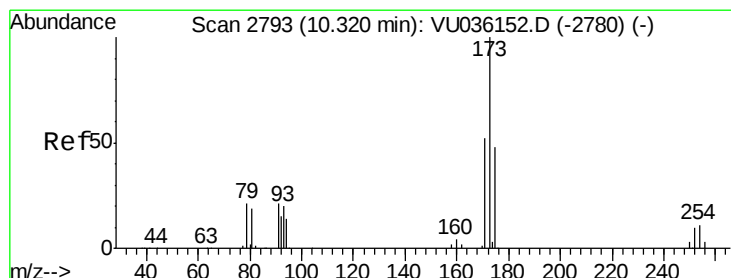
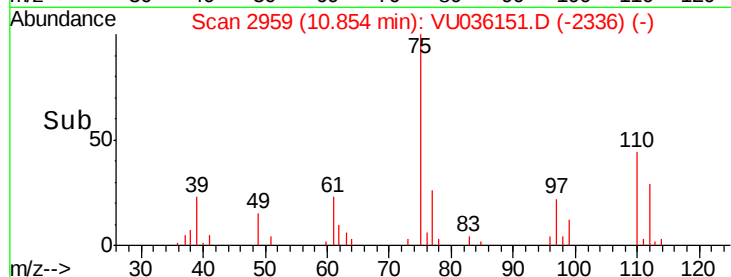
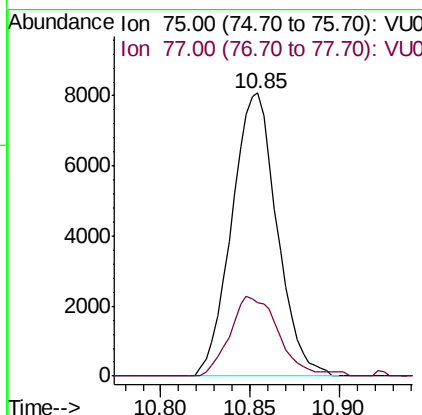
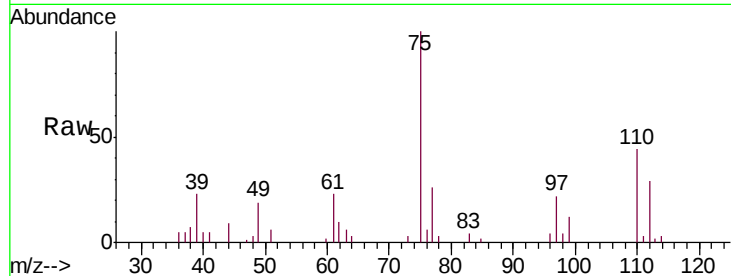




#59  
 1,2,3-Trichloropropane  
 Concen: 0.895 ug/L  
 RT: 10.85 min Scan# 2959  
 Delta R.T. 0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

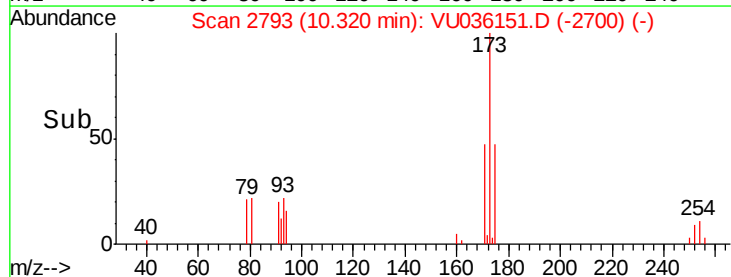
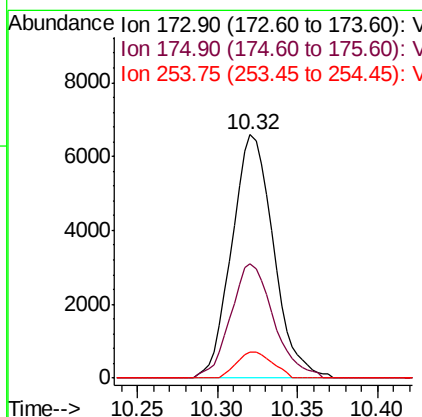
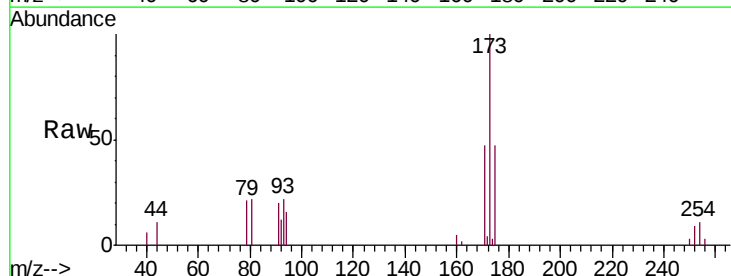
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00101

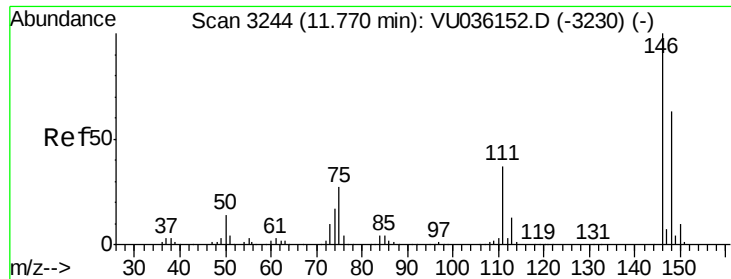
Tgt Ion: 75 Resp: 14304  
 Ion Ratio Lower Upper  
 75 100  
 77 30.0 26.6 39.8



#61  
 Bromoform  
 Concen: 0.968 ug/L  
 RT: 10.32 min Scan# 2793  
 Delta R.T. 0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

Tgt Ion: 173 Resp: 11704  
 Ion Ratio Lower Upper  
 173 100  
 175 48.6 39.1 58.7  
 254 9.2 8.0 12.0





#62

1,3-Dichlorobenzene

Concen: 0.877 ug/L

RT: 11.77 min Scan# 3244

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00101

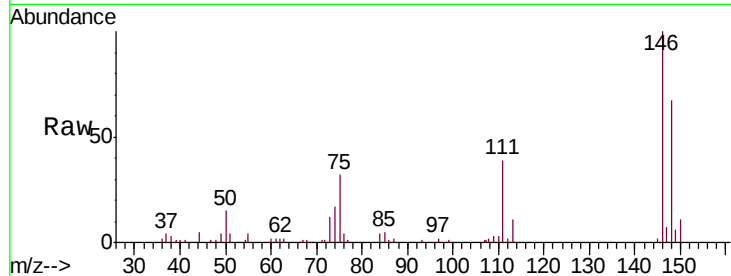
Tgt Ion:146 Resp: 35232

Ion Ratio Lower Upper

146 100

111 39.0 26.2 48.6

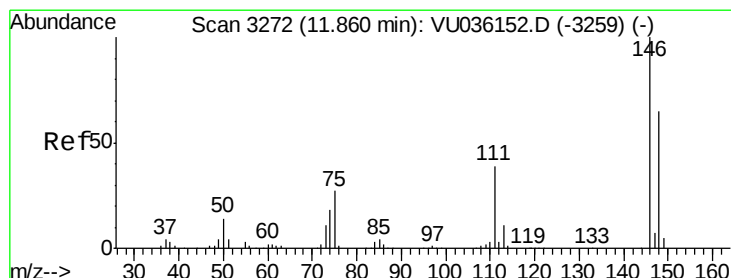
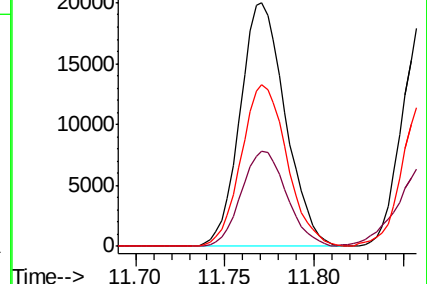
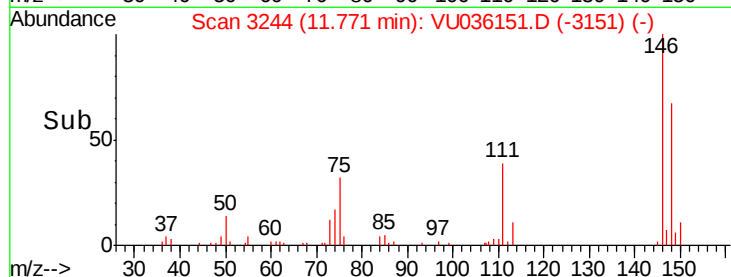
148 66.5 44.2 82.0



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



#63

1,4-Dichlorobenzene

Concen: 0.861 ug/L

RT: 11.86 min Scan# 3272

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

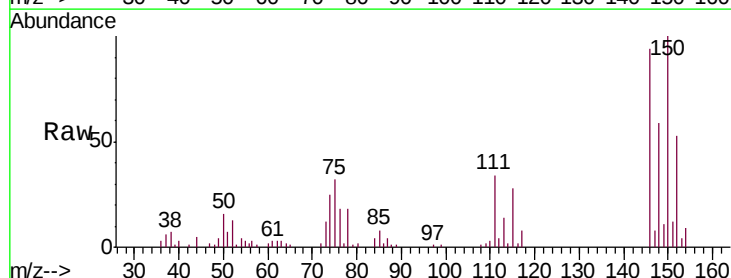
Tgt Ion:146 Resp: 33812

Ion Ratio Lower Upper

146 100

111 36.0 27.5 51.1

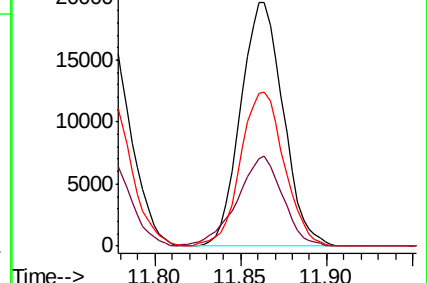
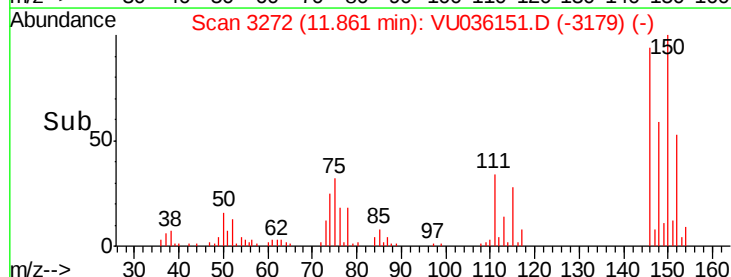
148 62.5 45.4 84.2

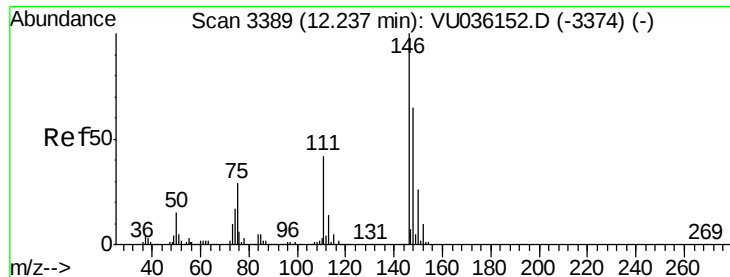


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

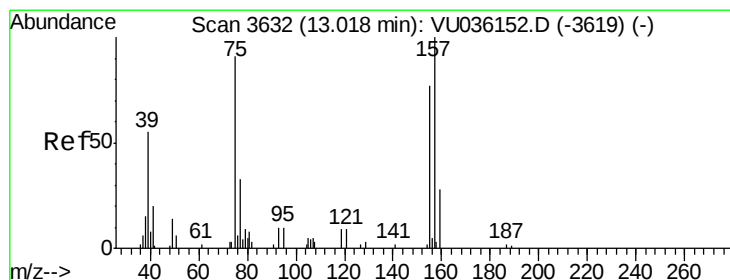
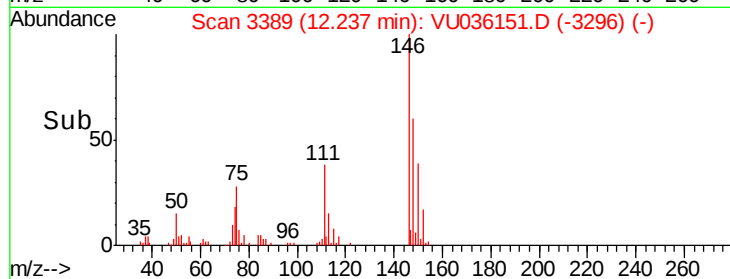
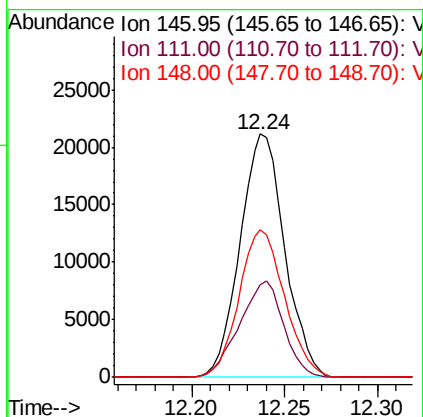
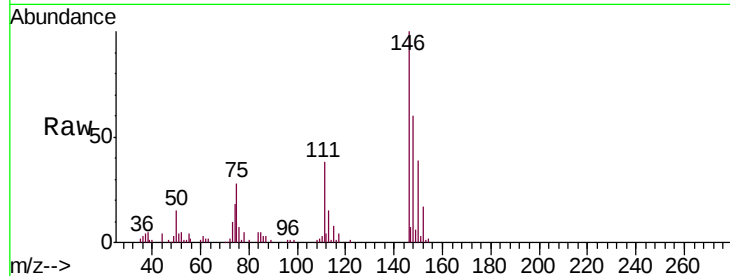




#65  
 1,2-Dichlorobenzene  
 Concen: 0.895 ug/L  
 RT: 12.24 min Scan# 3389  
 Delta R.T. 0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

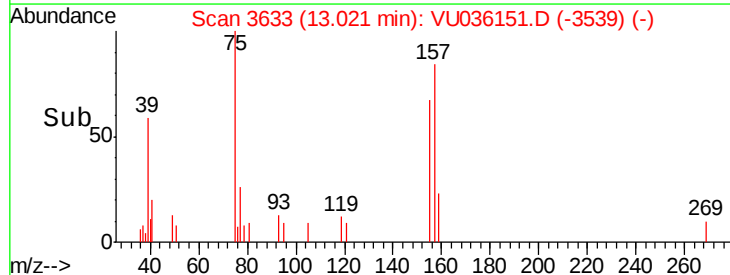
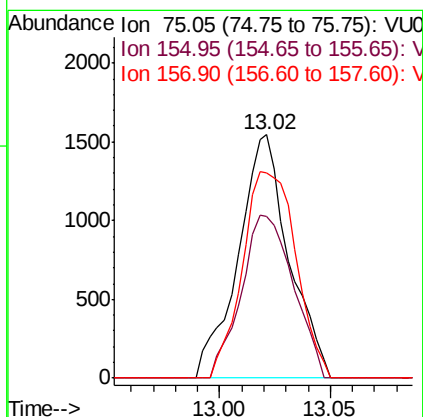
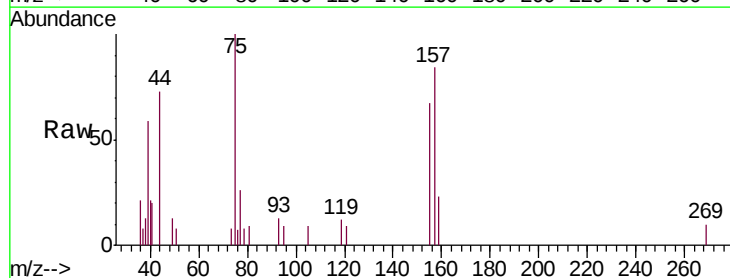
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00101

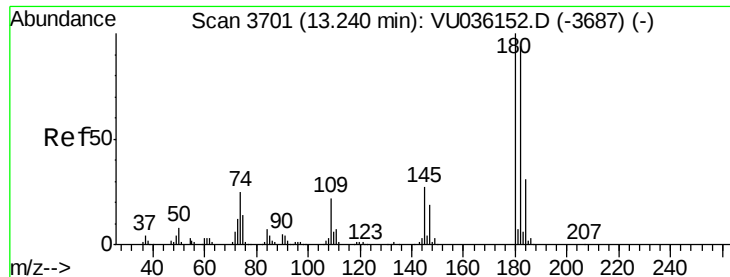
Tgt Ion: 146 Resp: 35381  
 Ion Ratio Lower Upper  
 146 100  
 111 38.1 33.3 49.9  
 148 60.4 52.2 78.2



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 1.007 ug/L  
 RT: 13.02 min Scan# 3633  
 Delta R.T. 0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

Tgt Ion: 75 Resp: 2475  
 Ion Ratio Lower Upper  
 75 100  
 155 66.6 68.2 102.2#  
 157 84.0 88.2 132.2#

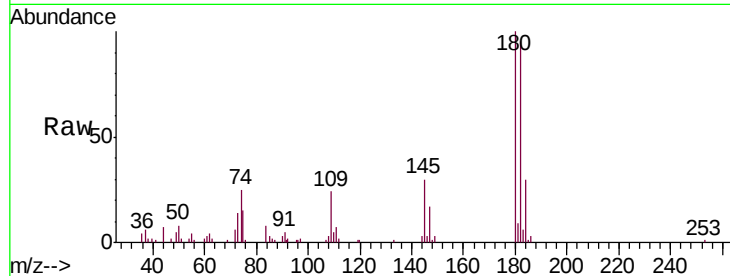




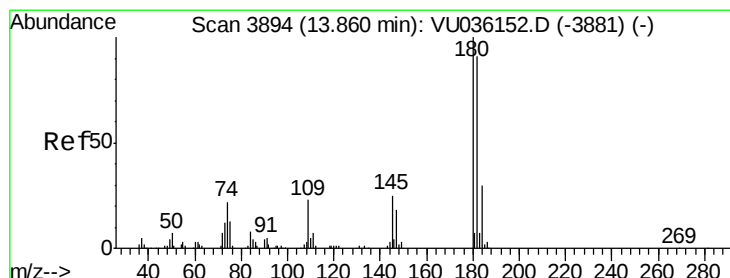
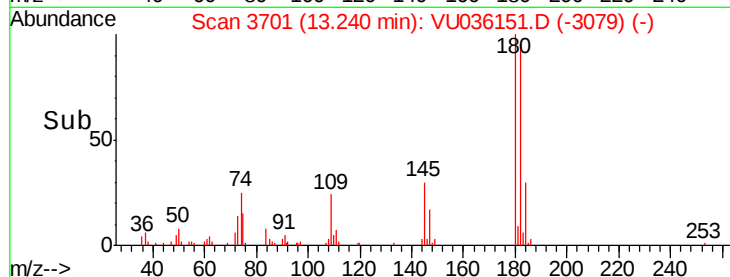
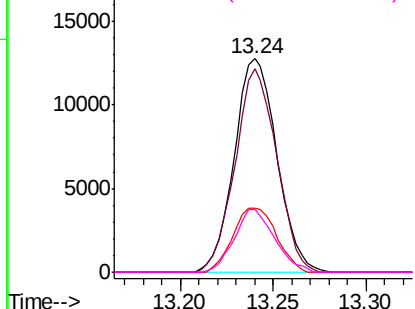
#67  
 1,3,5-Trichlorobenzene  
 Concen: 0.775 ug/L  
 RT: 13.24 min Scan# 3701  
 Delta R.T. 0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00101

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 20365 |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 92.8  | 76.2  | 114.4 |
| 184      | 30.6  | 24.1  | 36.1  |
| 145      | 27.9  | 22.1  | 33.1  |

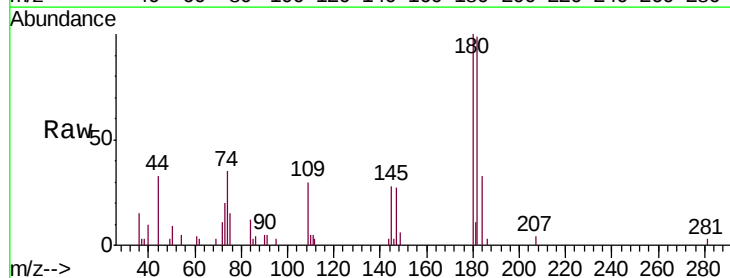


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

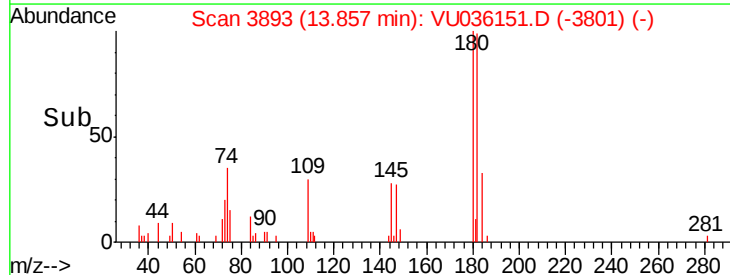
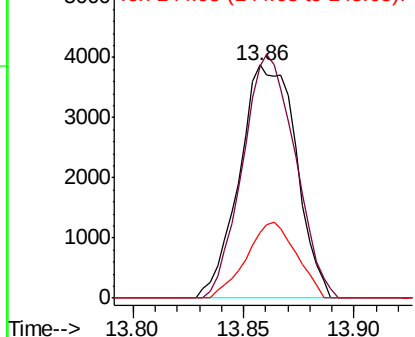


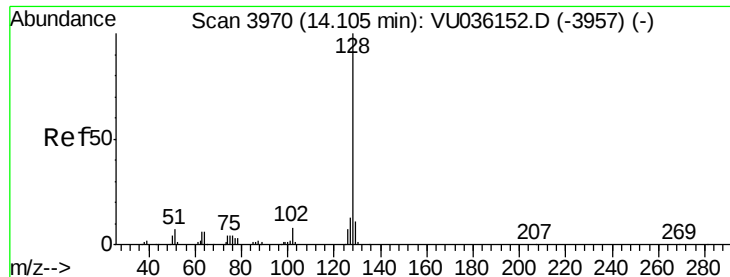
#68  
 1,2,4-trichlorobenzene  
 Concen: 0.496 ug/L  
 RT: 13.86 min Scan# 3893  
 Delta R.T. -0.00 min  
 Lab File: VU036151.D  
 Acq: 12 Dec 2019 15:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 6894  |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 97.1  | 75.0  | 112.6 |
| 145      | 28.6  | 21.8  | 32.6  |



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: 0.409 ug/L

RT: 14.11 min Scan# 3972

Delta R.T. 0.01 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00101

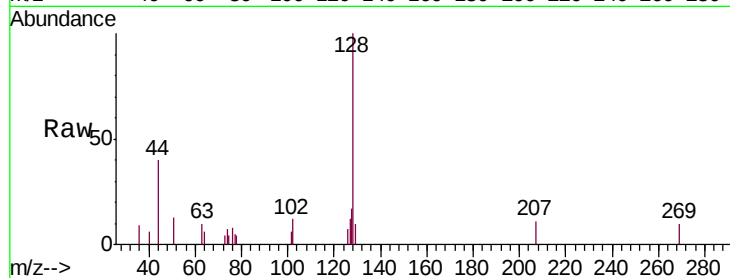
Tgt Ion:128 Resp: 5588

Ion Ratio Lower Upper

128 100

129 11.3 8.8 13.2

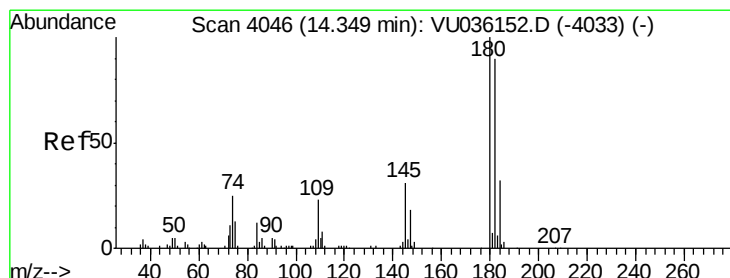
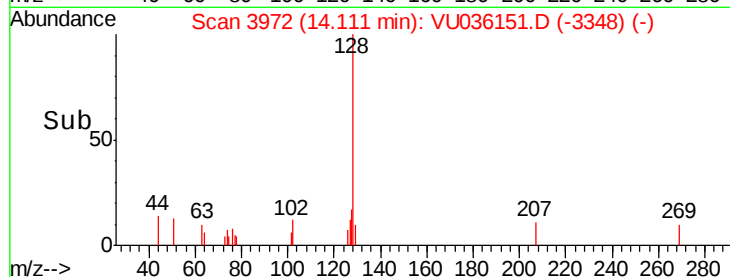
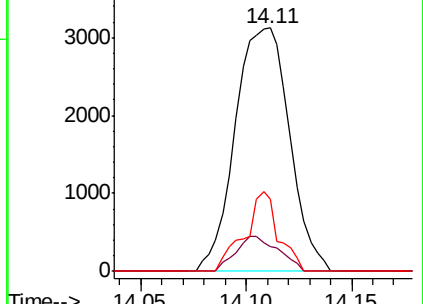
127 20.2 11.3 16.9#



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: 0.474 ug/L

RT: 14.35 min Scan# 4046

Delta R.T. 0.00 min

Lab File: VU036151.D

Acq: 12 Dec 2019 15:31

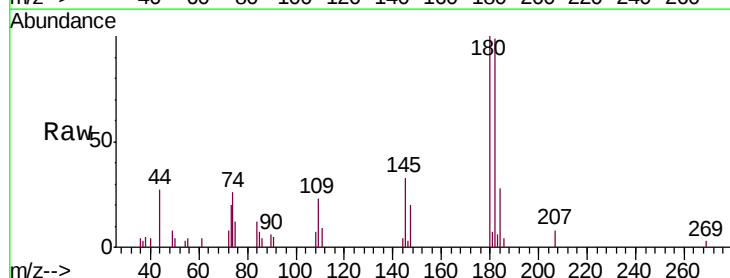
Tgt Ion:180 Resp: 6441

Ion Ratio Lower Upper

180 100

182 104.2 74.8 112.2

145 35.6 24.1 36.1



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

