

Data File : VU041390.D  
Acq On : 23 Nov 2020 16:09  
Operator : SY/MD  
Sample : L4849-16  
Misc : 25.0mL/MSVOA\_U/WATER  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
H4423

Quant Time: Nov 24 01:54:14 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR112320WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue Nov 24 01:52:19 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.26  | 114  | 54520    | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.42  | 117  | 57574    | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.81 | 152  | 24847    | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |          |
|--------------------------------|--------|-------|----------|----------|------|----------|
| 4) Vinyl Chloride-d3           | 1.60   | 65    | 13982    | 3.65     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 73.00%   |
| 7) Chloroethane-d5             | 1.92   | 69    | 13692    | 5.09     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 101.80%  |
| 11) 1,1-Dichloroethene-d2      | 2.57   | 63    | 25928    | 3.45     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 69.00%   |
| 20) 2-Butanone-d5              | 4.64   | 46    | 74725    | 76.55    | ug/L | 0.00     |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 153.10%# |
| 24) Chloroform-d               | 5.08   | 84    | 44602    | 5.71     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 114.20%  |
| 26) 1,2-Dichloroethane-d4      | 5.72   | 65    | 27601    | 6.07     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 121.40%  |
| 32) Benzene-d6                 | 5.74   | 84    | 73481    | 5.22     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 104.40%  |
| 36) 1,2-Dichloropropane-d6     | 6.70   | 67    | 25701    | 5.73     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 114.60%  |
| 41) Toluene-d8                 | 7.91   | 98    | 64926    | 4.88     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 97.60%   |
| 43) trans-1,3-Dichloropropene- | 8.19   | 79    | 10832    | 5.32     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 106.40%  |
| 46) 2-Hexanone-d5              | 8.64   | 63    | 53030    | 79.65    | ug/L | 0.00     |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 159.30%# |
| 57) 1,1,2,2-Tetrachloroethane- | 10.75  | 84    | 23741    | 6.51     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 130.20%# |
| 64) 1,2-Dichlorobenzene-d4     | 12.19  | 152   | 26710    | 6.45     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 129.00%# |

#### Target Compounds

|                                |      |     |        |         |        | Qvalue |
|--------------------------------|------|-----|--------|---------|--------|--------|
| 3) Chloromethane               | 1.53 | 50  | 567    | 0.127   | ug/L # | 43     |
| 5) Vinyl chloride              | 1.61 | 62  | 50082  | 10.512  | ug/L   | 87     |
| 8) Chloroethane                | 1.94 | 64  | 1648   | 0.610   | ug/L # | 62     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.57 | 101 | 211    | 0.056   | ug/L # | 19     |
| 13) Acetone                    | 2.64 | 43  | 1284   | 1.946   | ug/L   | 88     |
| 14) Carbon disulfide           | 2.81 | 76  | 706    | 0.060   | ug/L # | 76     |
| 15) Methyl Acetate             | 3.05 | 43  | 1426   | 0.917   | ug/L # | 55     |
| 17) Methyl tert-butyl Ether    | 3.38 | 73  | 18262  | 2.184   | ug/L   | 94     |
| 18) trans-1,2-Dichloroethene   | 3.37 | 96  | 64628  | 17.750  | ug/L   | 96     |
| 19) 1,1-Dichloroethane         | 3.89 | 63  | 20751  | 2.865   | ug/L   | 98     |
| 21) 2-Butanone                 | 4.82 | 43  | 146828 | 140.120 | ug/L # | 50     |
| 22) cis-1,2-Dichloroethene     | 4.68 | 96  | 3366   | 0.869   | ug/L   | 91     |
| 25) Chloroform                 | 5.11 | 83  | 1134   | 0.142   | ug/L   | 89     |
| 27) 1,2-Dichloroethane         | 5.81 | 62  | 427    | 0.082   | ug/L # | 78     |
| 30) Cyclohexane                | 5.40 | 56  | 993    | 0.162   | ug/L # | 87     |
| 33) Benzene                    | 5.79 | 78  | 16053  | 1.040   | ug/L   | 100    |
| 35) Methylcyclohexane          | 6.70 | 83  | 6801   | 1.109   | ug/L # | 15     |

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Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue Nov 24 01:52:19 2020  
Response via : Initial Calibration

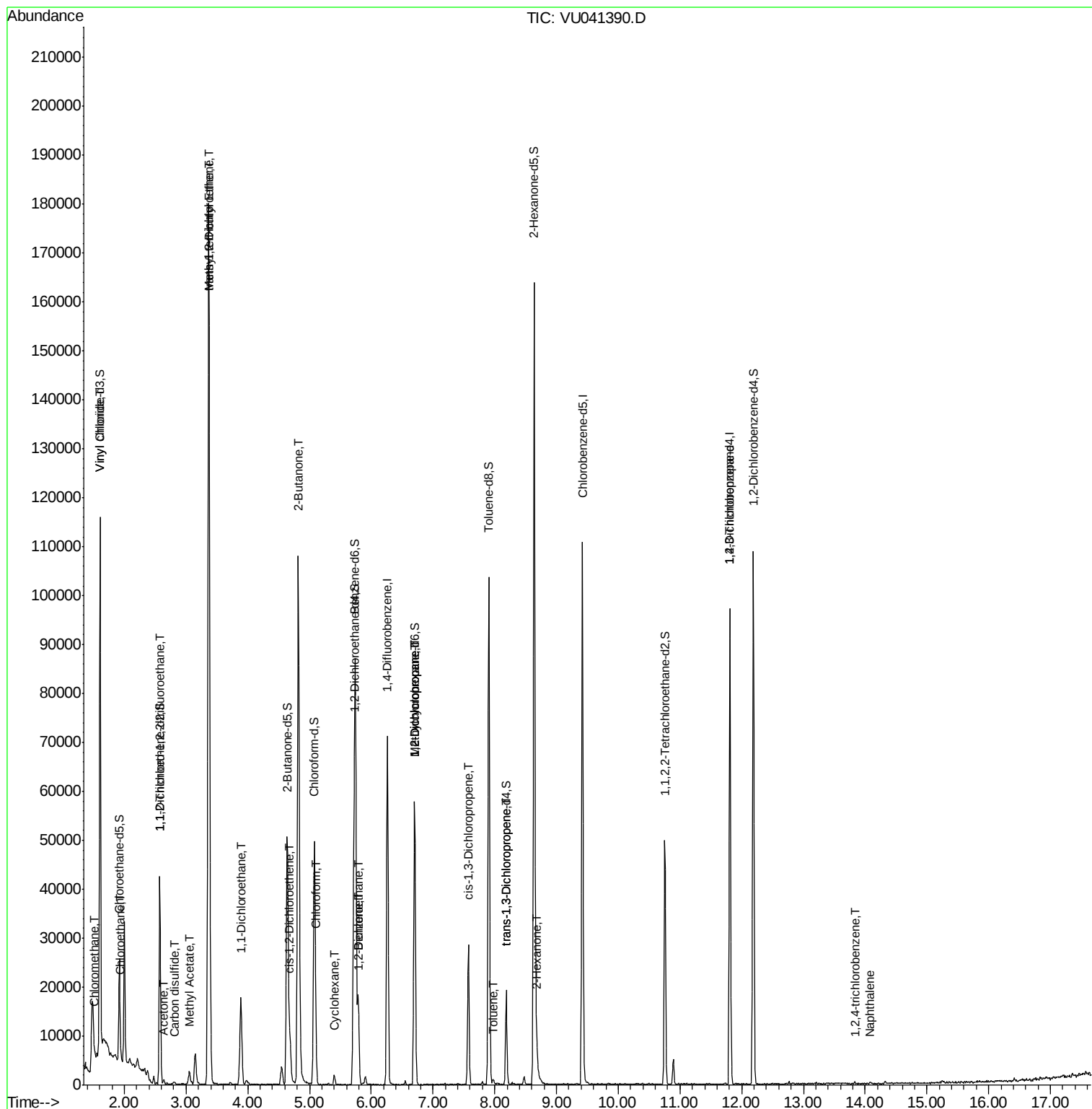
| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| 37) 1,2-Dichloropropane       | 6.70  | 63   | 3293     | 0.777 | ug/L # | 90       |
| 39) cis-1,3-Dichloropropene   | 7.57  | 75   | 839      | 0.143 | ug/L # | 73       |
| 42) Toluene                   | 7.97  | 91   | 657      | 0.040 | ug/L # | 68       |
| 44) trans-1,3-Dichloropropene | 8.19  | 75   | 533      | 0.100 | ug/L   | 94       |
| 48) 2-Hexanone                | 8.69  | 43   | 1956     | 1.026 | ug/L # | 90       |
| 59) 1,2,3-Trichloropropane    | 11.81 | 75   | 3172     | 1.146 | ug/L # | 79       |
| 68) 1,2,4-trichlorobenzene    | 13.83 | 180  | 256      | 0.065 | ug/L # | 67       |
| 69) Naphthalene               | 14.08 | 128  | 481      | 0.077 | ug/L # | 69       |

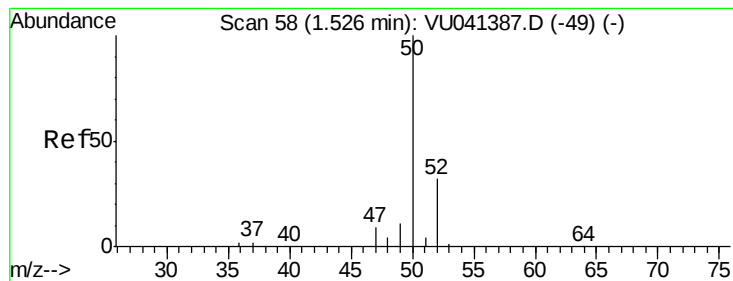
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#3

Chloromethane

Concen: 0.127 ug/L

RT: 1.53 min Scan# 58

Delta R.T. 0.00 min

Lab File: VU041390.D

Acq: 23 Nov 2020 16:09

Instrument :

MSVOA\_U

ClientSampleId :

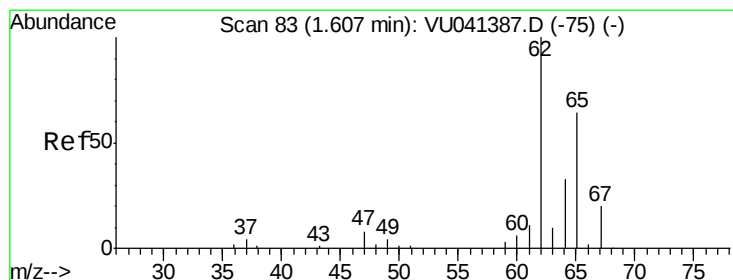
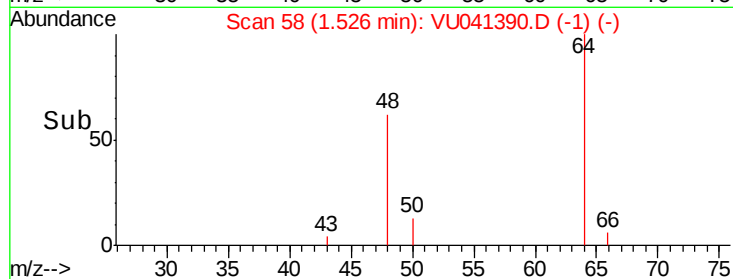
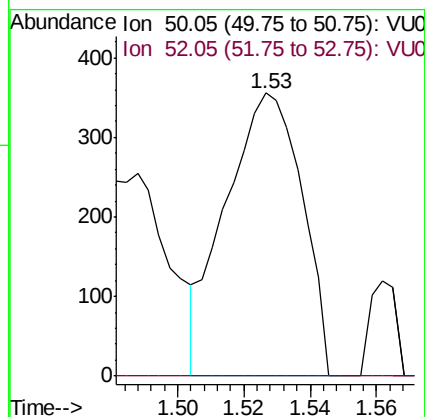
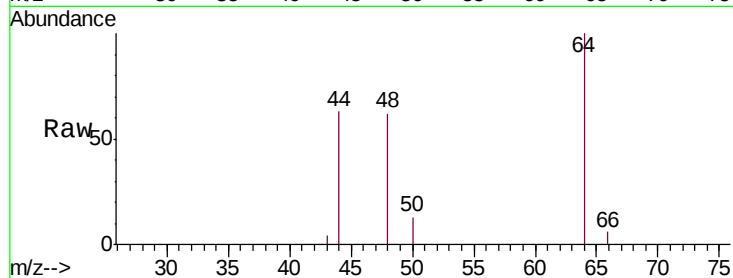
H4423

Tgt Ion: 50 Resp: 567

Ion Ratio Lower Upper

50 100

52 0.0 22.3 41.5#



#5

Vinyl chloride

Concen: 10.512 ug/L

RT: 1.61 min Scan# 84

Delta R.T. 0.00 min

Lab File: VU041390.D

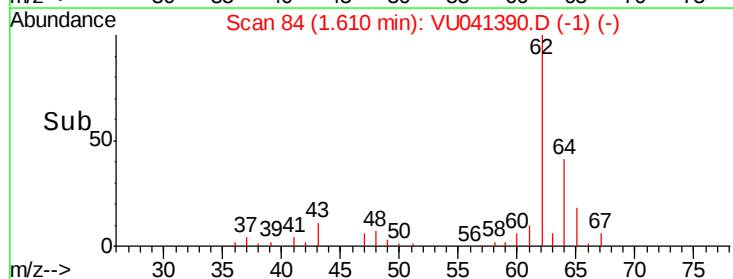
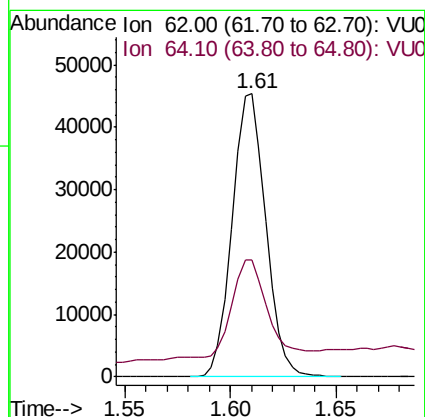
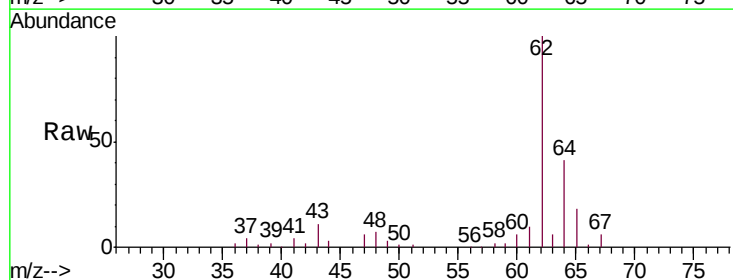
Acq: 23 Nov 2020 16:09

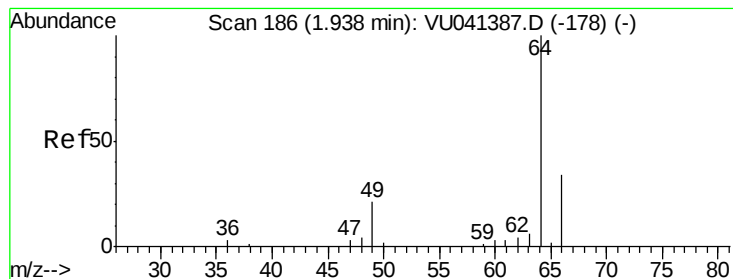
Tgt Ion: 62 Resp: 50082

Ion Ratio Lower Upper

62 100

64 41.2 23.8 44.2





#8

Chloroethane

Concen: 0.610 ug/L

RT: 1.94 min Scan# 187

Delta R.T. 0.00 min

Lab File: VU041390.D

Acq: 23 Nov 2020 16:09

Instrument :

MSVOA\_U

ClientSampleId :

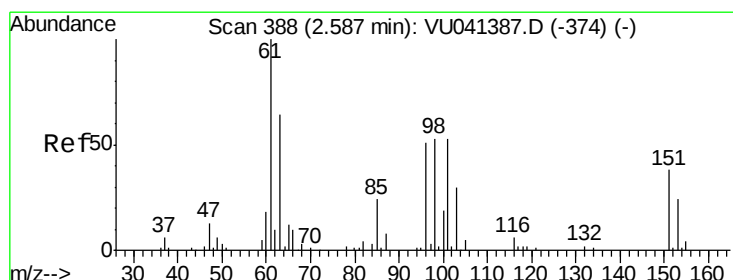
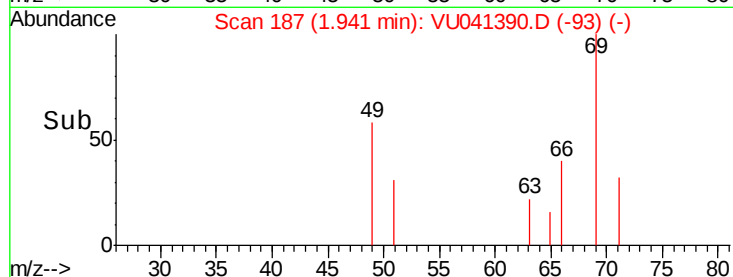
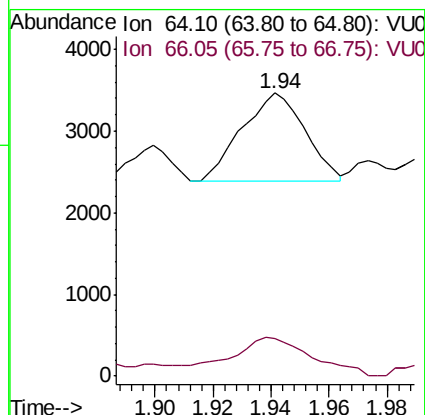
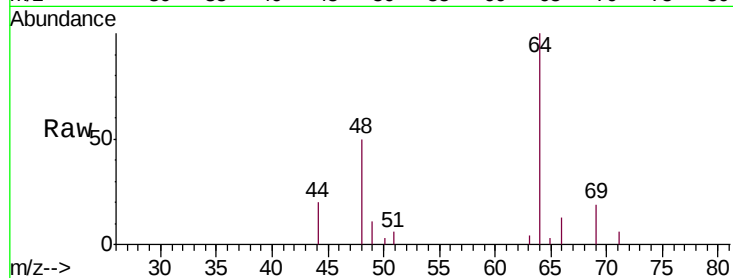
H4423

Tgt Ion: 64 Resp: 1648

Ion Ratio Lower Upper

64 100

66 13.3 24.6 45.8#



#10

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

Concen: 0.056 ug/L

RT: 2.57 min Scan# 383

Delta R.T. -0.02 min

Lab File: VU041390.D

Acq: 23 Nov 2020 16:09

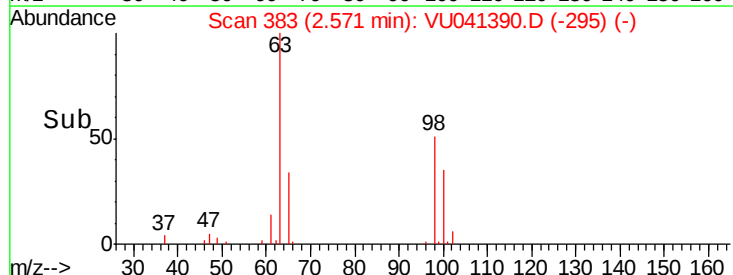
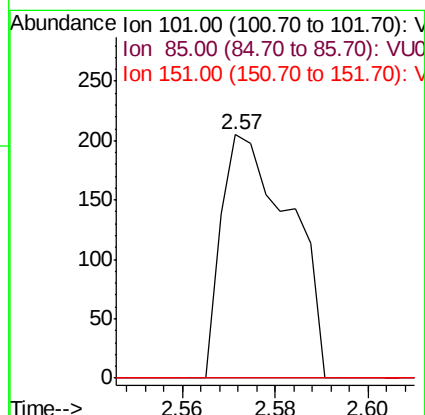
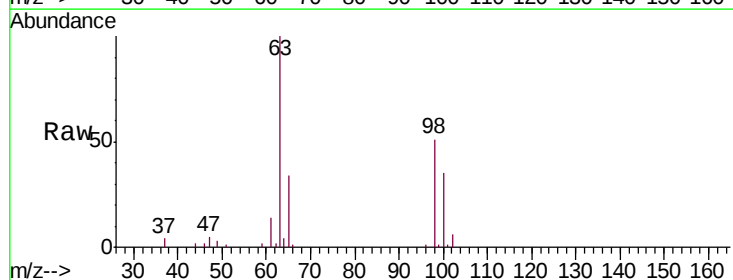
Tgt Ion: 101 Resp: 211

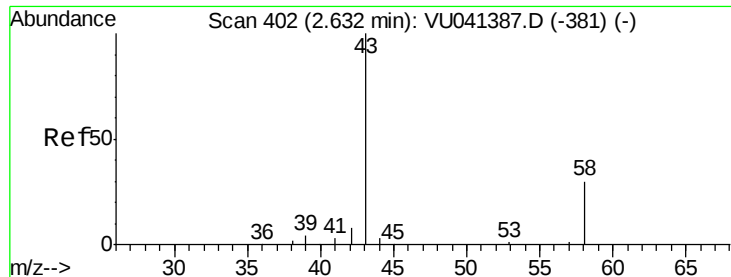
Ion Ratio Lower Upper

101 100

85 91.5 35.1 52.7#

151 0.0 56.2 84.2#





#13

Acetone

Concen: 1.946 ug/L

RT: 2.64 min Scan# 404

Delta R.T. 0.01 min

Lab File: VU041390.D

Acq: 23 Nov 2020 16:09

Instrument :

MSVOA\_U

ClientSampleId :

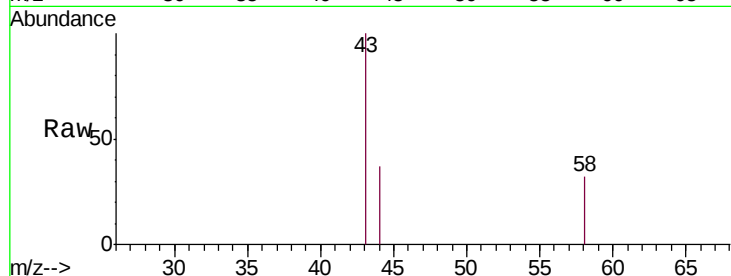
H4423

Tgt Ion: 43 Resp: 1284

Ion Ratio Lower Upper

43 100

58 22.4 0.0 57.8



Abundance Ion 43.05 (42.75 to 43.75): VU041387.D (-381) (-)

Ion 58.05 (57.75 to 58.75): VU041387.D (-381) (-)

2.64

600

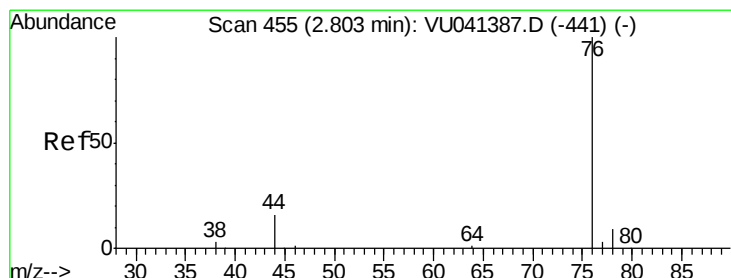
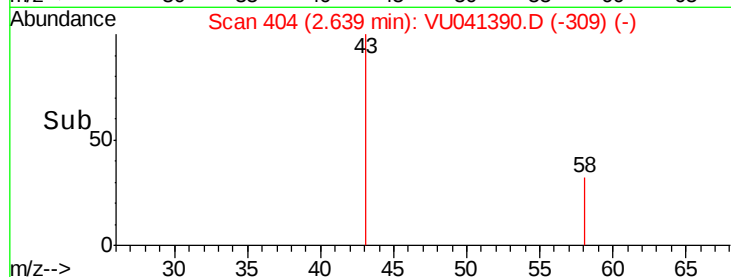
400

200

0

2.60 2.65

Time-->



#14

Carbon disulfide

Concen: 0.060 ug/L

RT: 2.81 min Scan# 458

Delta R.T. 0.01 min

Lab File: VU041390.D

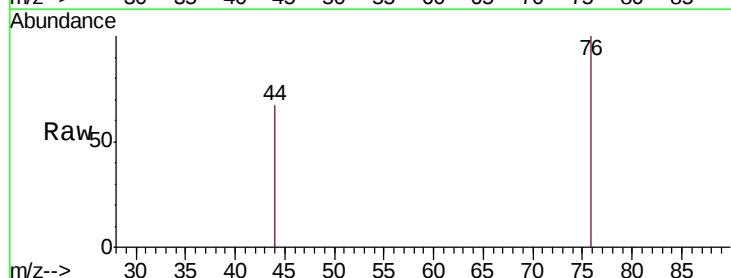
Acq: 23 Nov 2020 16:09

Tgt Ion: 76 Resp: 706

Ion Ratio Lower Upper

76 100

78 0.0 7.0 10.6#



Abundance Ion 76.05 (75.75 to 76.75): VU041387.D (-441) (-)

Ion 78.00 (77.70 to 78.70): VU041387.D (-441) (-)

2.81

400

300

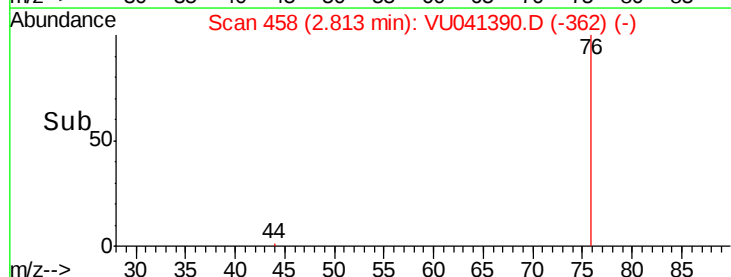
200

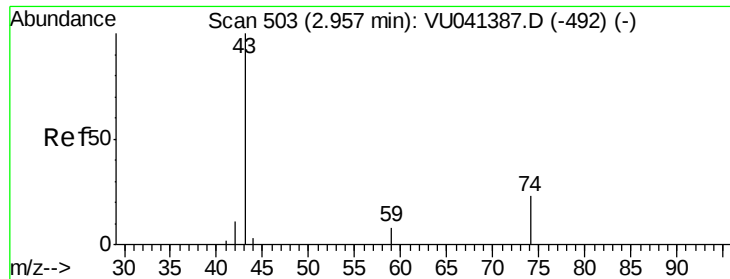
100

0

2.80 2.85

Time-->

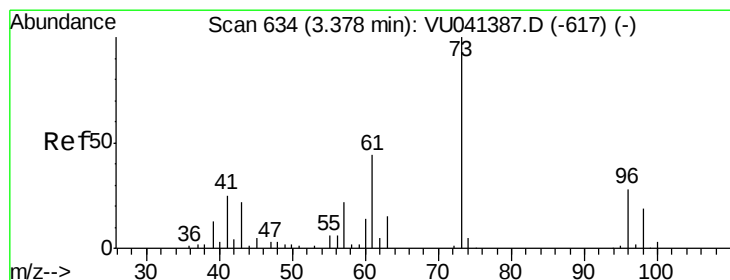
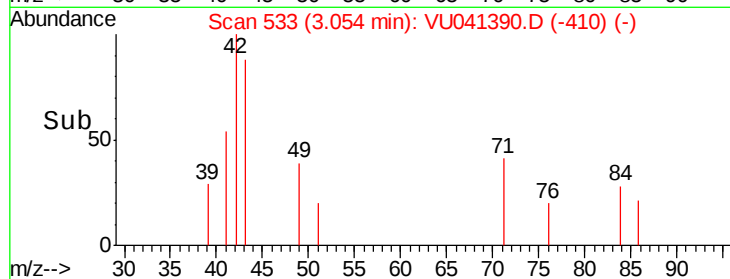
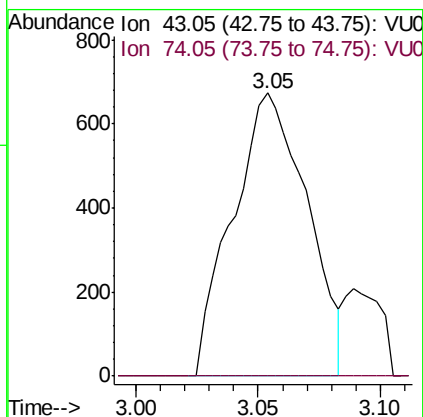
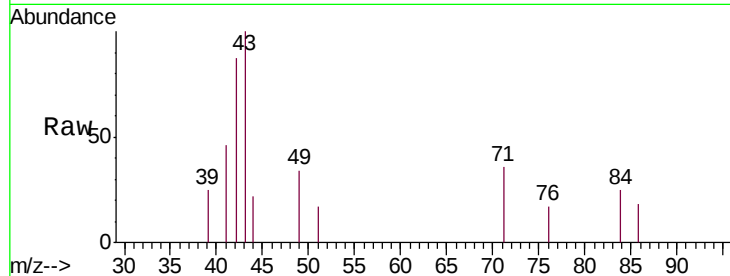




#15  
Methyl Acetate  
Concen: 0.917 ug/L  
RT: 3.05 min Scan# 533  
Delta R.T. 0.10 min  
Lab File: VU041390.D  
Acq: 23 Nov 2020 16:09

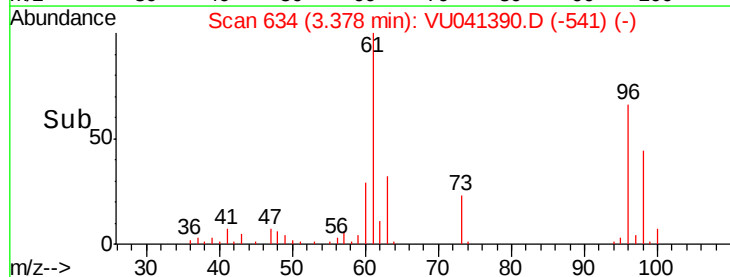
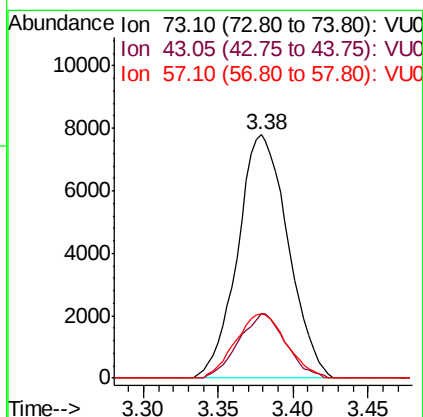
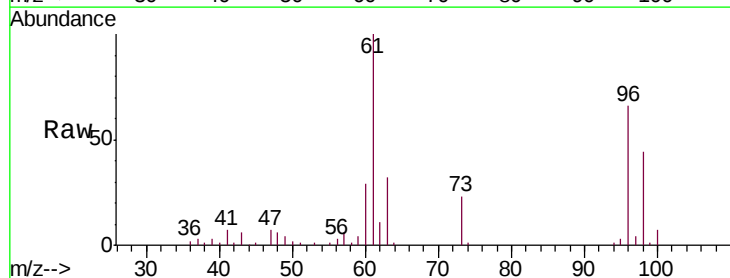
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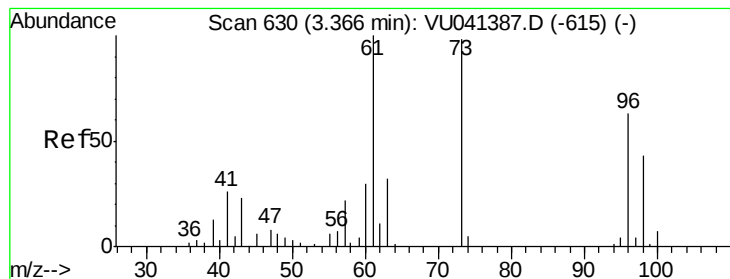
Tgt Ion: 43 Resp: 1426  
Ion Ratio Lower Upper  
43 100  
74 0.0 17.0 25.6#



#17  
Methyl tert-butyl Ether  
Concen: 2.184 ug/L  
RT: 3.38 min Scan# 634  
Delta R.T. 0.00 min  
Lab File: VU041390.D  
Acq: 23 Nov 2020 16:09

Tgt Ion: 73 Resp: 18262  
Ion Ratio Lower Upper  
73 100  
43 24.7 18.3 27.5  
57 26.3 17.7 26.5





#18

trans-1,2-Dichloroethene

Concen: 17.750 ug/L

RT: 3.37 min Scan# 631

Delta R.T. 0.00 min

Lab File: VU041390.D

Acq: 23 Nov 2020 16:09

Instrument :

MSVOA\_U

ClientSampleId :

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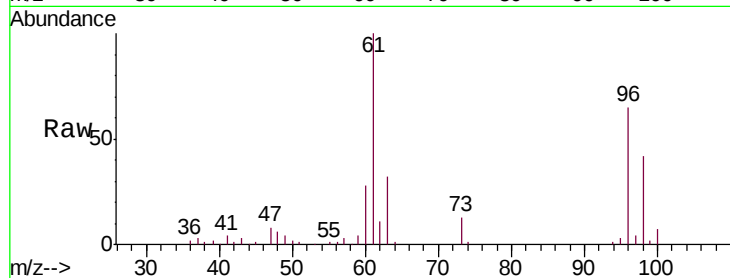
Tgt Ion: 96 Resp: 64628

Ion Ratio Lower Upper

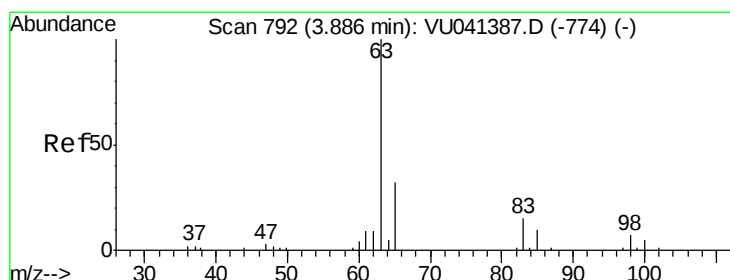
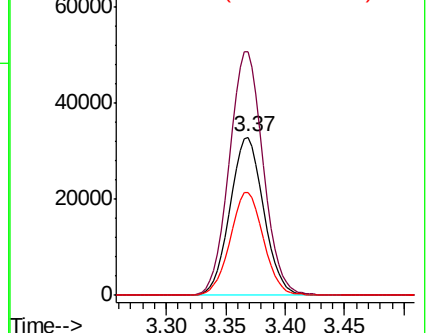
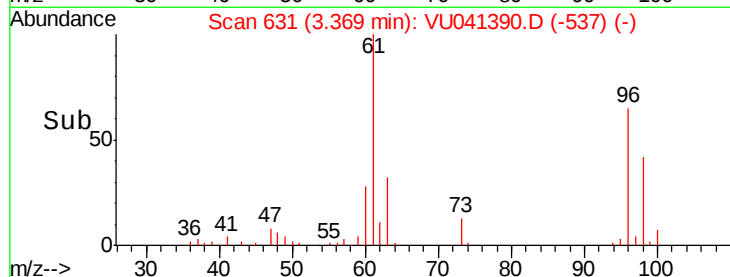
96 100

61 154.0 103.7 192.5

98 65.2 47.5 88.3



Abundance Ion 96.00 (95.70 to 96.70): VU041390.D (-537) (-)



#19

1,1-Dichloroethane

Concen: 2.865 ug/L

RT: 3.89 min Scan# 792

Delta R.T. 0.00 min

Lab File: VU041390.D

Acq: 23 Nov 2020 16:09

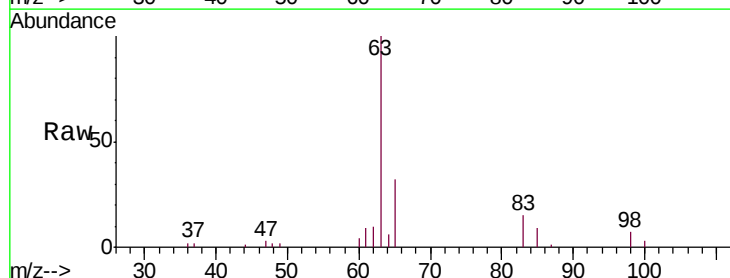
Tgt Ion: 63 Resp: 20751

Ion Ratio Lower Upper

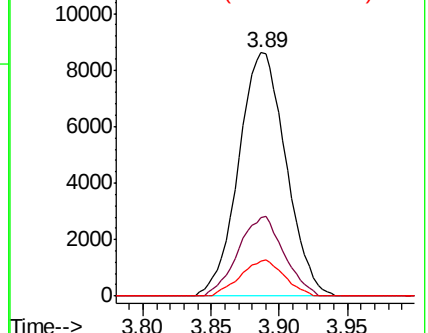
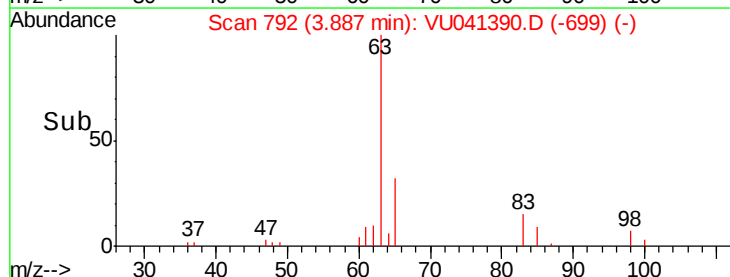
63 100

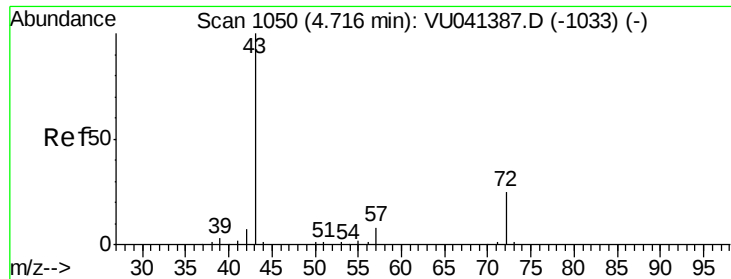
65 32.2 23.0 42.8

83 14.5 9.4 17.4



Abundance Ion 63.10 (62.80 to 63.80): VU041390.D (-699) (-)





#21

2-Butanone

Concen: 140.120 ug/L

RT: 4.82 min Scan# 1082

Delta R.T. 0.10 min

Lab File: VU041390.D

Acq: 23 Nov 2020 16:09

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MSVOA\_U

ClientSampleId :

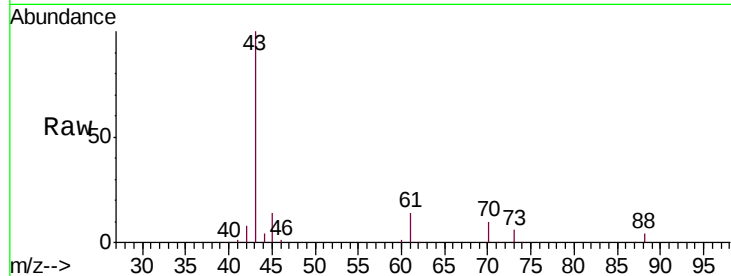
H4423

Tgt Ion: 43 Resp: 146828

Ion Ratio Lower Upper

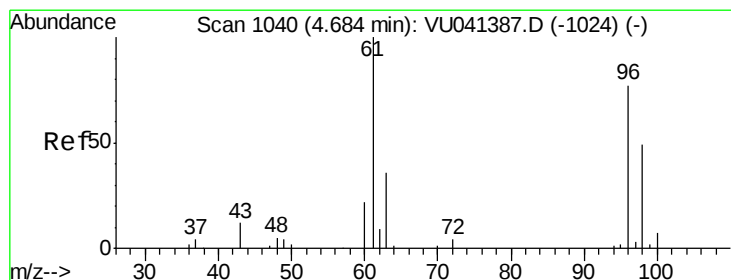
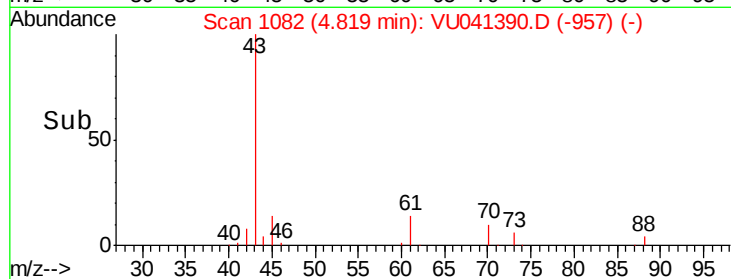
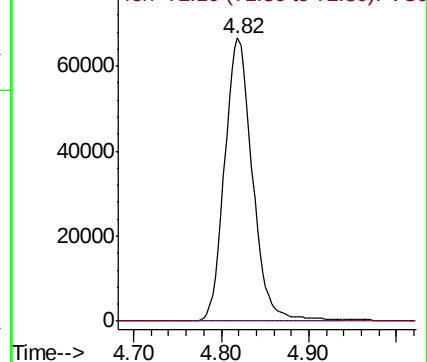
43 100

72 0.0 12.6 37.6#



Abundance Ion 43.05 (42.75 to 43.75): VU041387.D (-1033) (-)

Ion 72.10 (71.80 to 72.80): VU041387.D (-1033) (-)



#22

cis-1,2-Dichloroethene

Concen: 0.869 ug/L

RT: 4.68 min Scan# 1039

Delta R.T. -0.00 min

Lab File: VU041390.D

Acq: 23 Nov 2020 16:09

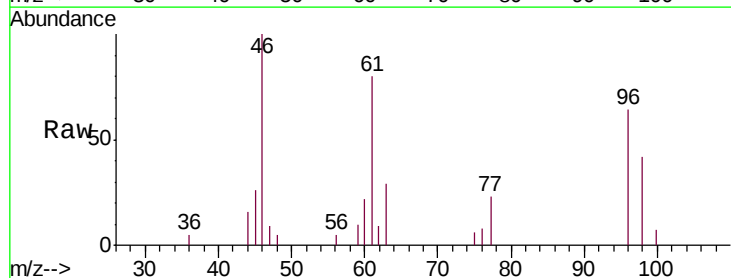
Tgt Ion: 96 Resp: 3366

Ion Ratio Lower Upper

96 100

61 125.5 95.3 176.9

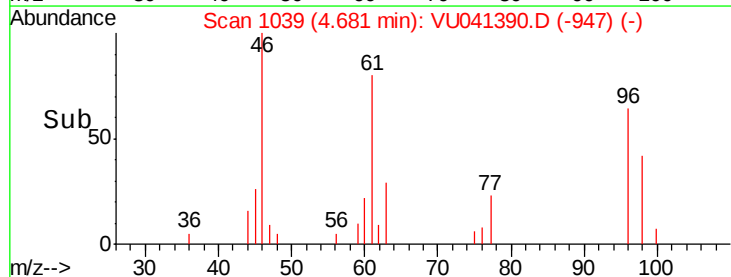
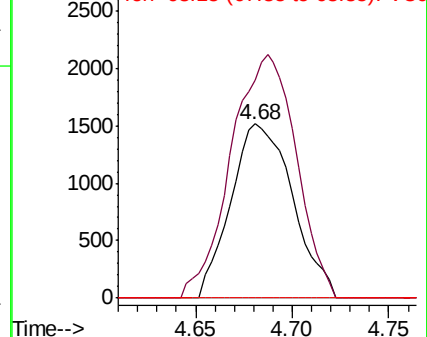
68 0.0 0.0 0.0

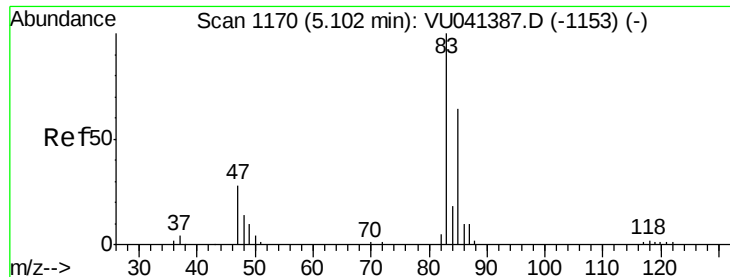


Abundance Ion 96.00 (95.70 to 96.70): VU041387.D (-1024) (-)

Ion 61.05 (60.75 to 61.75): VU041387.D (-1024) (-)

Ion 68.15 (67.85 to 68.85): VU041387.D (-1024) (-)

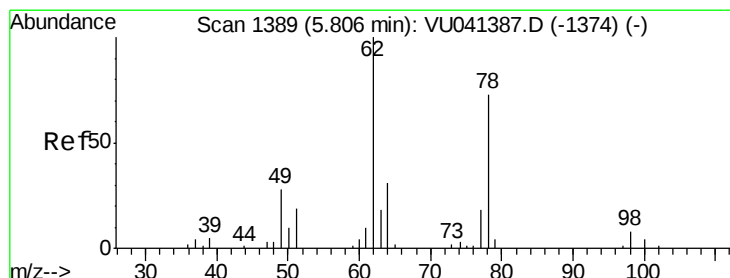
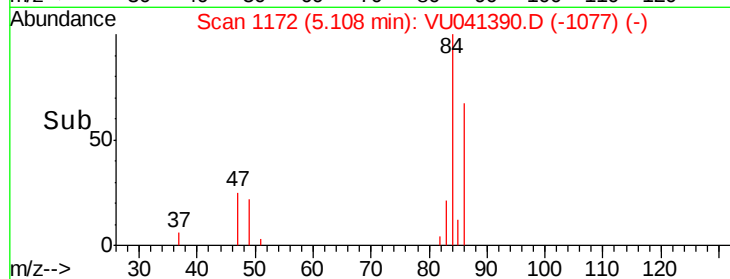
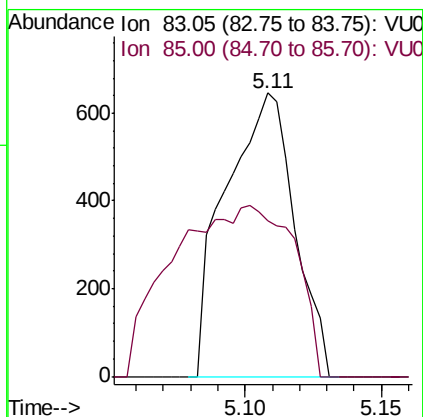
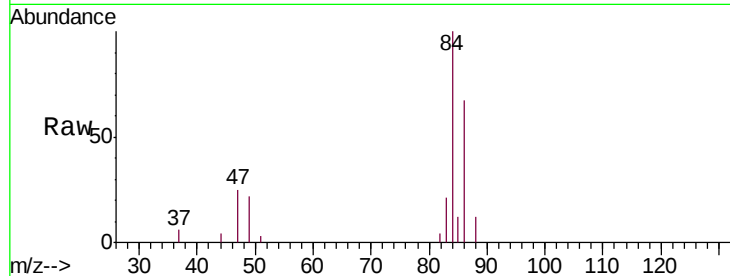




#25  
Chloroform  
Concen: 0.142 ug/L  
RT: 5.11 min Scan# 1172  
Delta R.T. 0.01 min  
Lab File: VU041390.D  
Acq: 23 Nov 2020 16:09

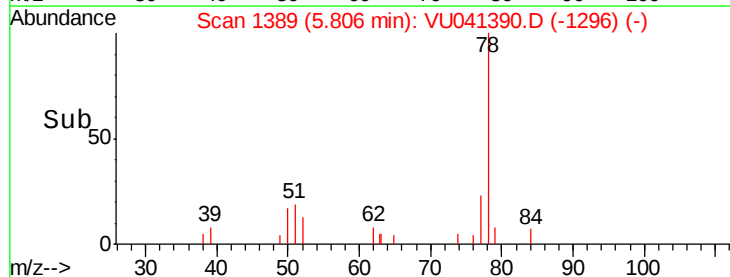
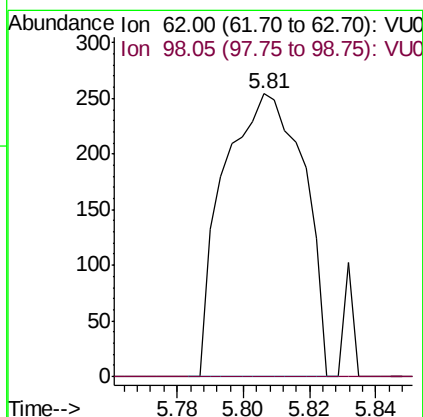
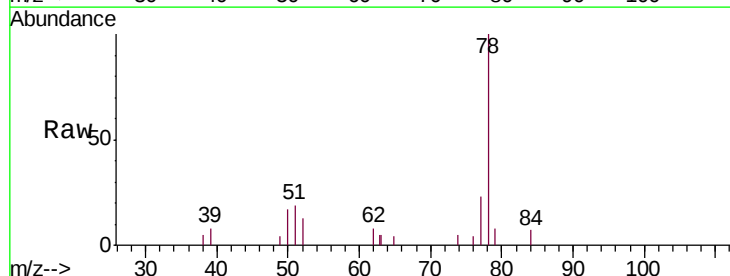
Instrument :  
MSVOA\_U  
ClientSampleId :  
H4423

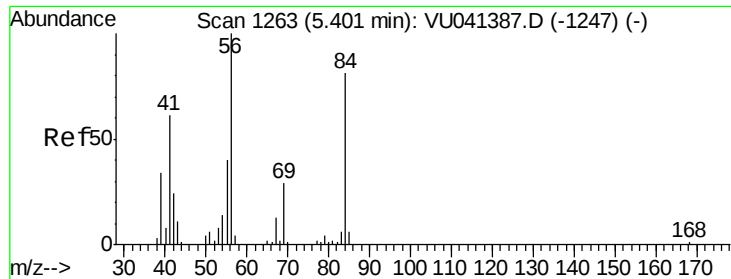
Tgt Ion: 83 Resp: 1134  
Ion Ratio Lower Upper  
83 100  
85 55.0 44.7 82.9



#27  
1,2-Dichloroethane  
Concen: 0.082 ug/L  
RT: 5.81 min Scan# 1389  
Delta R.T. 0.00 min  
Lab File: VU041390.D  
Acq: 23 Nov 2020 16:09

Tgt Ion: 62 Resp: 427  
Ion Ratio Lower Upper  
62 100  
98 0.0 6.0 9.0#

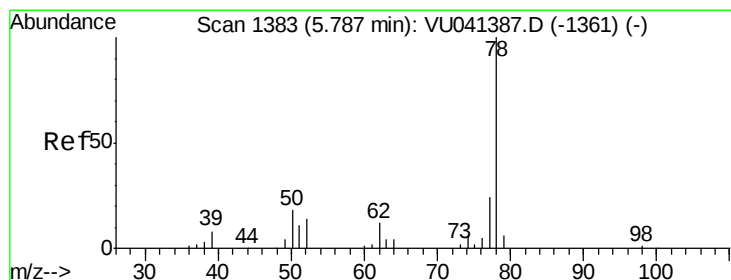
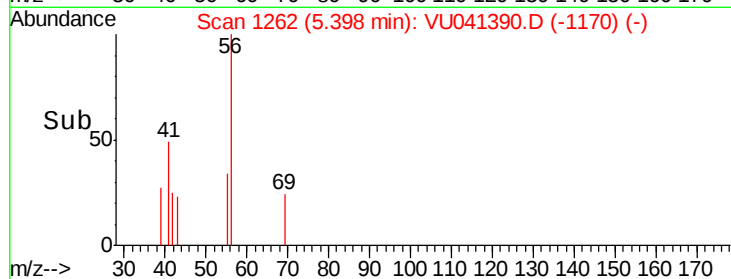
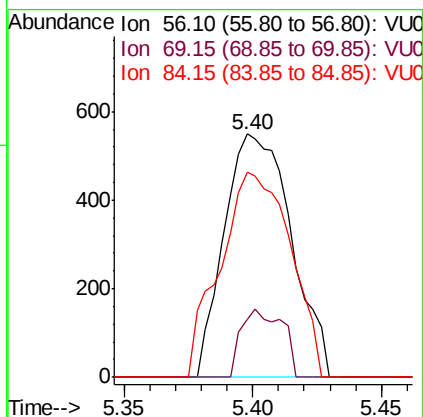
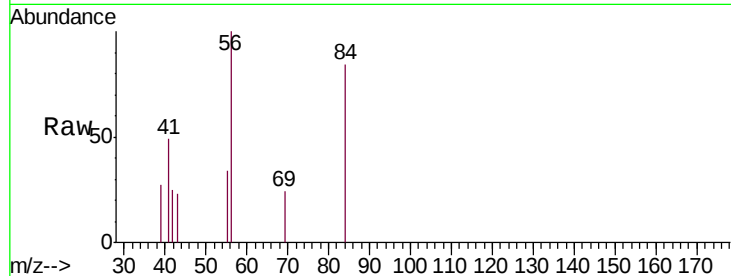




#30  
Cyclohexane  
Concen: 0.162 ug/L  
RT: 5.40 min Scan# 1262  
Delta R.T. -0.00 min  
Lab File: VU041390.D  
Acq: 23 Nov 2020 16:09

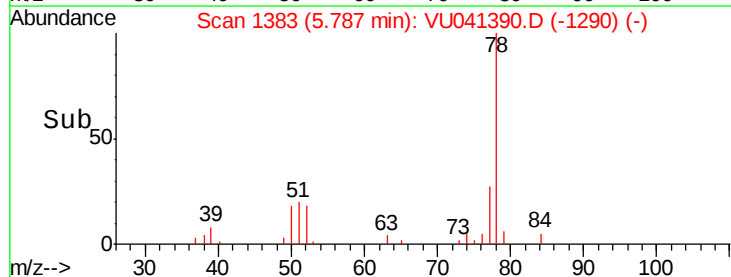
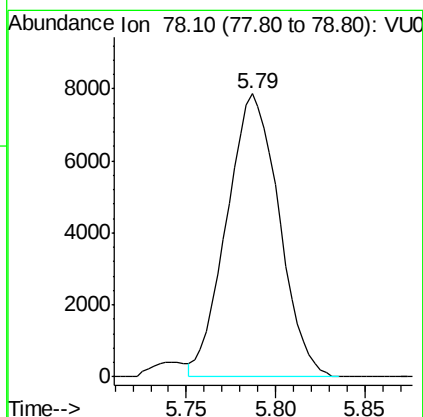
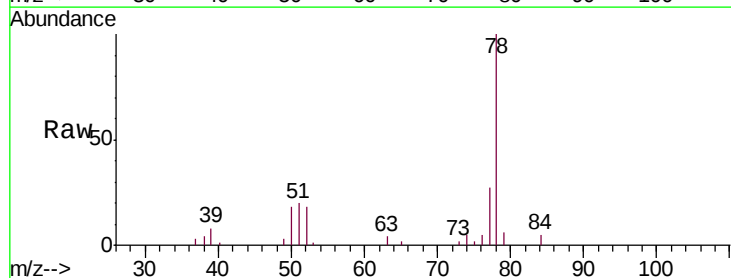
Instrument :  
MSVOA\_U  
ClientSampleId :  
H4423

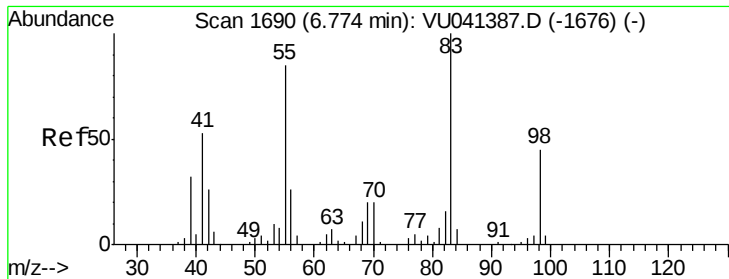
Tgt Ion: 56 Resp: 993  
Ion Ratio Lower Upper  
56 100  
69 17.2 23.8 35.6#  
84 88.7 64.6 97.0



#33  
Benzene  
Concen: 1.040 ug/L  
RT: 5.79 min Scan# 1383  
Delta R.T. 0.00 min  
Lab File: VU041390.D  
Acq: 23 Nov 2020 16:09

Tgt Ion: 78 Resp: 16053

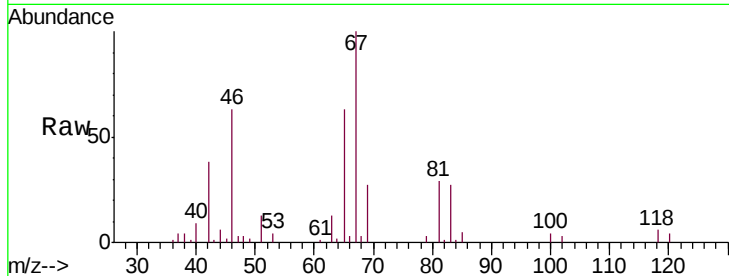




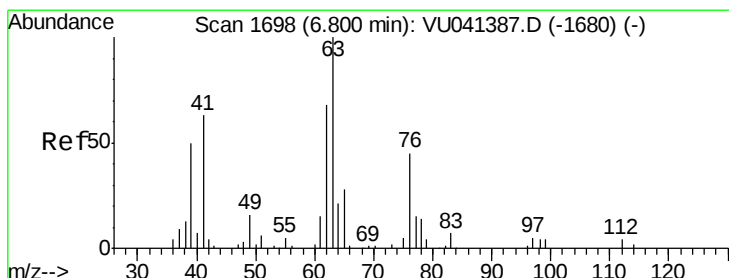
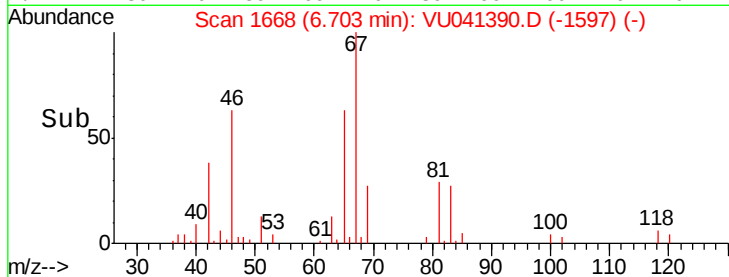
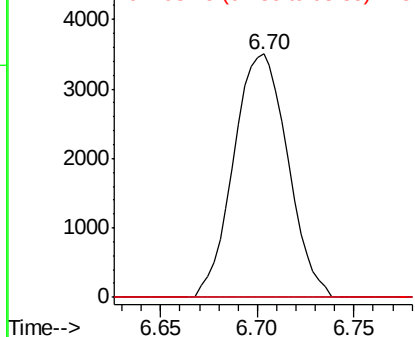
#35  
Methylcyclohexane  
Concen: 1.109 ug/L  
RT: 6.70 min Scan# 1668  
Delta R.T. -0.07 min  
Lab File: VU041390.D  
Acq: 23 Nov 2020 16:09

Instrument :  
MSVOA\_U  
ClientSampleId :  
H4423

Tgt Ion: 83 Resp: 6801  
Ion Ratio Lower Upper  
83 100  
55 0.0 68.4 102.6#  
98 0.0 36.5 54.7#

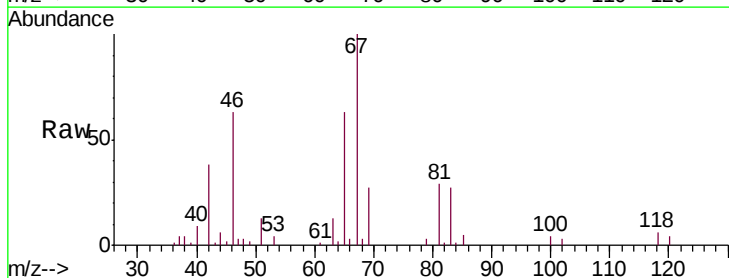


Abundance Ion 83.15 (82.85 to 83.85): VU0  
Ion 55.10 (54.80 to 55.80): VU0  
Ion 98.15 (97.85 to 98.85): VU0

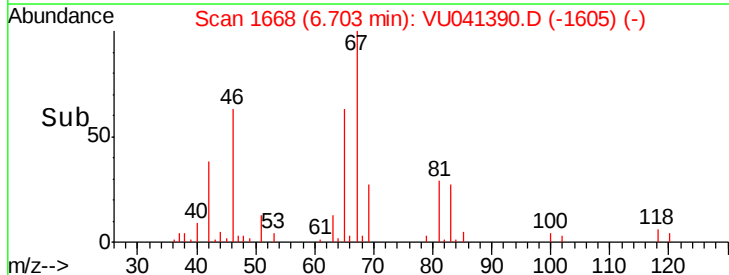
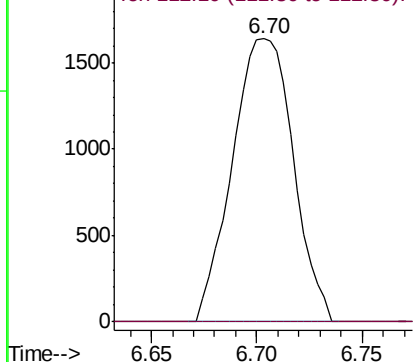


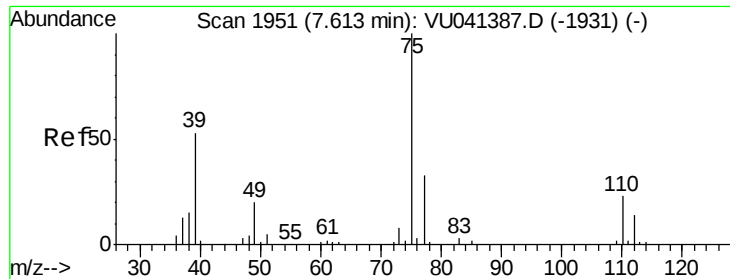
#37  
1,2-Dichloropropane  
Concen: 0.777 ug/L  
RT: 6.70 min Scan# 1668  
Delta R.T. -0.10 min  
Lab File: VU041390.D  
Acq: 23 Nov 2020 16:09

Tgt Ion: 63 Resp: 3293  
Ion Ratio Lower Upper  
63 100  
112 0.0 2.6 4.0#



Abundance Ion 63.10 (62.80 to 63.80): VU0  
Ion 112.10 (111.80 to 112.80): V

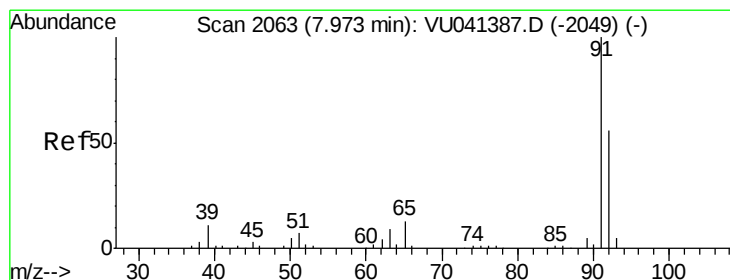
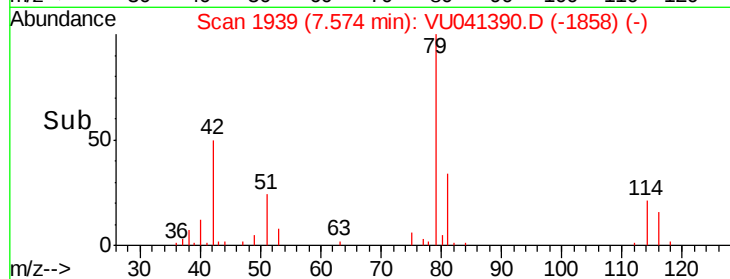
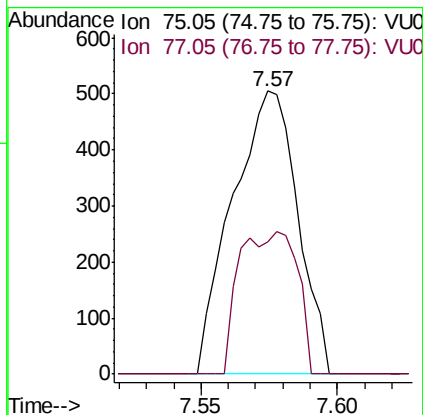
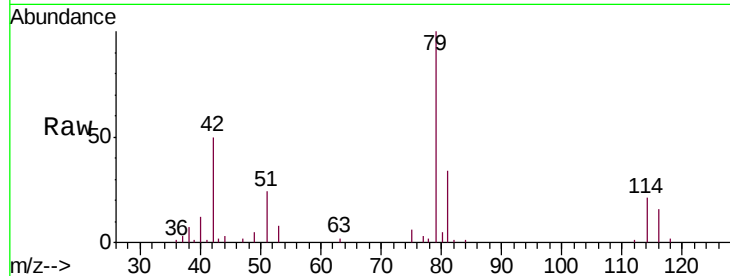




#39  
 cis-1,3-Dichloropropene  
 Concen: 0.143 ug/L  
 RT: 7.57 min Scan# 1939  
 Delta R.T. -0.04 min  
 Lab File: VU041390.D  
 Acq: 23 Nov 2020 16:09

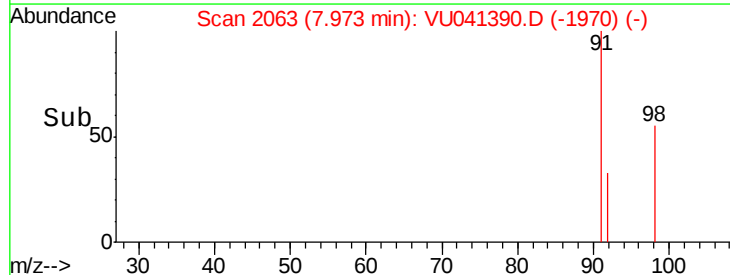
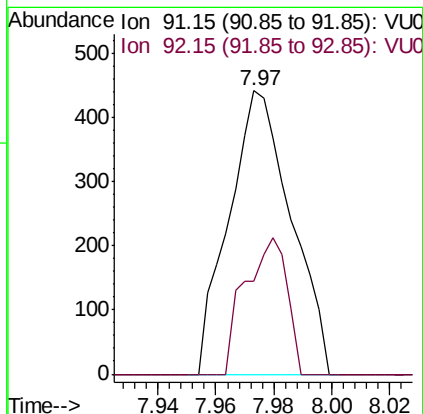
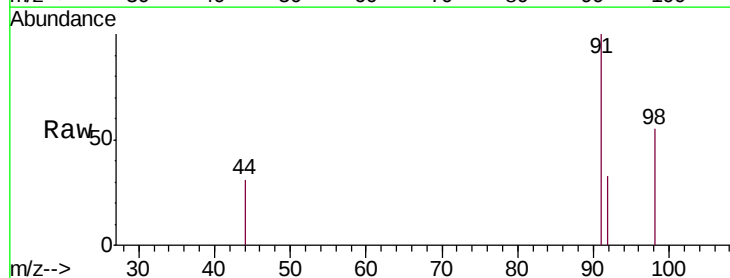
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 H4423

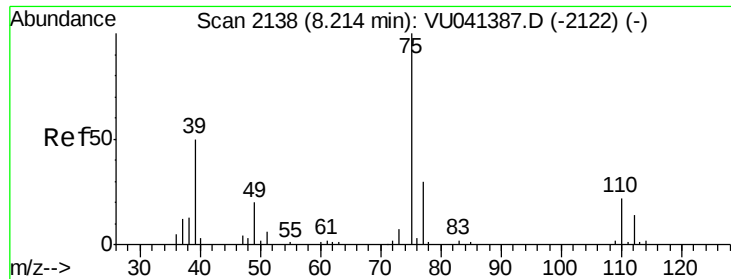
Tgt Ion: 75 Resp: 839  
 Ion Ratio Lower Upper  
 75 100  
 77 46.7 22.1 41.1#



#42  
 Toluene  
 Concen: 0.040 ug/L  
 RT: 7.97 min Scan# 2063  
 Delta R.T. 0.00 min  
 Lab File: VU041390.D  
 Acq: 23 Nov 2020 16:09

Tgt Ion: 91 Resp: 657  
 Ion Ratio Lower Upper  
 91 100  
 92 32.9 39.3 72.9#

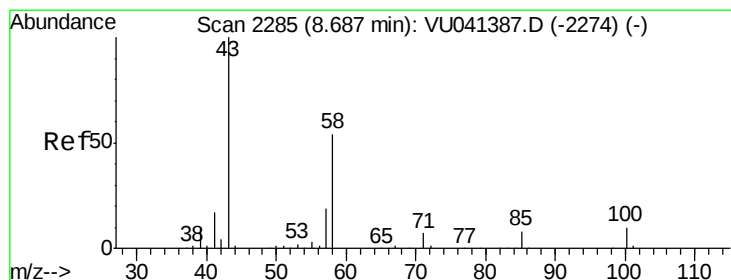
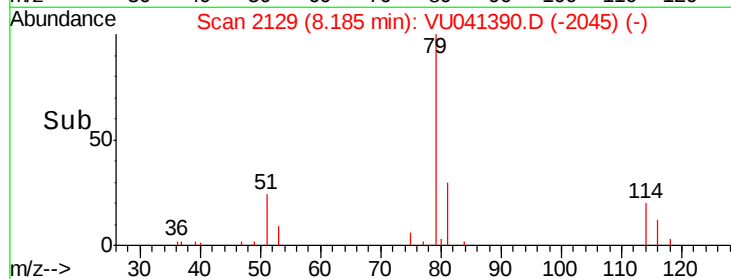
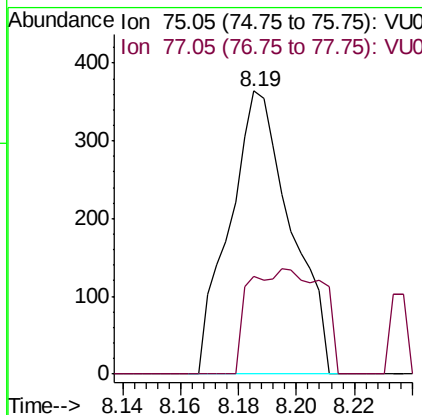
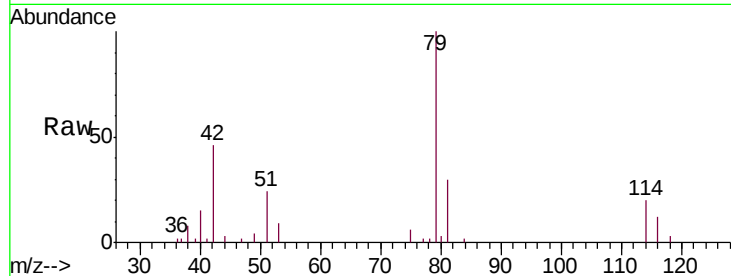




#44  
trans-1,3-Dichloropropene  
Concen: 0.100 ug/L  
RT: 8.19 min Scan# 2129  
Delta R.T. -0.03 min  
Lab File: VU041390.D  
Acq: 23 Nov 2020 16:09

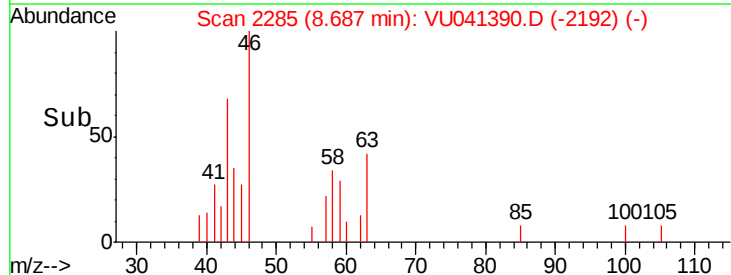
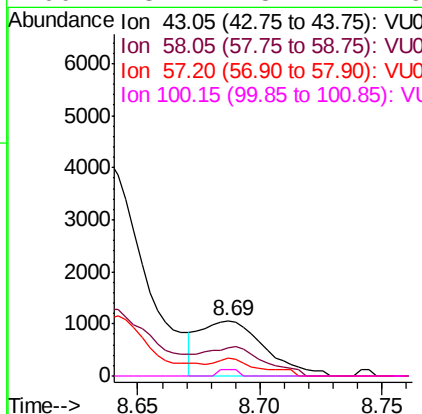
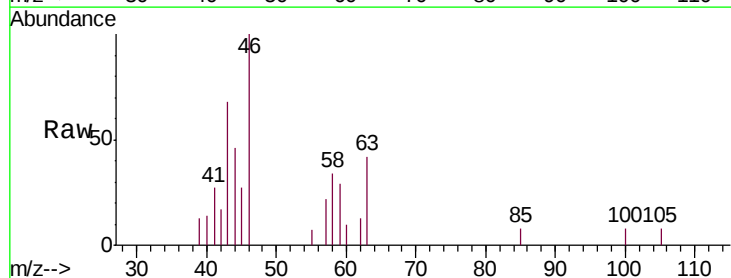
Instrument :  
MSVOA\_U  
ClientSampleId :  
H4423

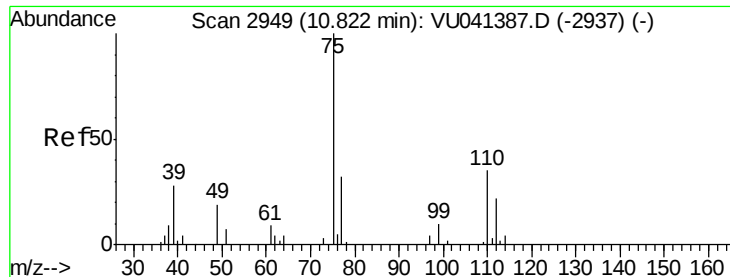
Tgt Ion: 75 Resp: 533  
Ion Ratio Lower Upper  
75 100  
77 34.3 21.7 40.3



#48  
2-Hexanone  
Concen: 1.026 ug/L  
RT: 8.69 min Scan# 2285  
Delta R.T. 0.00 min  
Lab File: VU041390.D  
Acq: 23 Nov 2020 16:09

Tgt Ion: 43 Resp: 1956  
Ion Ratio Lower Upper  
43 100  
58 46.4 42.0 63.0  
57 22.2 15.0 22.4  
100 3.4 8.4 12.6#





#59

1,2,3-Trichloropropane

Concen: 1.146 ug/L

RT: 11.81 min Scan# 3256

Delta R.T. 0.99 min

Lab File: VU041390.D

Acq: 23 Nov 2020 16:09

Instrument :

MSVOA\_U

ClientSampleId :

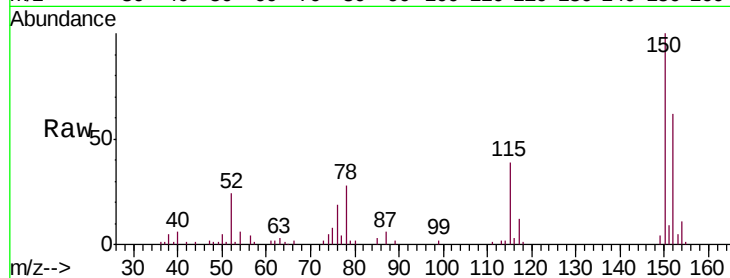
H4423

Tgt Ion: 75 Resp: 3172

Ion Ratio Lower Upper

75 100

77 42.9 25.1 37.7#



Abundance Ion 75.00 (74.70 to 75.70): VU041387.D (-2937) (-)

Ion 77.00 (76.70 to 77.70): VU041387.D (-2937) (-)

11.81

2000

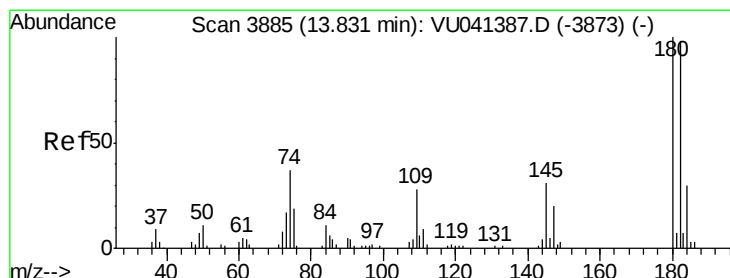
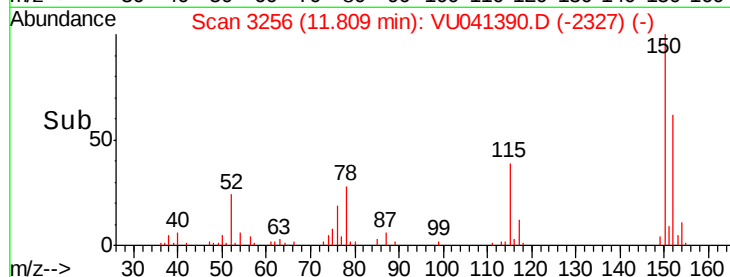
1500

1000

500

0

Time--> 11.75 11.80 11.85



#68

1,2,4-trichlorobenzene

Concen: 0.065 ug/L

RT: 13.83 min Scan# 3884

Delta R.T. -0.00 min

Lab File: VU041390.D

Acq: 23 Nov 2020 16:09

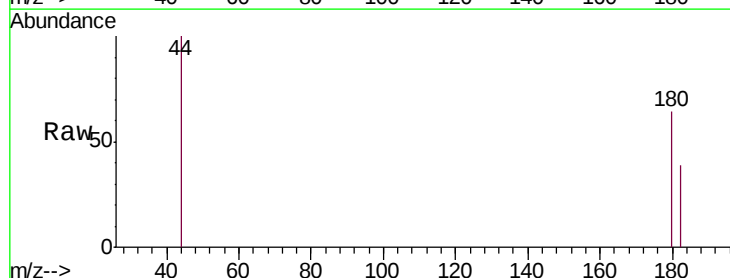
Tgt Ion: 180 Resp: 256

Ion Ratio Lower Upper

180 100

182 70.7 76.0 114.0#

145 0.0 25.7 38.5#



Abundance Ion 179.90 (179.60 to 180.60): VU041387.D (-3873) (-)

Ion 182.00 (181.70 to 182.70): VU041387.D (-3873) (-)

Ion 144.95 (144.65 to 145.65): VU041387.D (-3873) (-)

300

250

200

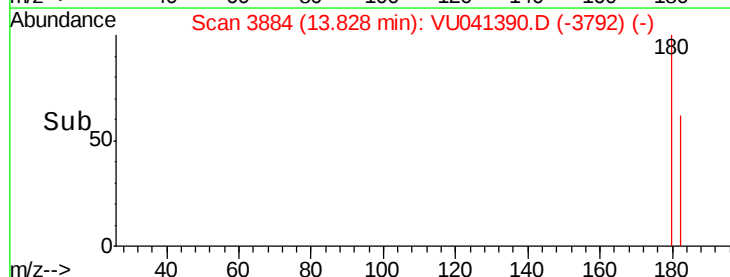
150

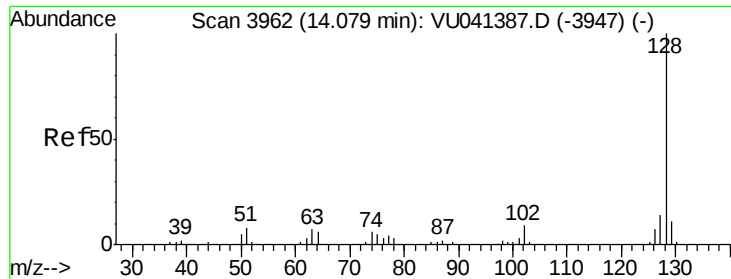
100

50

0

Time--> 13.80 13.82 13.84 13.86





#69

Naphthalene

Concen: 0.077 ug/L

RT: 14.08 min Scan# 3962

Delta R.T. 0.00 min

Lab File: VU041390.D

Acq: 23 Nov 2020 16:09

Instrument :

MSVOA\_U

ClientSampleId :

H4423

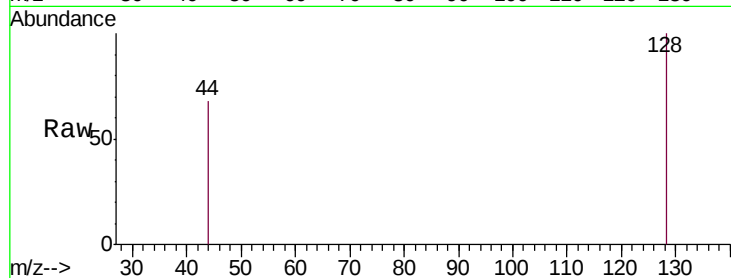
Tgt Ion:128 Resp: 481

Ion Ratio Lower Upper

128 100

129 0.0 8.3 12.5#

127 0.0 10.7 16.1#



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

