

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL100915\  
 Data File : VL026192.D  
 Acq On : 10 Oct 2015 1:36  
 Operator : SY/MD  
 Sample : G3973-01  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Quant Time: Oct 10 02:11:47 2015  
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL100915AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Oct 09 16:23:14 2015  
 QLast Update : Fri Oct 09 16:23:14 2015  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 6.66  | 49   | 304925   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 8.40  | 114  | 352633   | 10.00 | ppbv  | 0.07     |
| 55) Chlorobenzene-d5    | 14.07 | 117  | 145252   | 10.00 | ppbv  | 0.30     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 16.66  | 95    | 899      | 0.08     | ppbv | 0.35   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 0.80%# |

| Target Compounds               |       |     |          |         |        | Ovalue |
|--------------------------------|-------|-----|----------|---------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.64  | 85  | 22558    | 0.39    | ppbv   | 97     |
| 3) Chlorodifluoromethane       | 3.56  | 51  | 133381   | 3.75    | ppbv # | 84     |
| 4) Chloromethane               | 3.75  | 50  | 3962     | 0.20    | ppbv   | 91     |
| 6) Bromomethane                | 4.14  | 94  | 1719     | 0.12    | ppbv   | 94     |
| 7) Chloroethane                | 4.60  | 64  | 1672     | 0.19    | ppbv # | 1      |
| 9) Propene                     | 3.59  | 41  | 90433    | 5.53    | ppbv   | 90     |
| 10) Heptane                    | 9.34  | 43  | 2440475  | 42.94   | ppbv # | 1      |
| 11) Trichlorofluoromethane     | 4.70  | 101 | 16648    | 0.30    | ppbv   | 99     |
| 12) 1,1,2-Trichlorotrifluoroet | 5.33  | 101 | 3614     | 0.10    | ppbv   | 88     |
| 13) Ethanol                    | 4.34  | 45  | 68414    | 28.44   | ppbv   | 96     |
| 15) Acetone                    | 4.61  | 43  | 9741262  | 247.16  | ppbv # | 76     |
| 16) 1,3-Butadiene              | 3.94  | 39  | 131831   | 7.24    | ppbv # | 15     |
| 17) tert-Butyl alcohol         | 5.17  | 59  | 16428    | 0.69    | ppbv # | 71     |
| 19) Isopropyl Alcohol          | 4.78  | 45  | 69747    | 4.54    | ppbv # | 94     |
| 20) Methylene Chloride         | 5.17  | 84  | 18512    | 1.10    | ppbv # | 14     |
| 21) Allyl Chloride             | 5.18  | 41  | 1685405  | 65.52   | ppbv # | 62     |
| 23) Vinyl Acetate              | 6.07  | 43  | 54381772 | 779.58  | ppbv # | 15     |
| 24) 1,1-Dichloroethane         | 5.99  | 63  | 108135   | 2.27    | ppbv # | 85     |
| 25) Ethyl Acetate              | 6.76  | 43  | 26669734 | 349.94  | ppbv # | 77     |
| 26) Hexane                     | 6.77  | 57  | 30623455 | 829.65  | ppbv # | 14     |
| 27) Carbon Disulfide           | 5.40  | 76  | 39930    | 0.90    | ppbv # | 1      |
| 28) Methyl tert-Butyl Ether    | 5.98  | 73  | 138339   | 2.32    | ppbv # | 54     |
| 29) Chloroform                 | 6.75  | 83  | 5286     | 0.10    | ppbv   | 84     |
| 30) Cyclohexane                | 8.40  | 84  | 42492831 | 1208.28 | ppbv # | 49     |
| 31) cis-1,2-Dichloroethene     | 6.48  | 61  | 11726    | 0.35    | ppbv # | 21     |
| 34) 2-Butanone                 | 6.38  | 43  | 16355373 | 833.26  | ppbv # | 54     |
| 35) Carbon Tetrachloride       | 8.24  | 117 | 924      | 0.04    | ppbv # | 41     |
| 36) Benzene                    | 8.10  | 78  | 25813757 | 765.39  | ppbv # | 70     |
| 37) 1,2-Dichloroethane         | 7.48  | 62  | 141793   | 7.85    | ppbv # | 1      |
| 39) 1,2-Dichloropropane        | 8.90  | 63  | 5563     | 0.44    | ppbv # | 1      |
| 40) 1,4-Dioxane                | 9.07  | 88  | 324      | 0.16    | ppbv # | 1      |
| 41) Tetrahydrofuran            | 7.22  | 42  | 490228   | 44.34   | ppbv # | 38     |
| 42) Bromodichloromethane       | 9.18  | 83  | 4758607  | 200.12  | ppbv # | 29     |
| 43) Methyl Methacrylate        | 9.35  | 69  | 145680   | 12.26   | ppbv # | 1      |
| 44) 2,2,4-Trimethylpentane     | 9.41  | 57  | 27455163 | 489.59  | ppbv # | 54     |
| 45) t-1,3-Dichloropropene      | 10.75 | 75  | 1312     | 0.08    | ppbv # | 1      |
| 46) cis-1,3-Dichloropropene    | 10.10 | 75  | 1516     | 0.08    | ppbv # | 1      |
| 47) 1,1,2-Trichloroethane      | 10.88 | 97  | 2099081  | 139.67  | ppbv # | 1      |
| 48) Dibromochloromethane       | 11.91 | 129 | 2146     | 0.10    | ppbv # | 10     |
| 50) 4-Methyl-2-Pentanone       | 9.87  | 43  | 1898324  | 73.14   | ppbv # | 37     |
| 51) 2-Hexanone                 | 11.74 | 43  | 42583884 | 1824.92 | ppbv # | 30     |

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 Response via : Initial Calibration

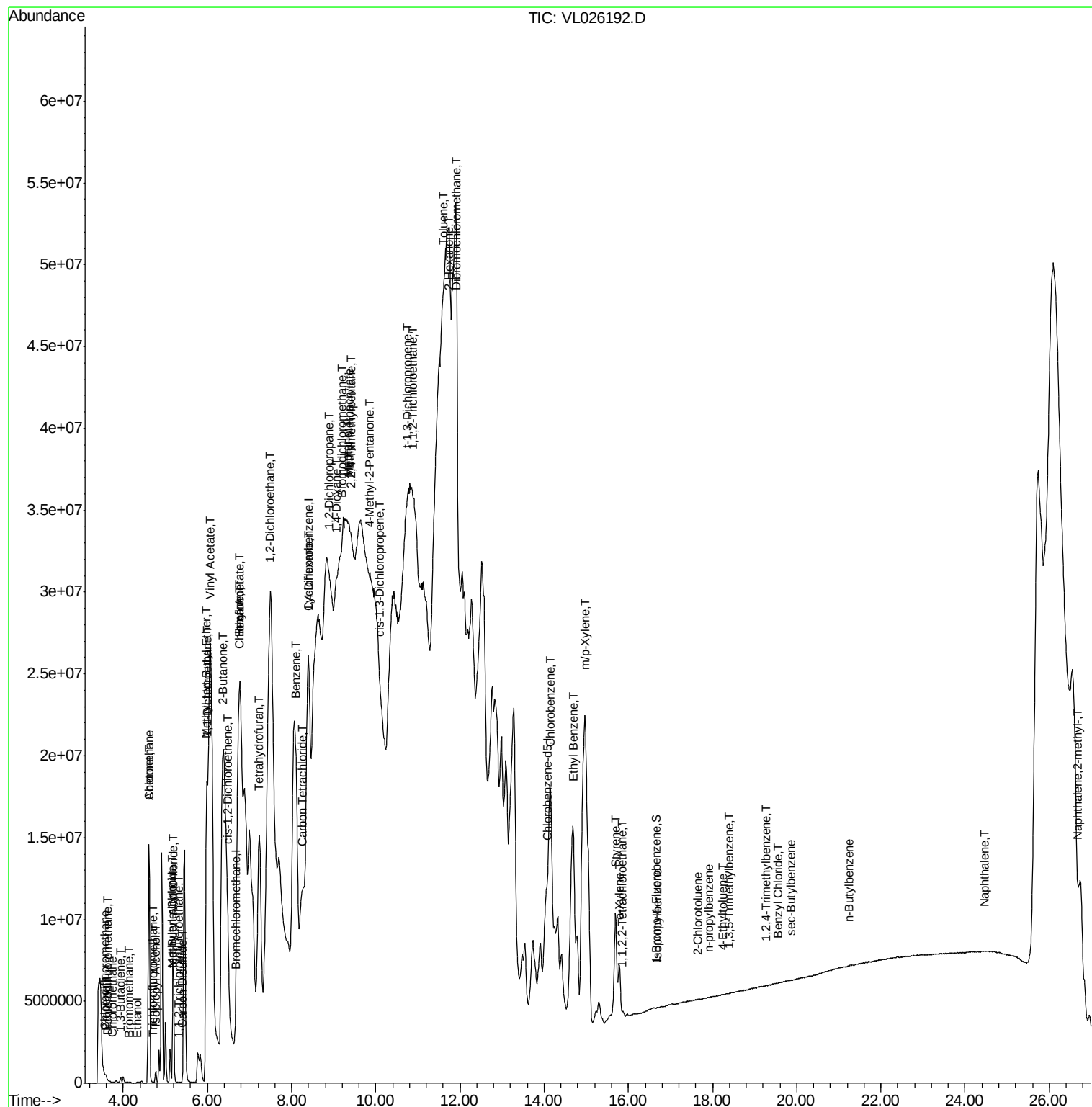
| Internal Standards            | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|---------|--------|----------|
| -----                         |       |      |          |         |        |          |
| 53) Toluene                   | 11.60 | 91   | 72341935 | 1664.53 | ppbv # | 47       |
| 57) Chlorobenzene             | 14.16 | 112  | 4343727  | 331.33  | ppbv # | 34       |
| 58) Ethyl Benzene             | 14.69 | 91   | 35789533 | 1696.32 | ppbv # | 71       |
| 59) m/p-Xylene                | 14.97 | 91   | 46435027 | 2742.51 | ppbv # | 77       |
| 60) o-Xylene                  | 15.79 | 91   | 3953213  | 222.80  | ppbv # | 85       |
| 61) Styrene                   | 15.69 | 104  | 253611   | 34.94   | ppbv # | 1        |
| 62) Isopropylbenzene          | 16.69 | 105  | 71590    | 3.06    | ppbv # | 90       |
| 63) 1,1,2,2-Tetrachloroethane | 15.85 | 83   | 56207    | 4.26    | ppbv # | 25       |
| 64) n-propylbenzene           | 17.91 | 120  | 2331     | 0.37    | ppbv # | 1        |
| 66) Benzyl Chloride           | 19.55 | 91   | 7959     | 1.30    | ppbv # | 64       |
| 67) sec-Butylbenzene          | 19.86 | 105  | 4144     | 0.14    | ppbv # | 57       |
| 70) n-Butylbenzene            | 21.25 | 91   | 38873    | 1.76    | ppbv # | 65       |
| 71) 2-Chlorotoluene           | 17.65 | 91   | 8510     | 0.50    | ppbv # | 93       |
| 72) 4-Ethyltoluene            | 18.24 | 105  | 734      | 0.04    | ppbv # | 1        |
| 73) 1,3,5-Trimethylbenzene    | 18.39 | 105  | 2260     | 0.13    | ppbv # | 44       |
| 74) 1,2,4-Trimethylbenzene    | 19.27 | 105  | 1270     | 0.07    | ppbv # | 46       |
| 79) Naphthalene               | 24.47 | 128  | 621      | 0.05    | ppbv # | 20       |
| 80) Naphthalene,2-methyl-     | 26.68 | 142  | 33654    | 12.80   | ppbv # | 1        |
| -----                         |       |      |          |         |        |          |

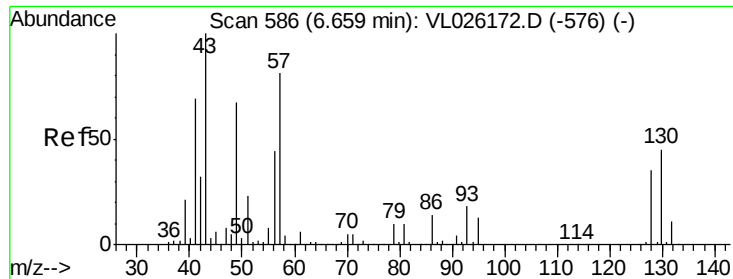
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 6.66 min Scan# 586

Delta R.T. 0.00 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

ClientSampleId :

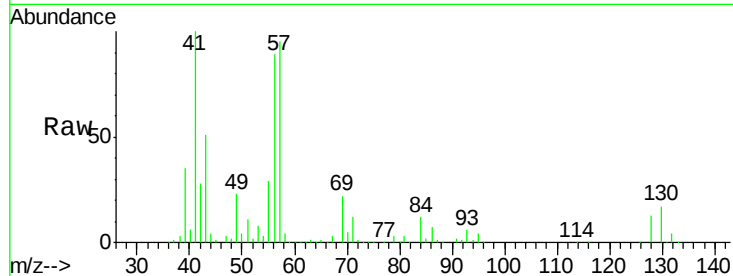
Tot Ion: 49 Resp: 304925

Ion Ratio Lower Upper

49 100

128 58.4 26.3 78.8

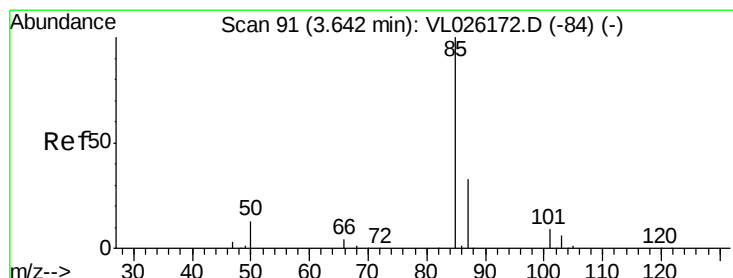
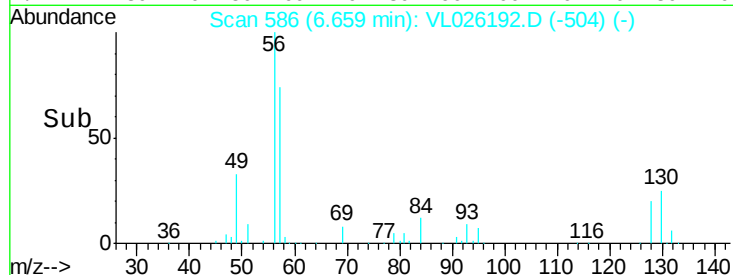
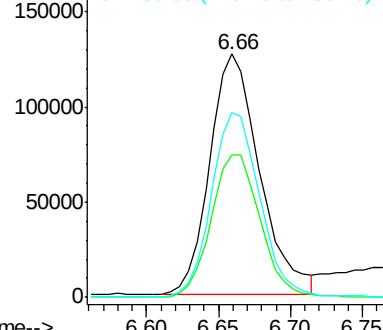
130 74.3 34.2 102.5



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.39 ppbv

RT: 3.64 min Scan# 90

Delta R.T. -0.01 min

Lab File: VL026192.D

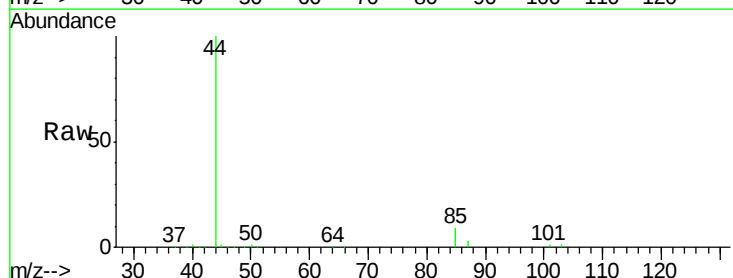
Acq: 10 Oct 2015 1:36

Tgt Ion: 85 Resp: 22558

Ion Ratio Lower Upper

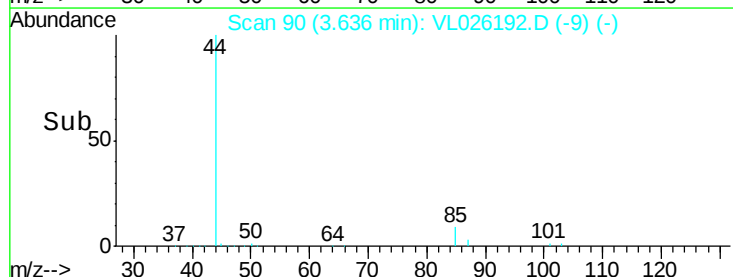
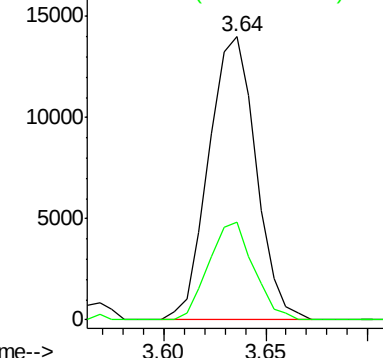
85 100

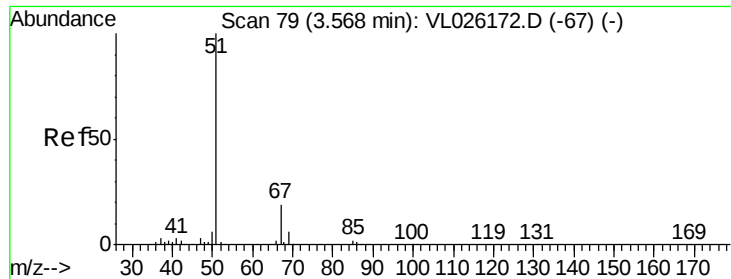
87 34.7 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 3.75 ppbv

RT: 3.56 min Scan# 78

Delta R.T. -0.01 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

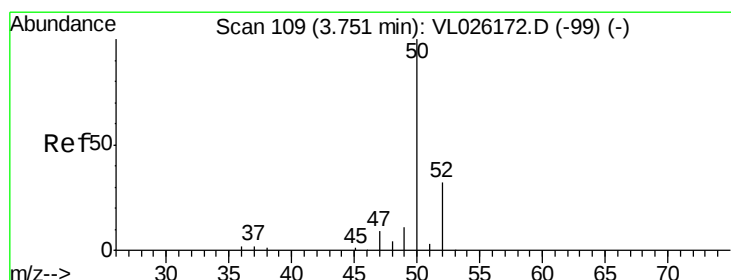
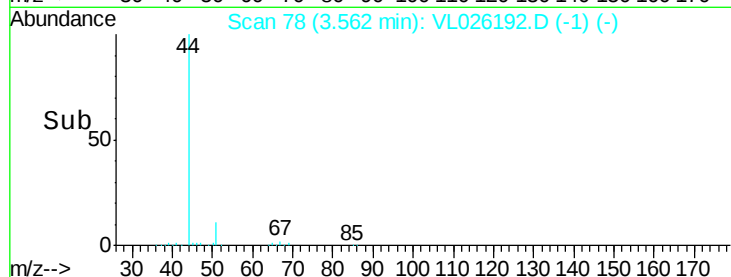
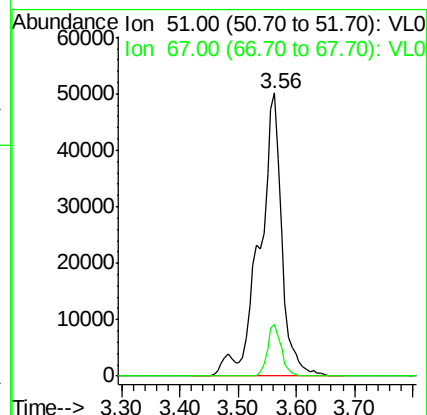
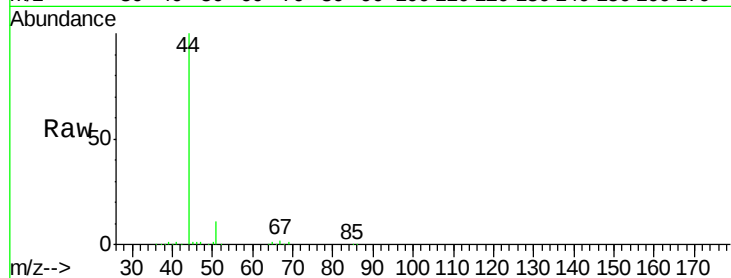
ClientSampleId :

Tot Ion: 51 Resp: 133381

Ion Ratio Lower Upper

51 100

67 11.5 14.9 22.3#



#4

Chloromethane

Concen: 0.20 ppbv

RT: 3.75 min Scan# 108

Delta R.T. -0.01 min

Lab File: VL026192.D

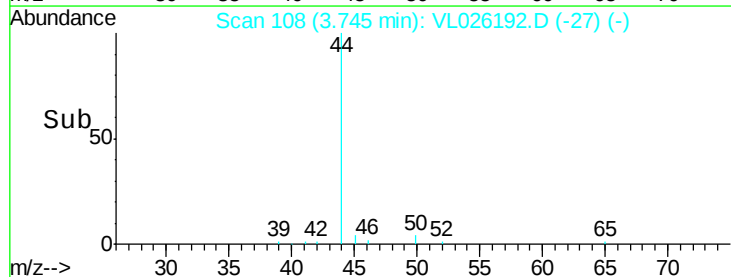
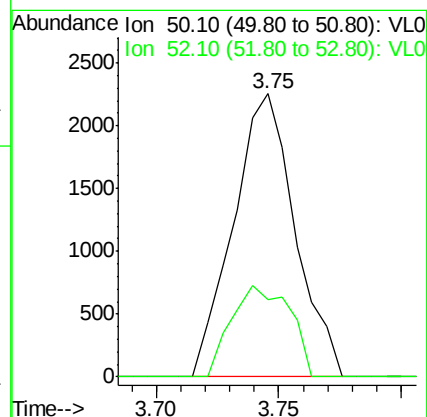
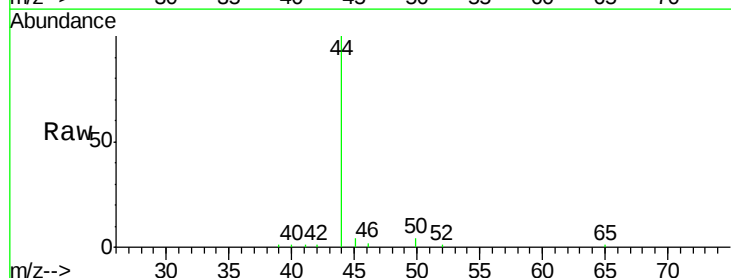
Acq: 10 Oct 2015 1:36

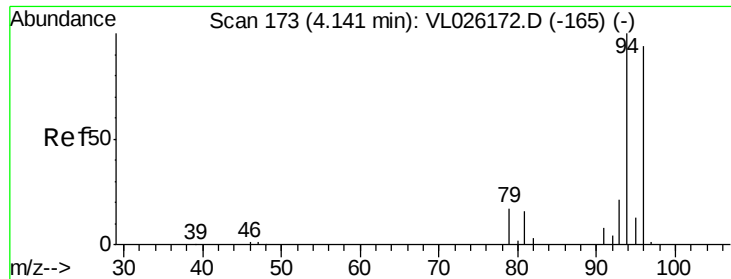
Tgt Ion: 50 Resp: 3962

Ion Ratio Lower Upper

50 100

52 27.5 25.9 38.9





#6

Bromomethane

Concen: 0.12 ppbv

RT: 4.14 min Scan# 172

Delta R.T. -0.01 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

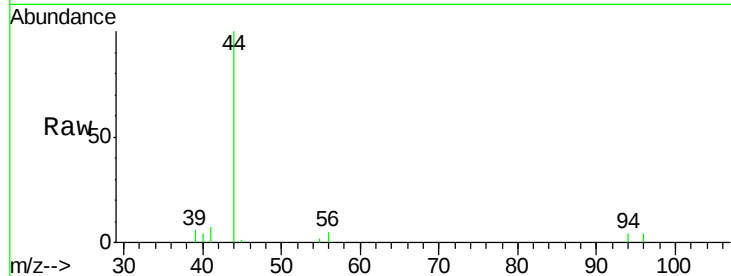
ClientSampled :

Tot Ion: 94 Resp: 1719

Ion Ratio Lower Upper

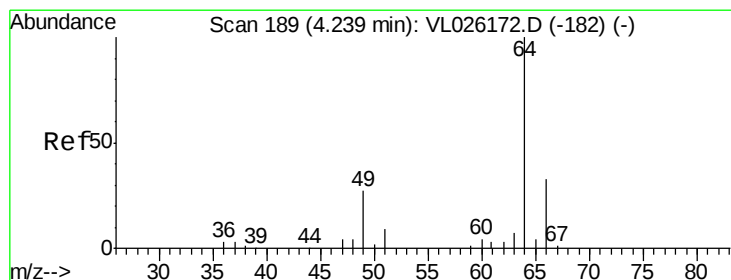
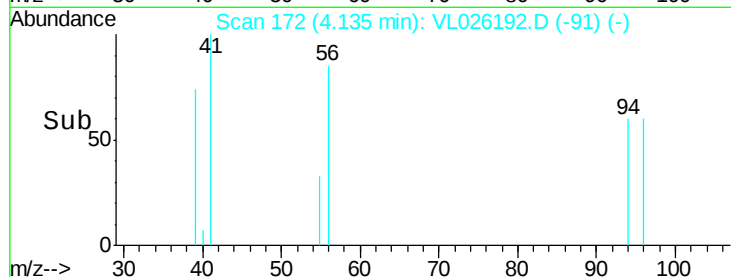
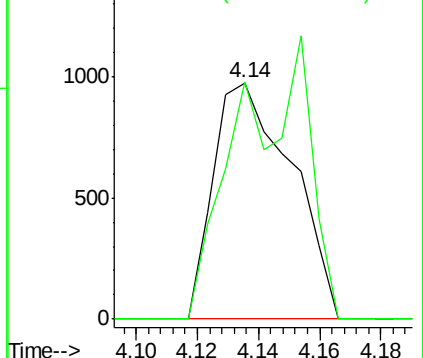
94 100

96 100.4 75.4 113.2



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0



#7

Chloroethane

Concen: 0.19 ppbv

RT: 4.60 min Scan# 249

Delta R.T. 0.37 min

Lab File: VL026192.D

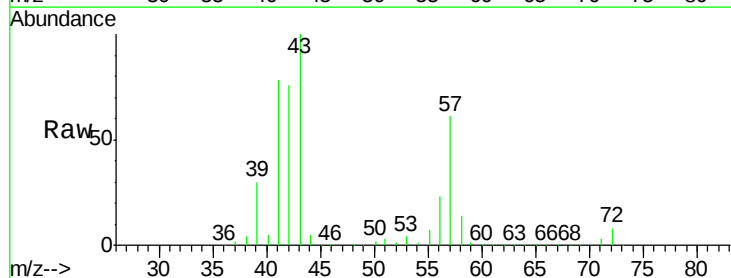
Acq: 10 Oct 2015 1:36

Tgt Ion: 64 Resp: 1672

Ion Ratio Lower Upper

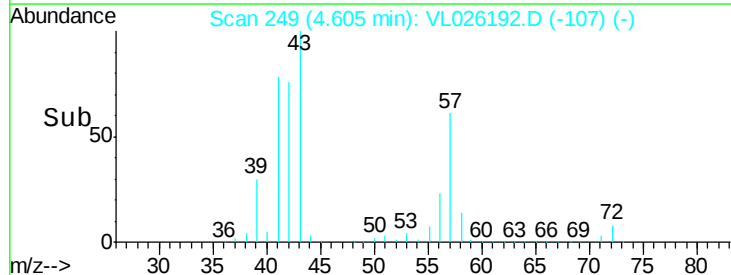
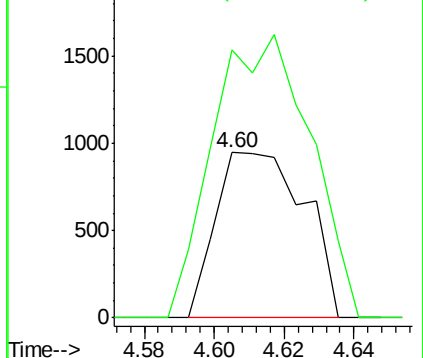
64 100

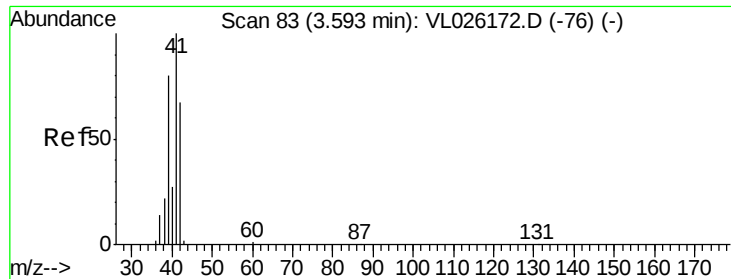
66 161.6 26.5 39.7#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0





#9

Propene

Concen: 5.53 ppbv

RT: 3.59 min Scan# 82

Delta R.T. -0.01 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

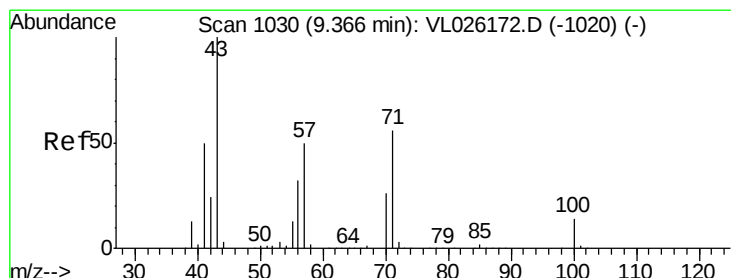
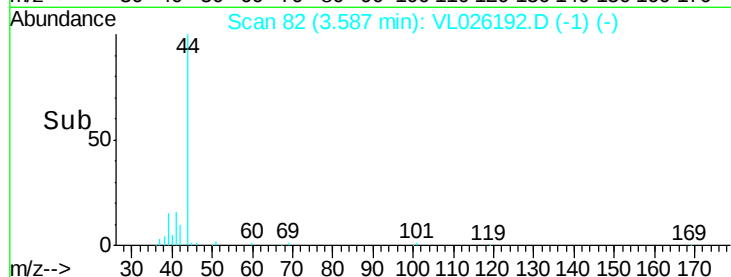
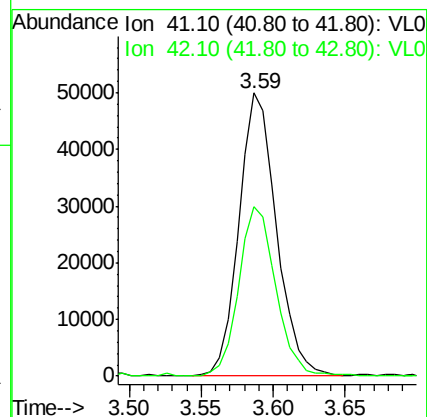
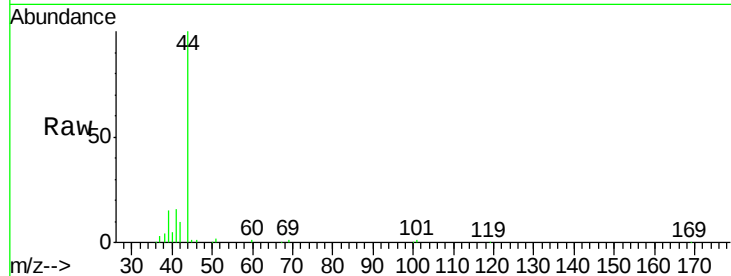
ClientSampled :

Tot Ion: 41 Resp: 90433

Ion Ratio Lower Upper

41 100

42 59.3 53.6 80.4



#10

Heptane

Concen: 42.94 ppbv

RT: 9.34 min Scan# 1025

Delta R.T. -0.03 min

Lab File: VL026192.D

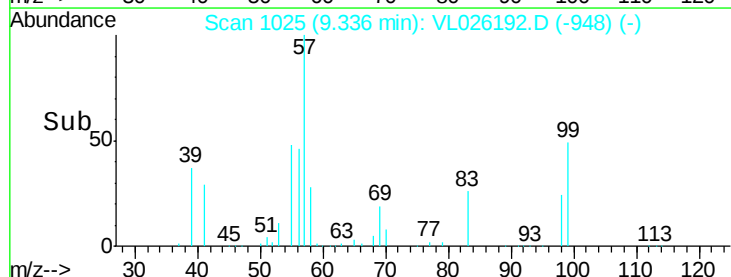
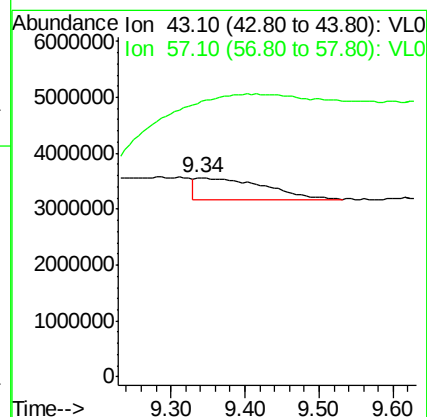
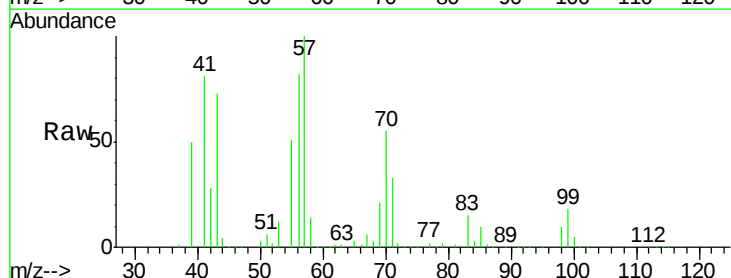
Acq: 10 Oct 2015 1:36

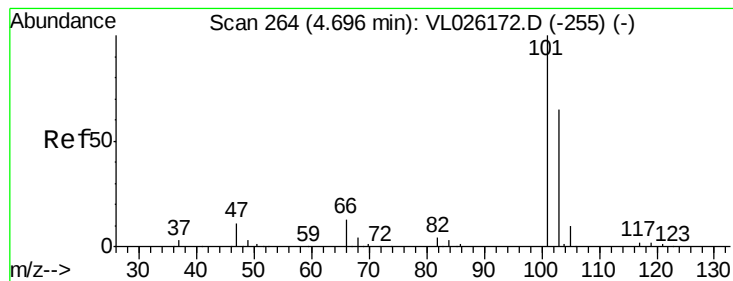
Tgt Ion: 43 Resp: 2440475

Ion Ratio Lower Upper

43 100

57 2051.1 41.8 62.8#





#11

Trichlorofluoromethane

Concen: 0.30 ppbv

RT: 4.70 min Scan# 265

Delta R.T. 0.01 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

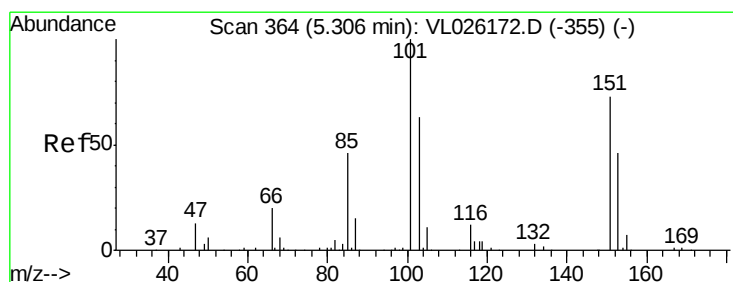
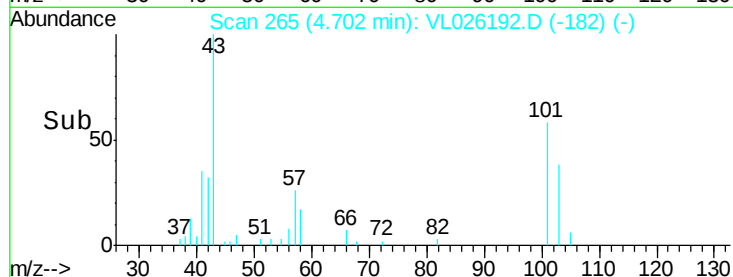
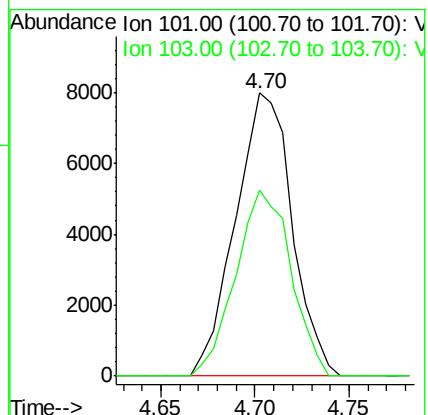
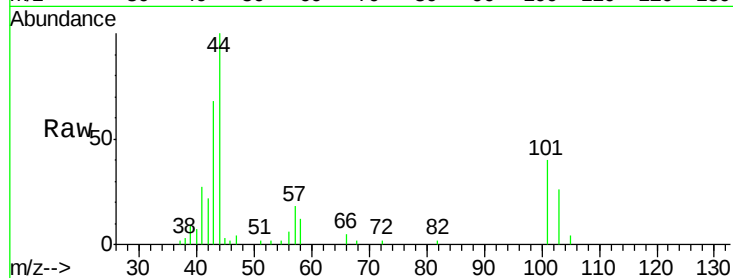
ClientSampleId :

Tot Ion:101 Resp: 16648

Ion Ratio Lower Upper

101 100

103 65.6 51.9 77.9



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.10 ppbv

RT: 5.33 min Scan# 368

Delta R.T. 0.02 min

Lab File: VL026192.D

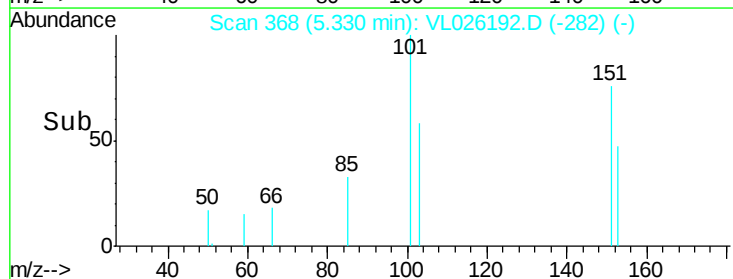
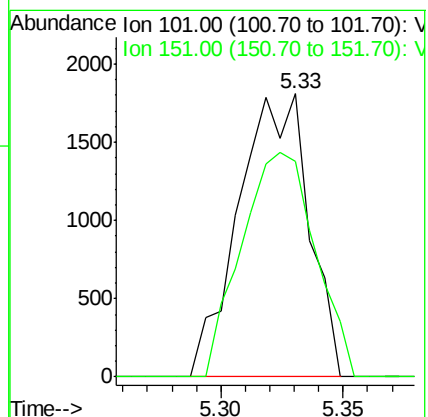
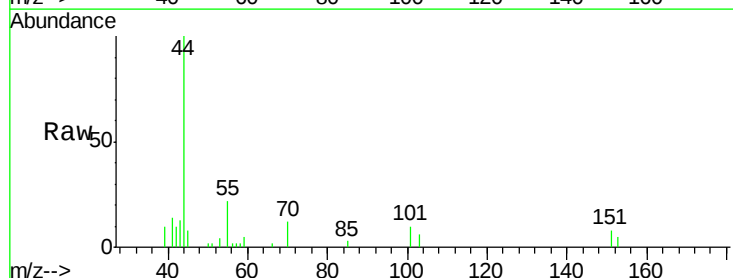
Acq: 10 Oct 2015 1:36

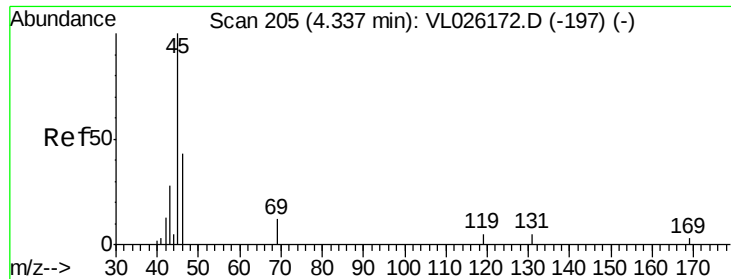
Tgt Ion:101 Resp: 3614

Ion Ratio Lower Upper

101 100

151 83.7 59.0 88.6





#13

Ethanol

Concen: 28.44 ppbv

RT: 4.34 min Scan# 205

Delta R.T. 0.00 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

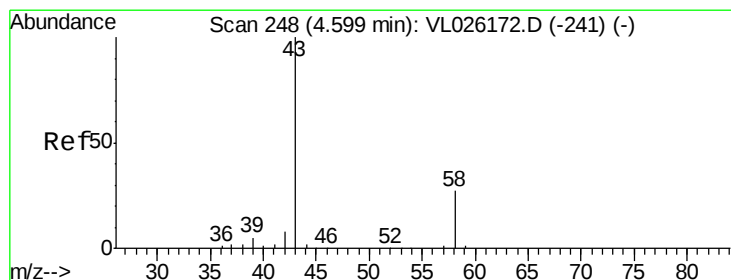
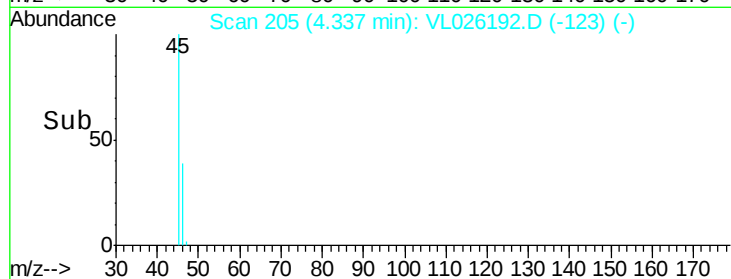
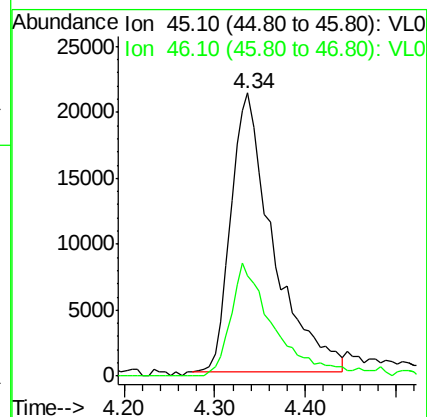
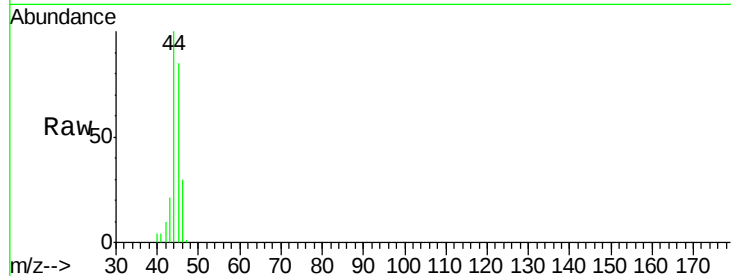
ClientSampleId :

Tot Ion: 45 Resp: 68414

Ion Ratio Lower Upper

45 100

46 42.8 18.1 72.5



#15

Acetone

Concen: 247.16 ppbv

RT: 4.61 min Scan# 250

Delta R.T. 0.01 min

Lab File: VL026192.D

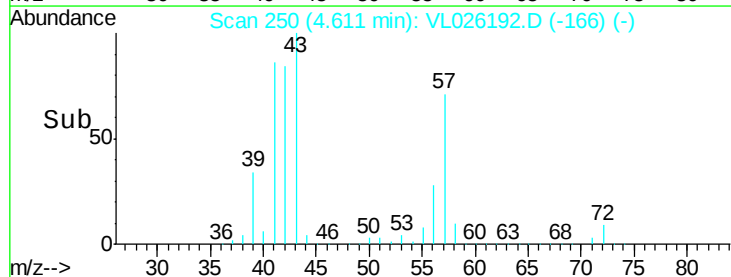
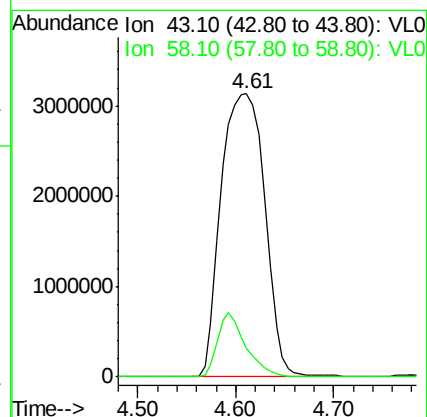
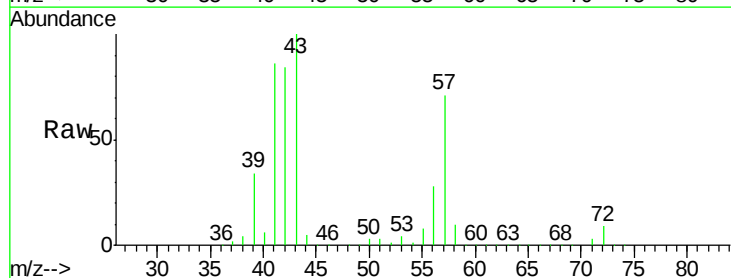
Acq: 10 Oct 2015 1:36

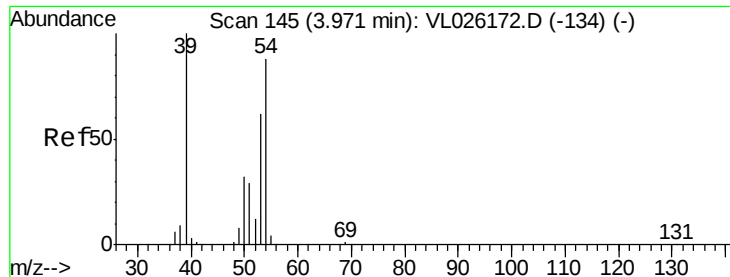
Tgt Ion: 43 Resp: 9741262

Ion Ratio Lower Upper

43 100

58 14.8 22.0 33.0#

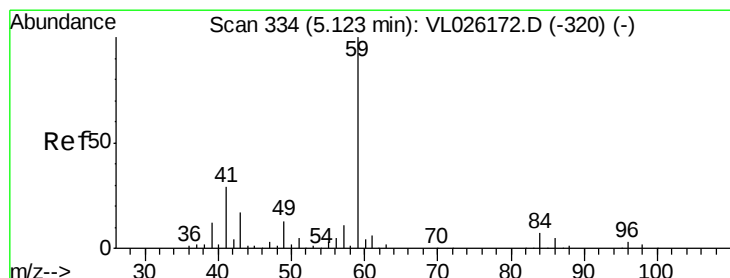
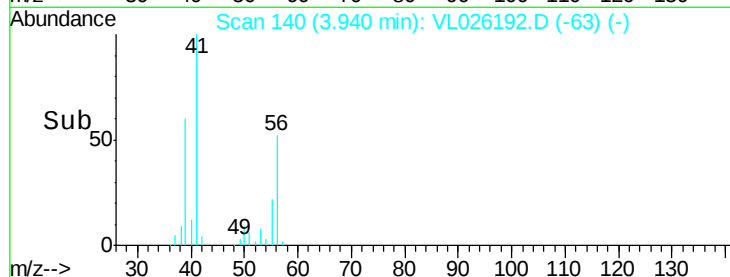
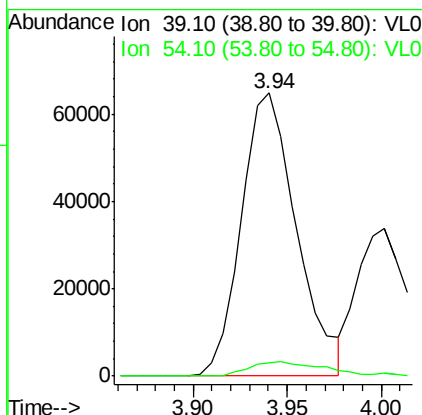
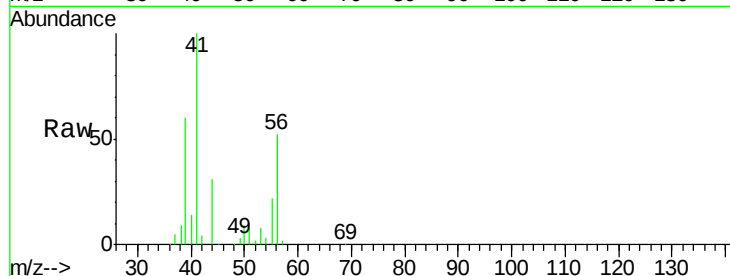




#16  
 1,3-Butadiene  
 Concen: 7.24 ppbv  
 RT: 3.94 min Scan# 140  
 Delta R.T. -0.03 min  
 Lab File: VL026192.D  
 Acq: 10 Oct 2015 1:36

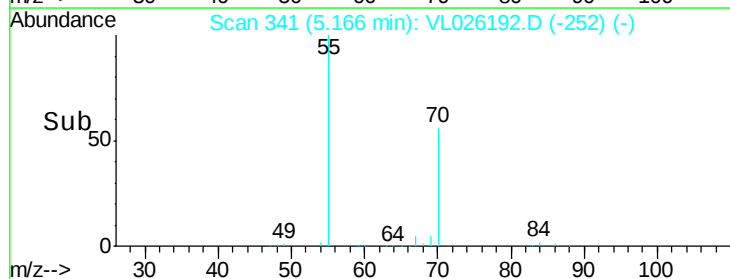
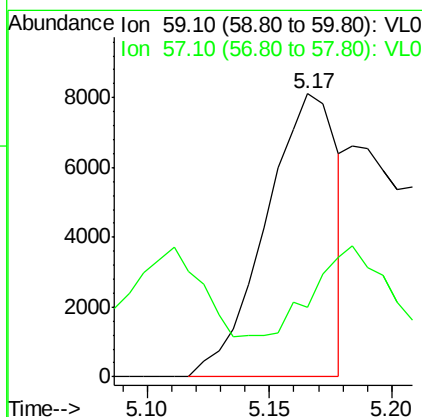
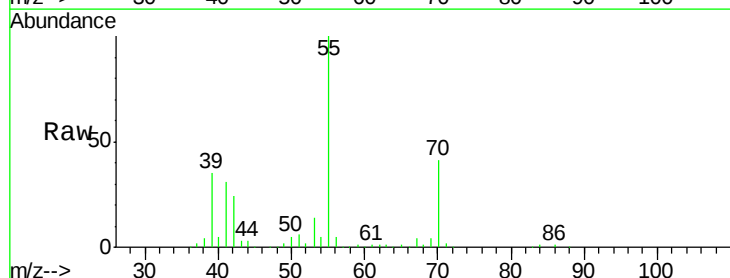
Instrument :  
 MSVOA\_L  
 ClientSampleId :

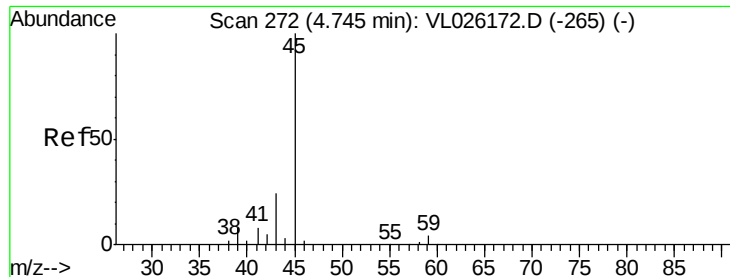
Tot Ion: 39 Resp: 131831  
 Ion Ratio Lower Upper  
 39 100  
 54 7.0 67.9 101.9#



#17  
 tert-Butyl alcohol  
 Concen: 0.69 ppbv  
 RT: 5.17 min Scan# 341  
 Delta R.T. 0.04 min  
 Lab File: VL026192.D  
 Acq: 10 Oct 2015 1:36

Tgt Ion: 59 Resp: 16428  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 8.8 13.2#





#19

Isopropyl Alcohol

Concen: 4.54 ppbv

RT: 4.78 min Scan# 277

Delta R.T. 0.03 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

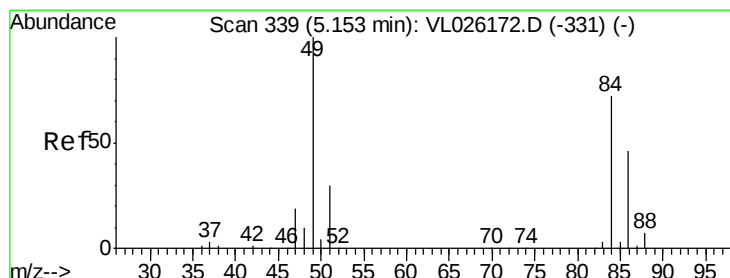
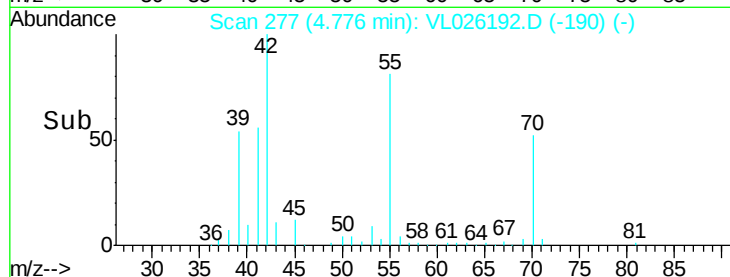
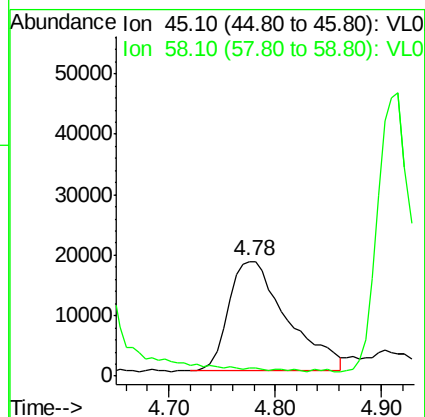
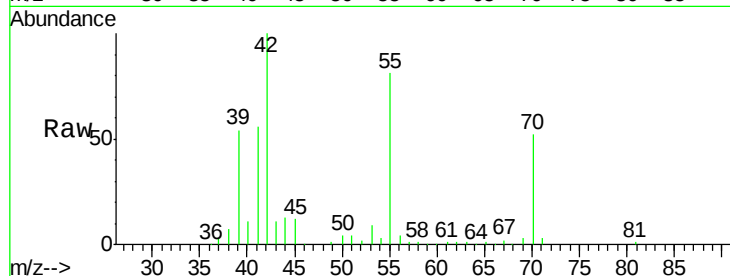
ClientSampled :

Tot Ion: 45 Resp: 69747

Ion Ratio Lower Upper

45 100

58 0.0 1.7 2.5#



#20

Methylene Chloride

Concen: 1.10 ppbv

RT: 5.17 min Scan# 341

Delta R.T. 0.01 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Tgt Ion: 84 Resp: 18512

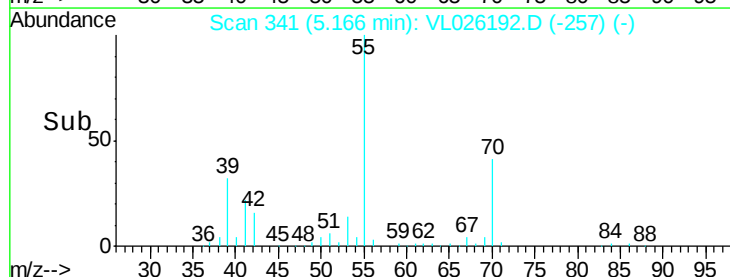
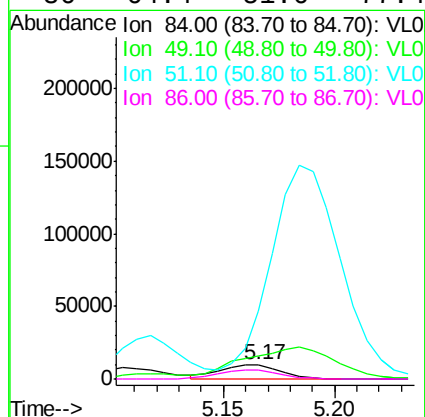
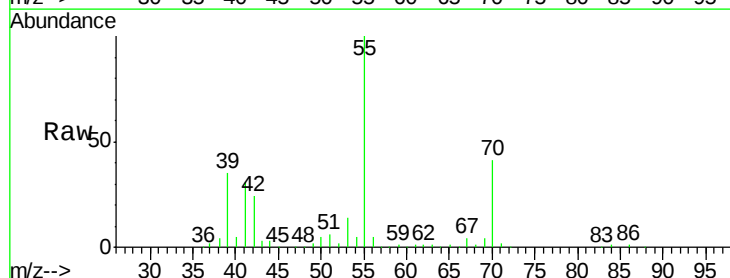
Ion Ratio Lower Upper

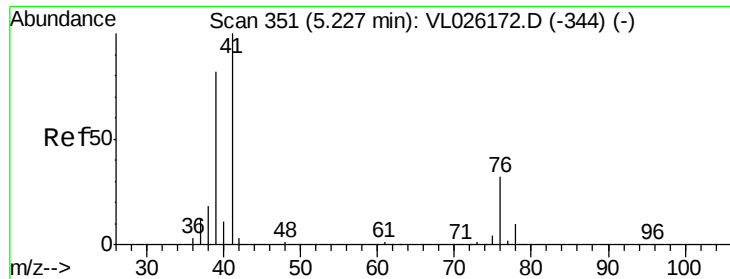
84 100

49 131.4 111.3 166.9

51 348.9 33.0 49.6#

86 64.4 51.6 77.4





#21

Allvl Chloride

Concen: 65.52 ppbv

RT: 5.18 min Scan# 344

Delta R.T. -0.04 min

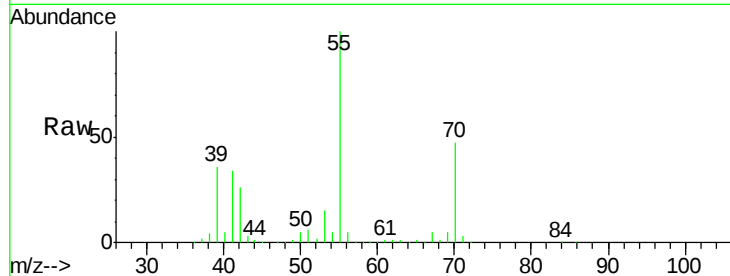
Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

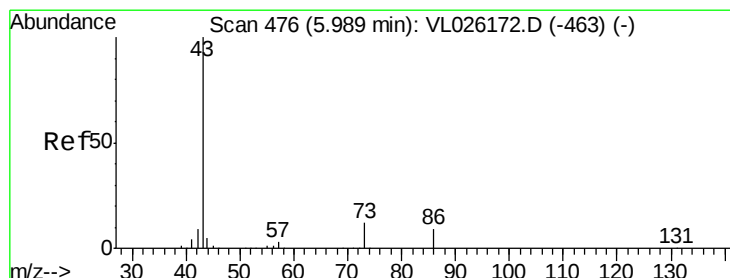
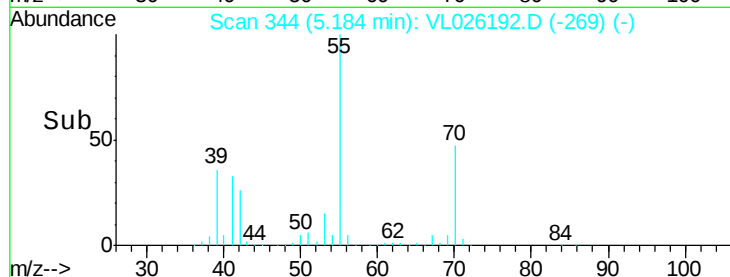
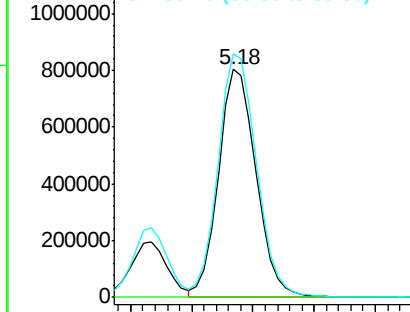
Instrument :  
MSVOA\_L  
ClientSampled :

Tot Ion: 41 Resp: 1685405

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 41  | 100   |       |       |
| 76  | 0.0   | 25.4  | 38.2# |
| 39  | 110.5 | 66.5  | 99.7# |



Abundance Ion 41.10 (40.80 to 41.80): VL0  
Ion 76.10 (75.80 to 76.80): VL0  
Ion 39.10 (38.80 to 39.80): VL0



#23

Vinyl Acetate

Concen: 779.58 ppbv

RT: 6.07 min Scan# 489

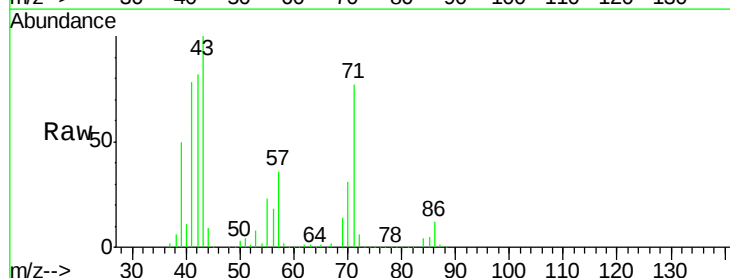
Delta R.T. 0.08 min

Lab File: VL026192.D

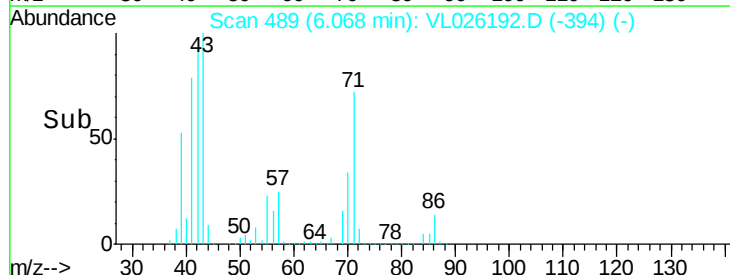
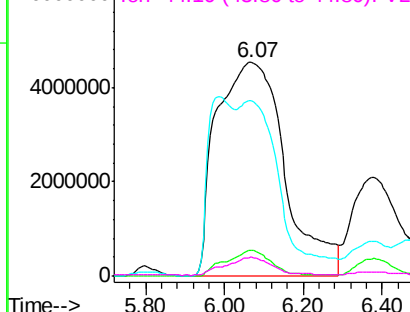
Acq: 10 Oct 2015 1:36

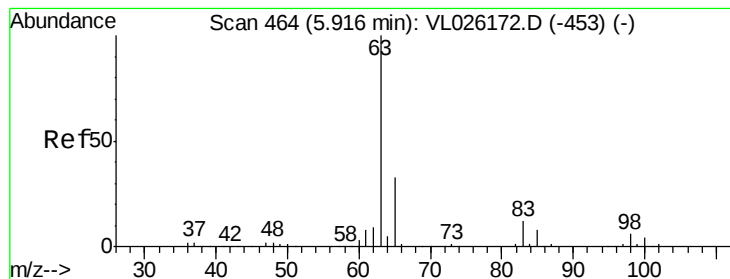
Tgt Ion: 43 Resp: 54381772

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 86  | 11.9  | 7.2   | 10.8# |
| 42  | 82.0  | 7.4   | 11.2# |
| 44  | 8.5   | 3.9   | 5.9#  |



Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 86.10 (85.80 to 86.80): VL0  
Ion 42.10 (41.80 to 42.80): VL0  
Ion 44.10 (43.80 to 44.80): VL0





#24

1,1-Dichloroethane

Concen: 2.27 ppbv

RT: 5.99 min Scan# 476

Delta R.T. 0.07 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

ClientSampleId :

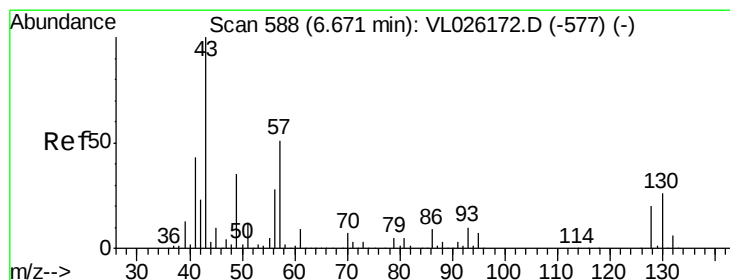
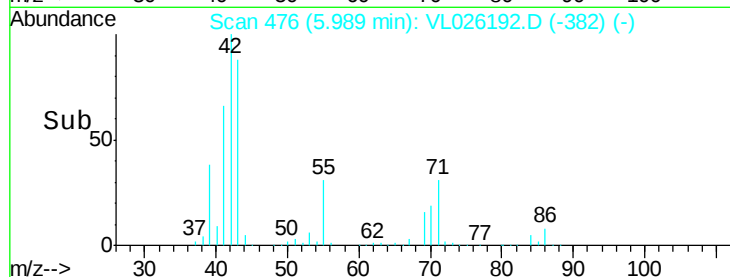
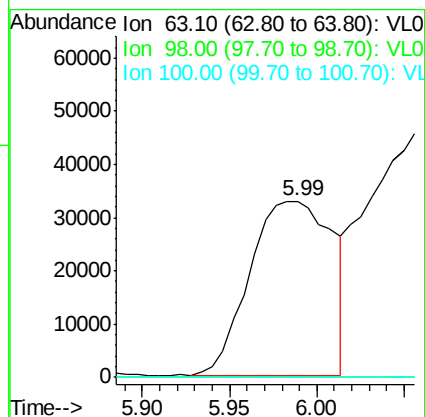
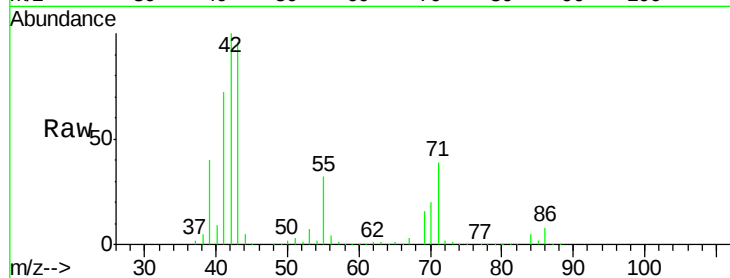
Tot Ion: 63 Resp: 108135

Ion Ratio Lower Upper

63 100

98 0.0 2.9 8.7#

100 0.0 1.8 5.5#



#25

Ethyl Acetate

Concen: 349.94 ppbv

RT: 6.76 min Scan# 603

Delta R.T. 0.09 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Tgt Ion: 43 Resp: 26669734

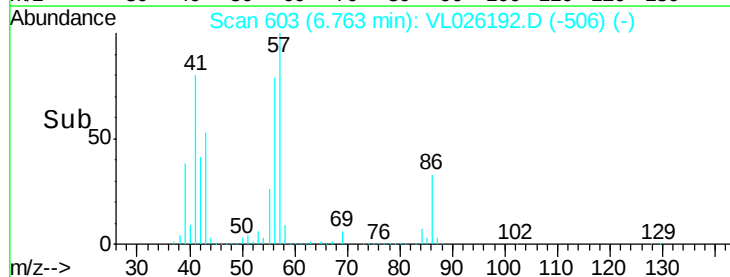
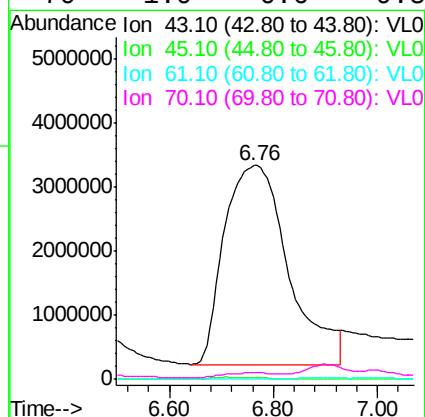
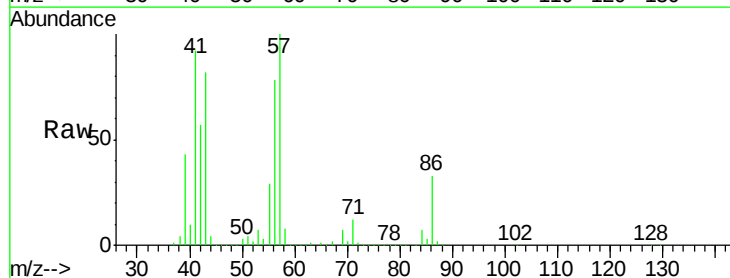
Ion Ratio Lower Upper

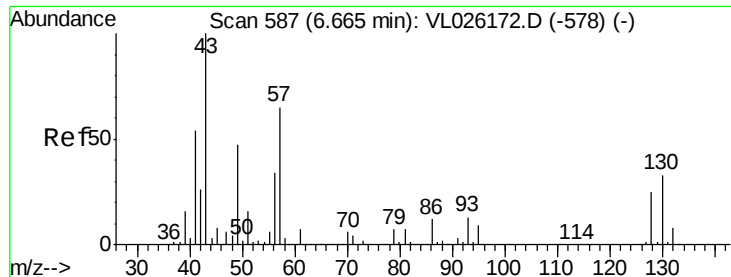
43 100

45 0.7 7.7 11.5#

61 0.2 7.4 11.2#

70 1.9 6.6 9.8#

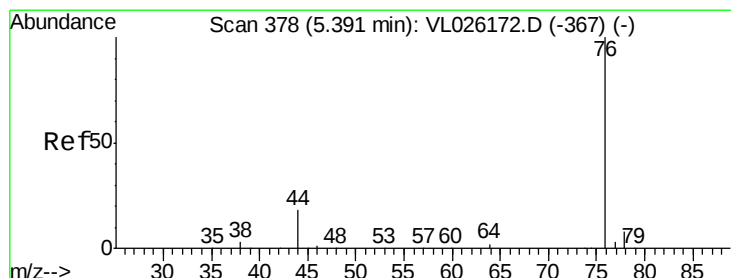
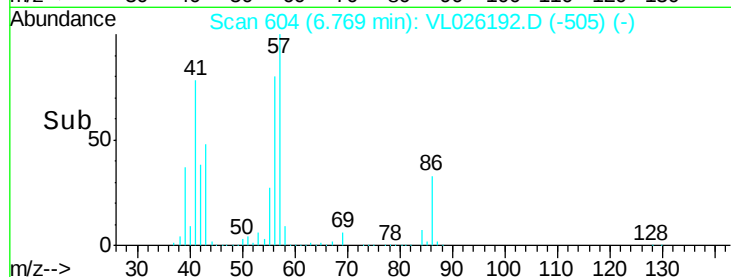
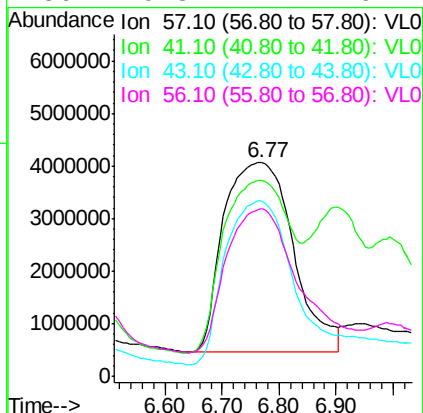
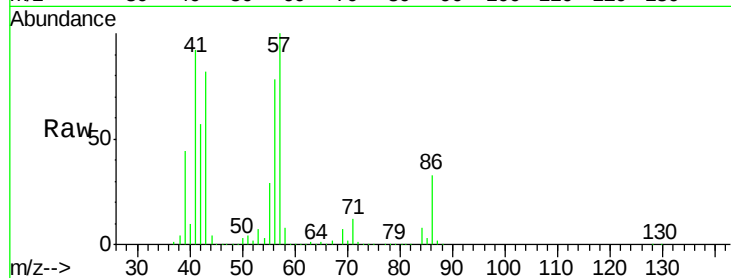




#26  
Hexane  
Concen: 829.65 ppbv  
RT: 6.77 min Scan# 604  
Delta R.T. 0.10 min  
Lab File: VL026192.D  
Acq: 10 Oct 2015 1:36

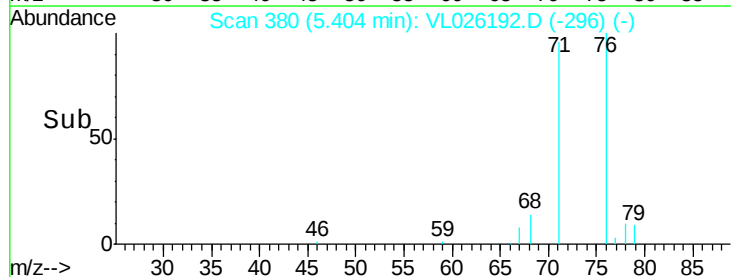
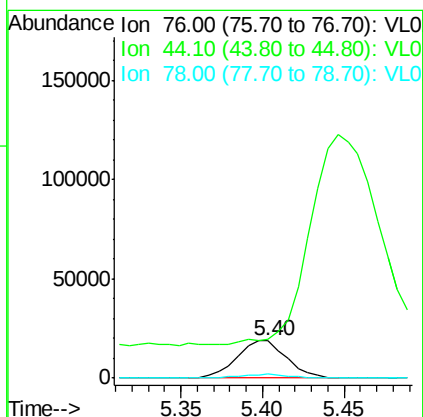
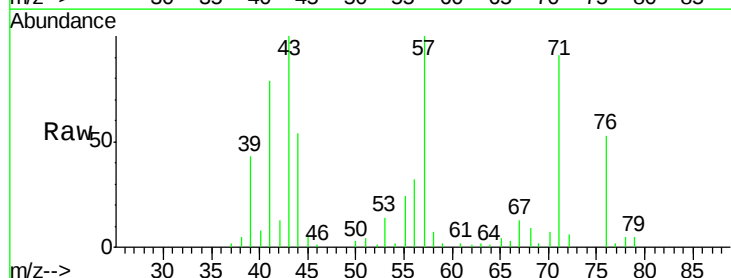
Instrument :  
MSVOA\_L  
ClientSampled :

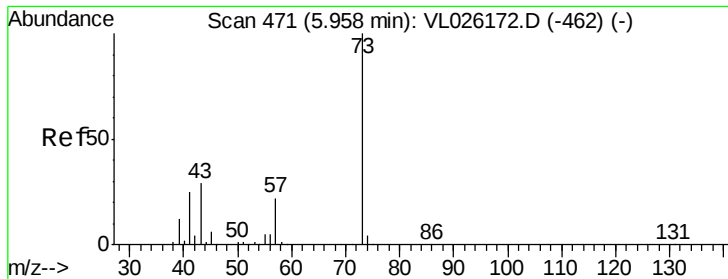
Tot Ion: 57 Resp:30623455  
Ion Ratio Lower Upper  
57 100  
41 88.9 68.0 102.0  
43 0.0 164.4 246.6#  
56 79.3 42.7 64.1#



#27  
Carbon Disulfide  
Concen: 0.90 ppbv  
RT: 5.40 min Scan# 380  
Delta R.T. 0.01 min  
Lab File: VL026192.D  
Acq: 10 Oct 2015 1:36

Tgt Ion: 76 Resp: 39930  
Ion Ratio Lower Upper  
76 100  
44 827.7 14.2 21.4#  
78 11.2 7.5 11.3



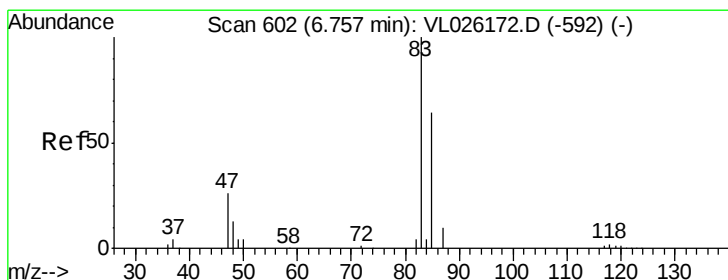
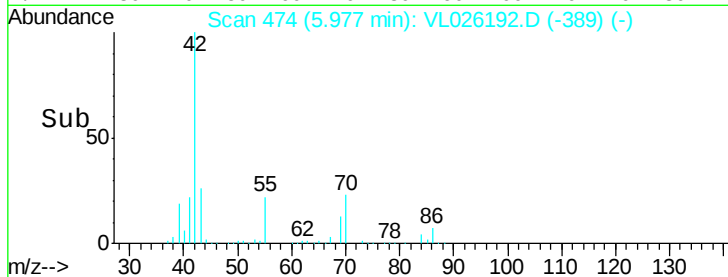
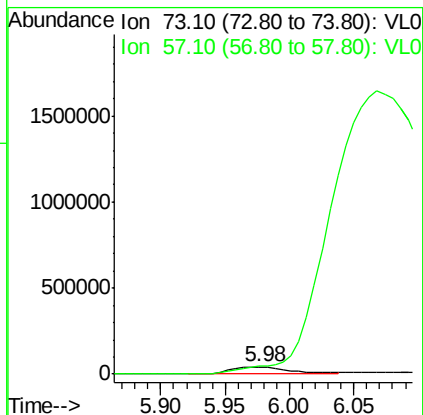
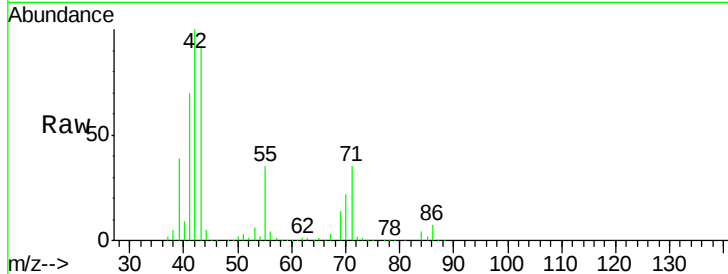


#28

Methvl tert-Butvl Ether  
 Concen: 2.32 ppbv  
 RT: 5.98 min Scan# 474  
 Delta R.T. 0.02 min  
 Lab File: VL026192.D  
 Acq: 10 Oct 2015 1:36

Instrument :  
 MSVOA\_L  
 ClientSampleId :

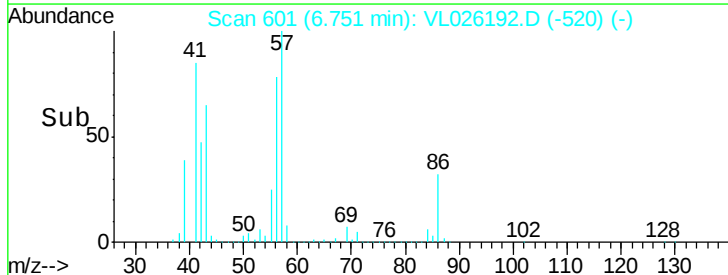
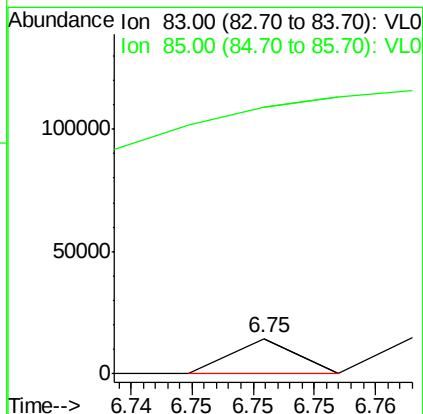
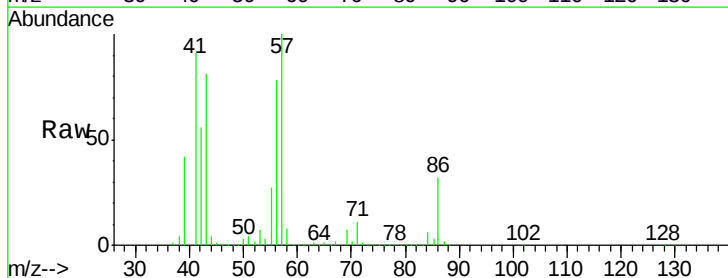
Tot Ion: 73 Resp: 138339  
 Ion Ratio Lower Upper  
 73 100  
 57 0.0 17.8 26.6#

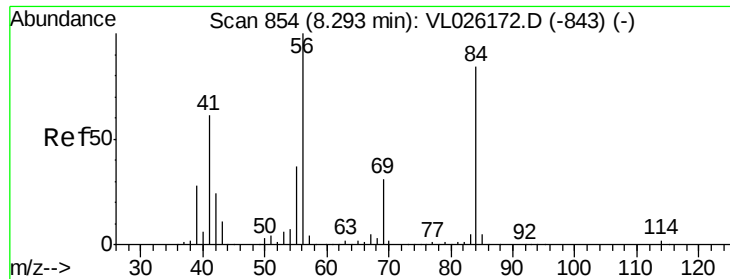


#29

Chloroform  
 Concen: 0.10 ppbv  
 RT: 6.75 min Scan# 601  
 Delta R.T. -0.01 min  
 Lab File: VL026192.D  
 Acq: 10 Oct 2015 1:36

Tgt Ion: 83 Resp: 5286  
 Ion Ratio Lower Upper  
 83 100  
 85 52.1 51.5 77.3

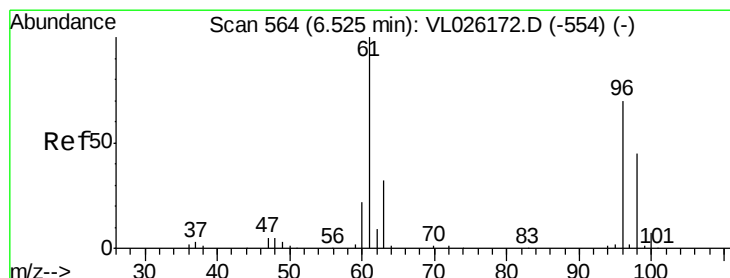
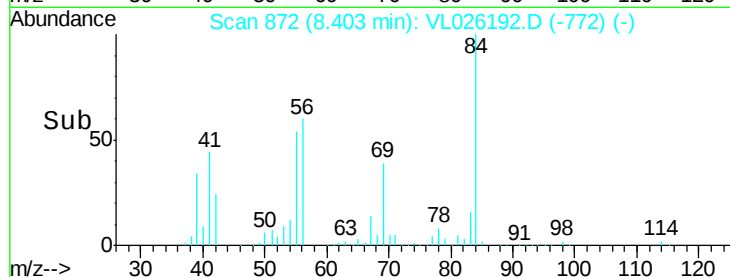
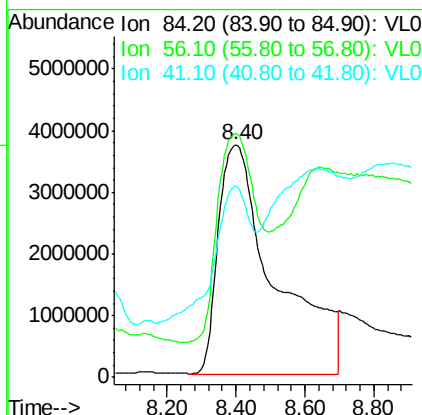
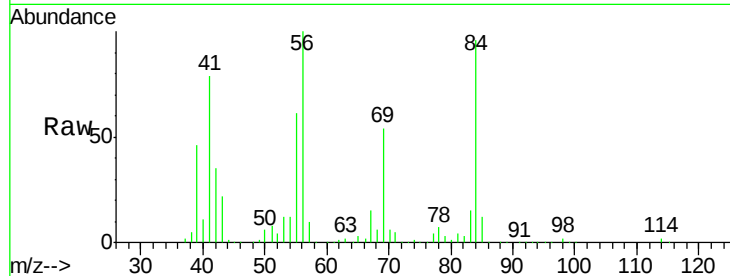




#30  
Cvclohexane  
Concen: 1208.28 ppbv  
RT: 8.40 min Scan# 872  
Delta R.T. 0.11 min  
Lab File: VL026192.D  
Acq: 10 Oct 2015 1:36

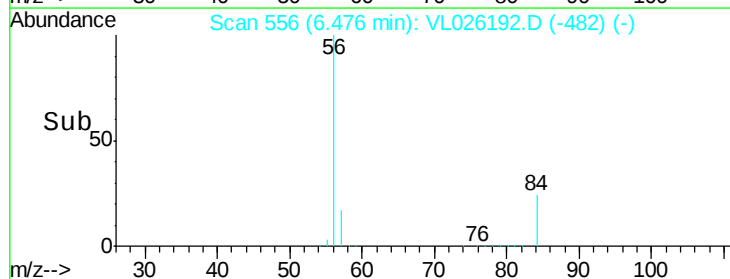
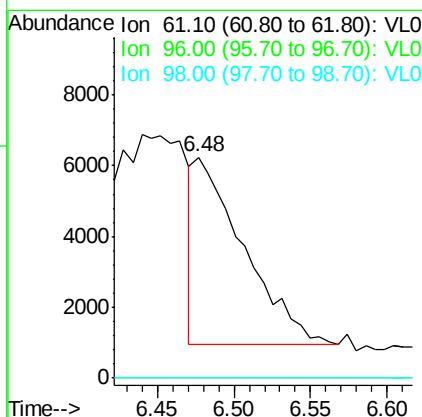
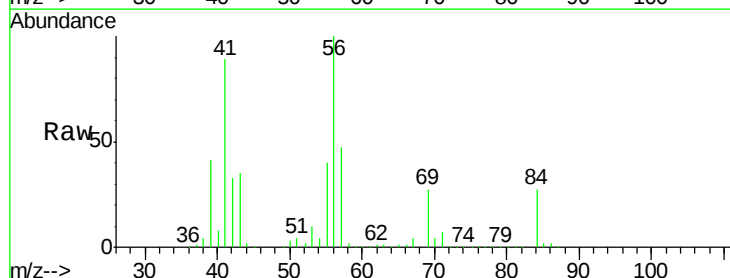
Instrument :  
MSVOA\_L  
ClientSampleId :

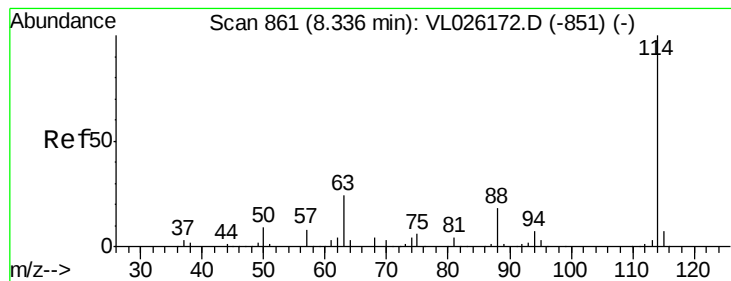
Tot Ion: 84 Resp:42492831  
Ion Ratio Lower Upper  
84 100  
56 62.4 99.8 149.8#  
41 36.5 58.1 87.1#



#31  
cis-1,2-Dichloroethene  
Concen: 0.35 ppbv  
RT: 6.48 min Scan# 556  
Delta R.T. -0.05 min  
Lab File: VL026192.D  
Acq: 10 Oct 2015 1:36

Tgt Ion: 61 Resp: 11726  
Ion Ratio Lower Upper  
61 100  
96 0.0 55.8 83.8#  
98 0.0 35.8 53.6#





#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

RT: 8.40 min Scan# 872

Delta R.T. 0.07 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

ClientSampled :

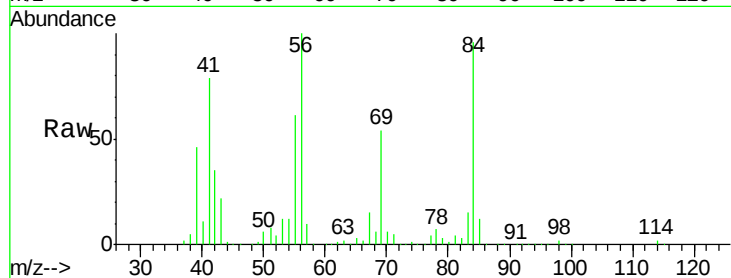
Tot Ion:114 Resp: 352633

Ion Ratio Lower Upper

114 100

63 169.7 19.0 28.6#

88 17.2 13.8 20.8

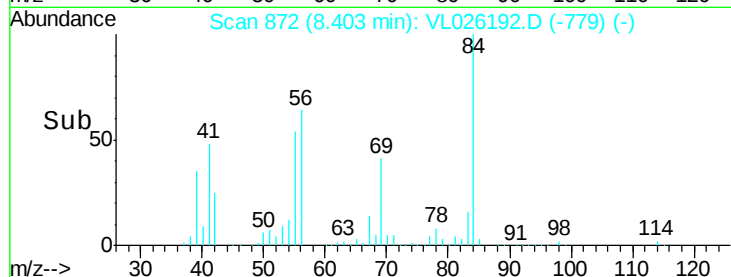


Abundance Ion 114.10 (113.80 to 114.80): V

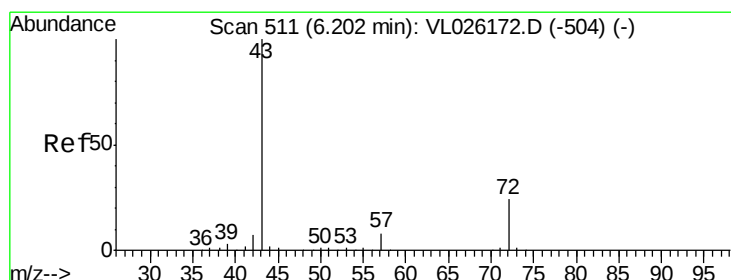
Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0

Time-->



Time-->



#34

2-Butanone

Concen: 833.26 ppbv

RT: 6.38 min Scan# 540

Delta R.T. 0.18 min

Lab File: VL026192.D

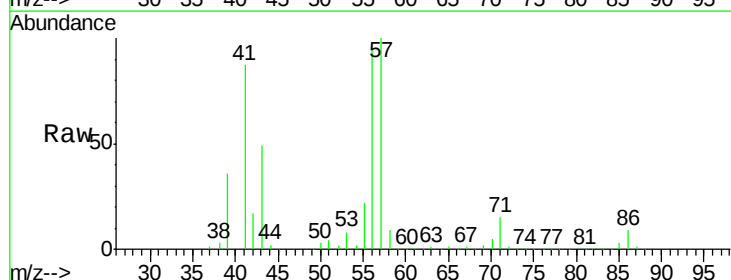
Acq: 10 Oct 2015 1:36

Tgt Ion: 43 Resp:16355373

Ion Ratio Lower Upper

43 100

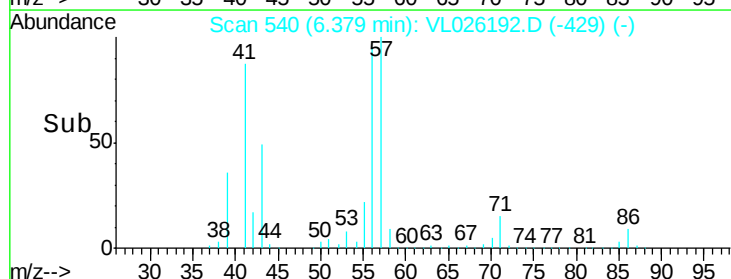
72 1.6 19.6 29.4#



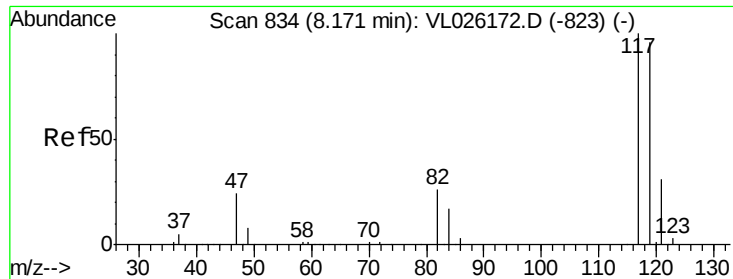
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Time-->



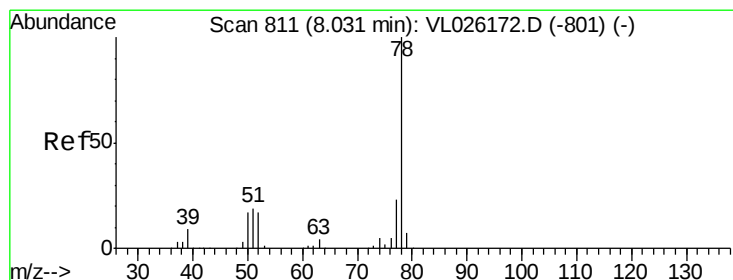
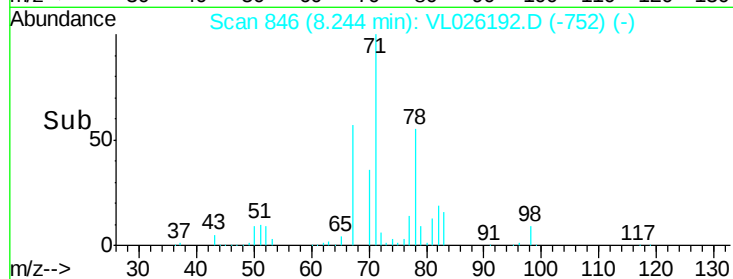
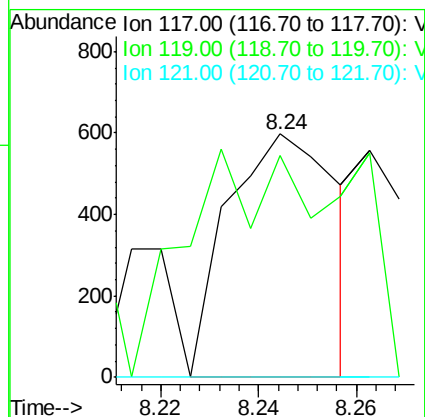
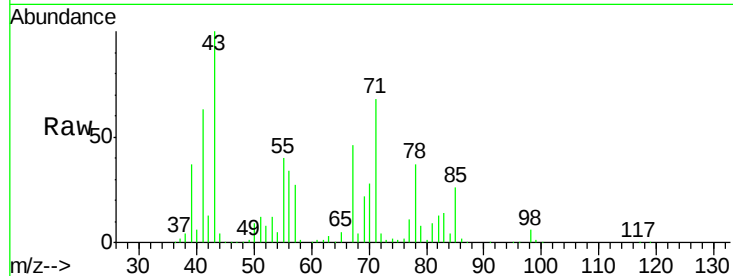
Time-->



#35  
Carbon Tetrachloride  
Concen: 0.04 ppbv  
RT: 8.24 min Scan# 846  
Delta R.T. 0.07 min  
Lab File: VL026192.D  
Acq: 10 Oct 2015 1:36

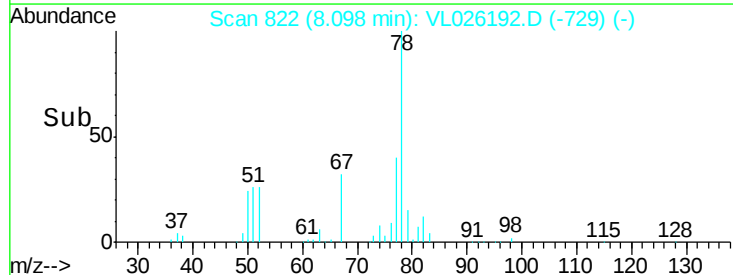
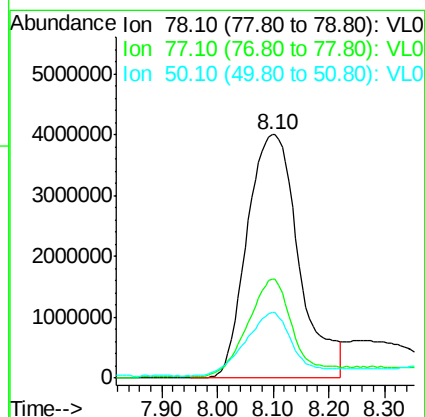
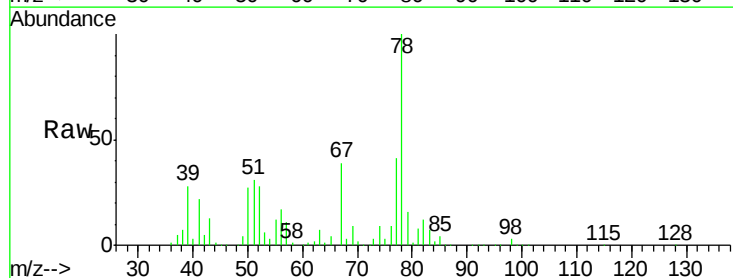
Instrument :  
MSVOA\_L  
ClientSampleId :

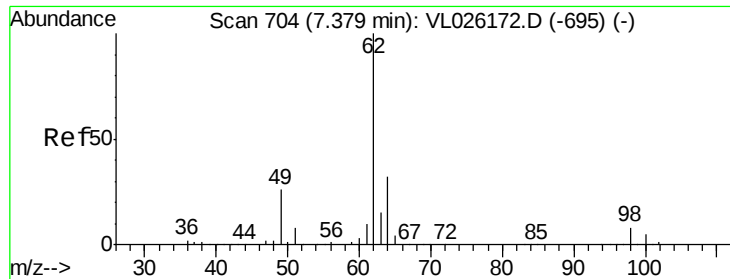
Tot Ion:117 Resp: 924  
Ion Ratio Lower Upper  
117 100  
119 37.3 76.6 115.0#  
121 0.0 25.0 37.4#



#36  
Benzene  
Concen: 765.39 ppbv  
RT: 8.10 min Scan# 822  
Delta R.T. 0.07 min  
Lab File: VL026192.D  
Acq: 10 Oct 2015 1:36

Tgt Ion: 78 Resp:25813757  
Ion Ratio Lower Upper  
78 100  
77 40.0 18.2 27.4#  
50 26.1 13.4 20.2#

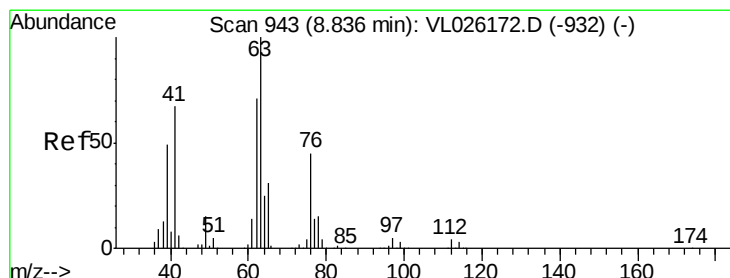
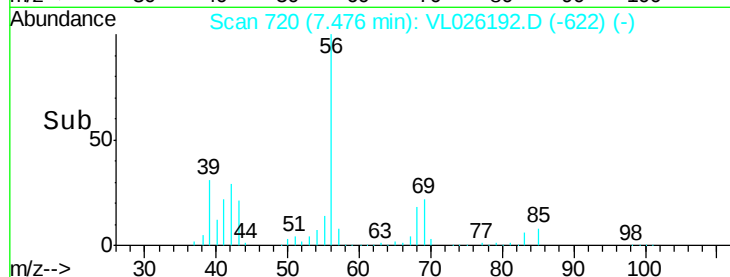
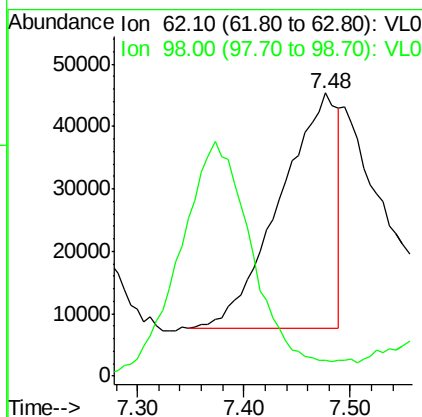
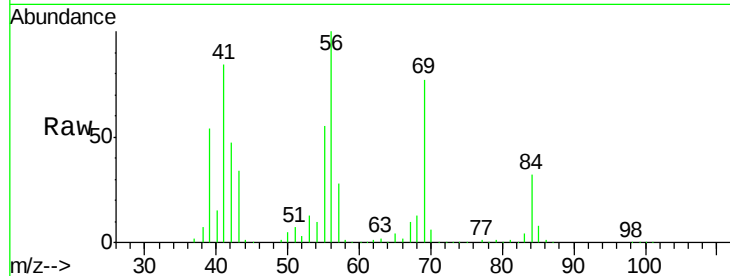




#37  
 1,2-Dichloroethane  
 Concen: 7.85 ppbv  
 RT: 7.48 min Scan# 720  
 Delta R.T. 0.10 min  
 Lab File: VL026192.D  
 Acq: 10 Oct 2015 1:36

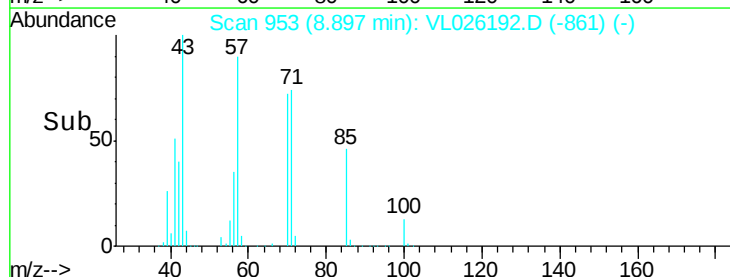
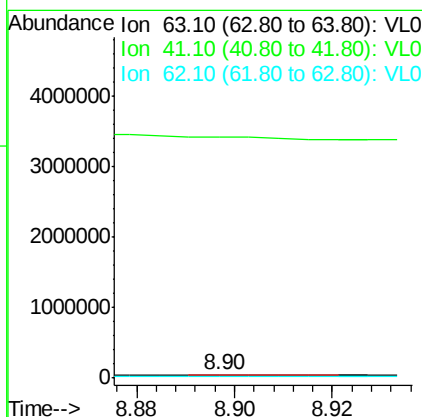
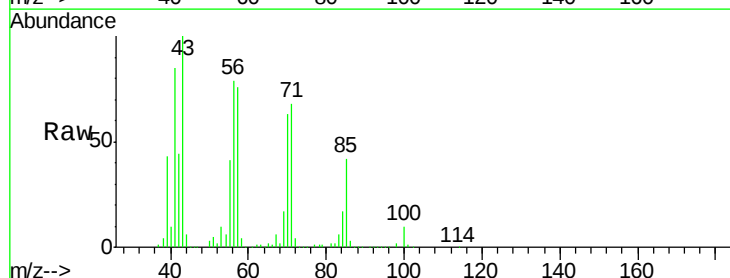
Instrument :  
 MSVOA\_L  
 ClientSampleId :

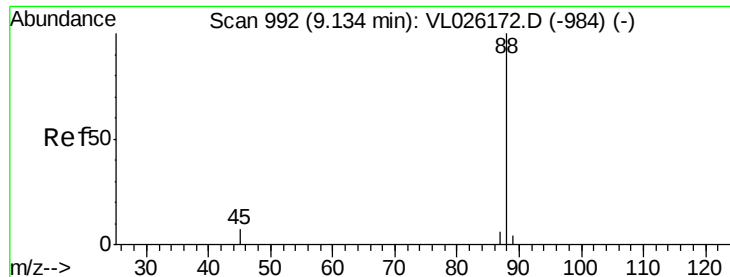
Tot Ion: 62 Resp: 141793  
 Ion Ratio Lower Upper  
 62 100  
 98 126.9 6.2 9.2#



#39  
 1,2-Dichloropropane  
 Concen: 0.44 ppbv  
 RT: 8.90 min Scan# 953  
 Delta R.T. 0.06 min  
 Lab File: VL026192.D  
 Acq: 10 Oct 2015 1:36

Tgt Ion: 63 Resp: 5563  
 Ion Ratio Lower Upper  
 63 100  
 41 753.4 53.9 80.9#  
 62 35.6 57.1 85.7#

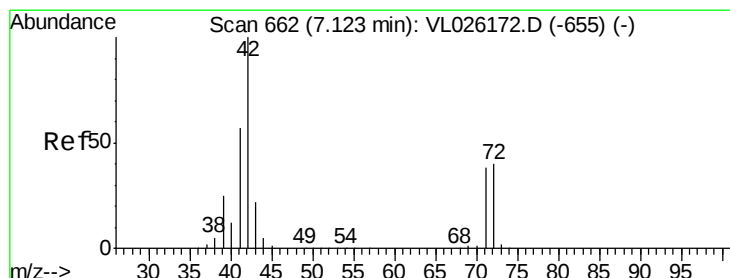
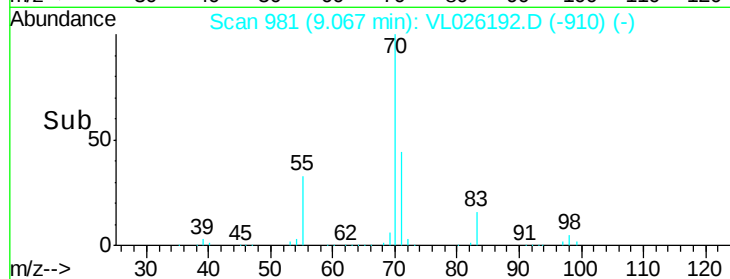
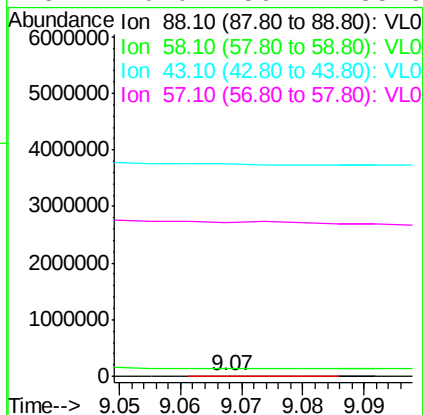
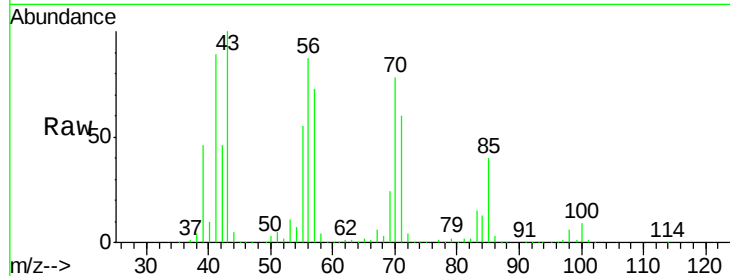




#40  
1,4-Dioxane  
Concen: 0.16 ppbv  
RT: 9.07 min Scan# 981  
Delta R.T. -0.07 min  
Lab File: VL026192.D  
Acq: 10 Oct 2015 1:36

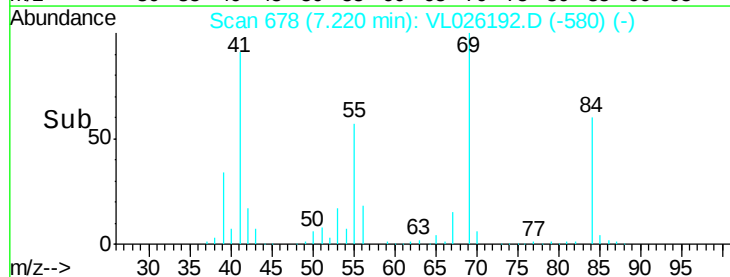
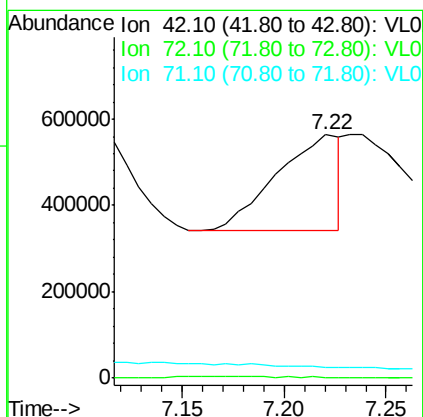
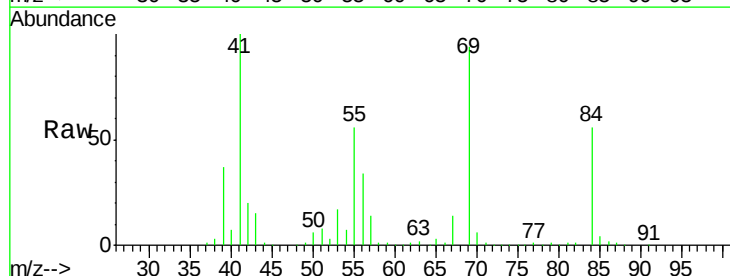
Instrument :  
MSVOA\_L  
ClientSampled :

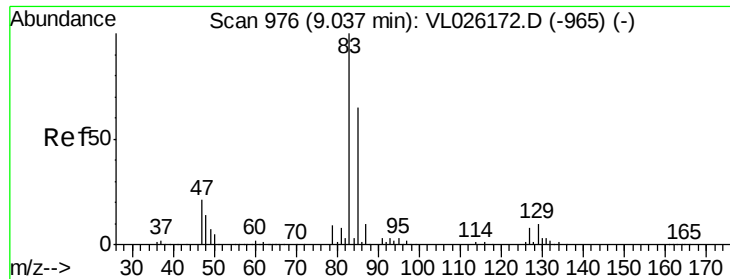
Tot Ion: 88 Resp: 324  
Ion Ratio Lower Upper  
88 100  
58 0.0 178.4 267.6#  
43 0.0 510.2 765.4#  
57 0.0 2564.2 3846.4#



#41  
Tetrahydrofuran  
Concen: 44.34 ppbv  
RT: 7.22 min Scan# 678  
Delta R.T. 0.10 min  
Lab File: VL026192.D  
Acq: 10 Oct 2015 1:36

Tgt Ion: 42 Resp: 490228  
Ion Ratio Lower Upper  
42 100  
72 2.6 32.4 48.6#  
71 0.0 30.2 45.4#





#42

Bromodichloromethane

Concen: 200.12 ppbv

RT: 9.18 min Scan# 1000

Delta R.T. 0.15 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

ClientSampleId :

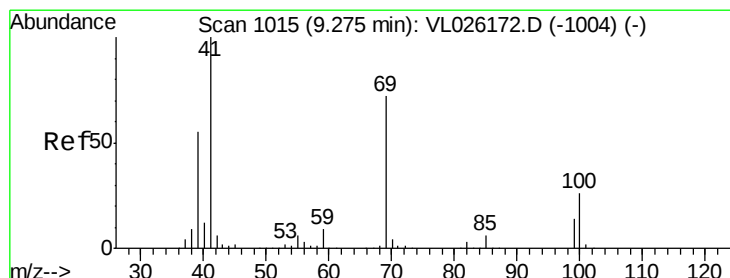
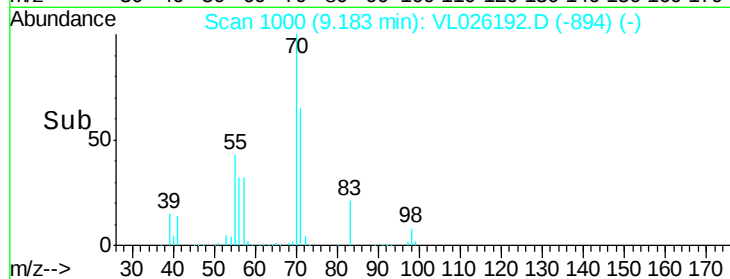
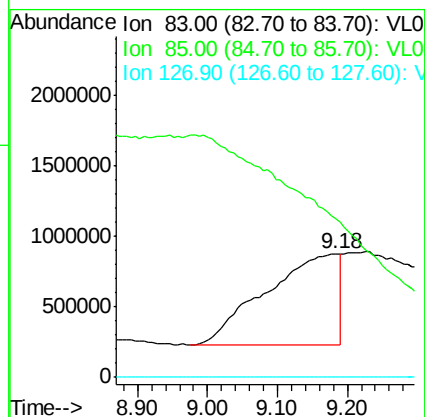
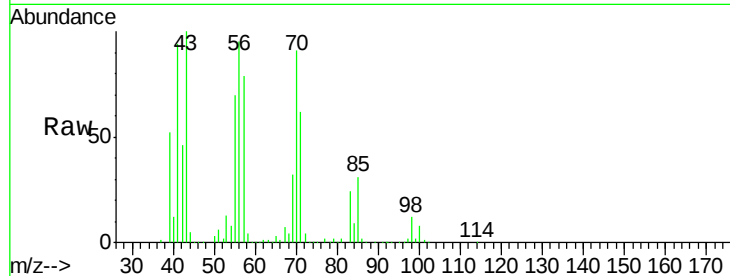
Tot Ion: 83 Resp: 4758607

Ion Ratio Lower Upper

83 100

85 4.1 51.9 77.9#

127 0.0 6.2 9.4#



#43

Methyl Methacrylate

Concen: 12.26 ppbv

RT: 9.35 min Scan# 1028

Delta R.T. 0.08 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

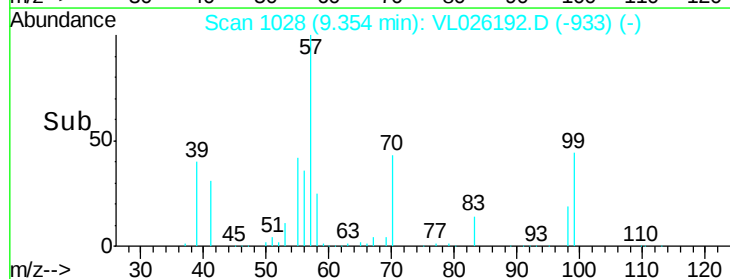
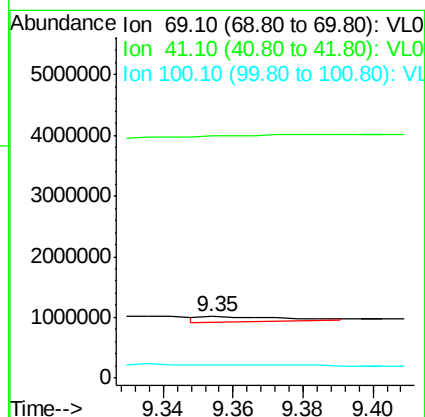
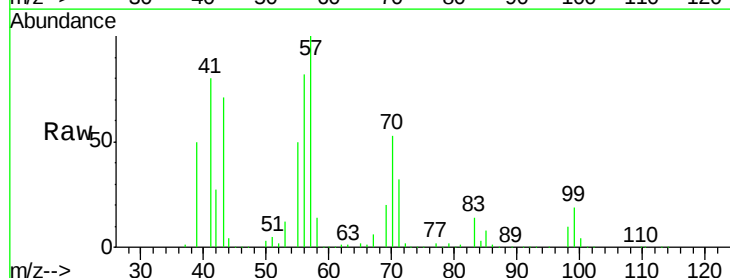
Tgt Ion: 69 Resp: 145680

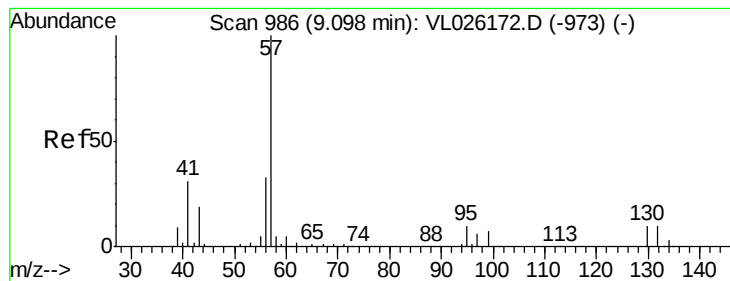
Ion Ratio Lower Upper

69 100

41 8763.4 111.5 167.3#

100 0.0 28.4 42.6#





#44

2,2,4-Trimethylpentane

Concen: 489.59 ppbv

RT: 9.41 min Scan# 1038

Delta R.T. 0.32 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

ClientSampleId :

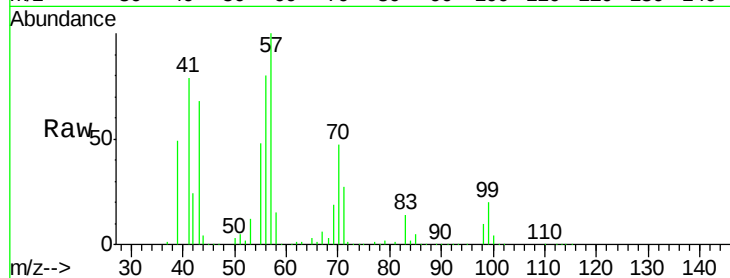
Tot Ion: 57 Resp: 27455163

Ion Ratio Lower Upper

57 100

41 46.5 23.7 35.5#

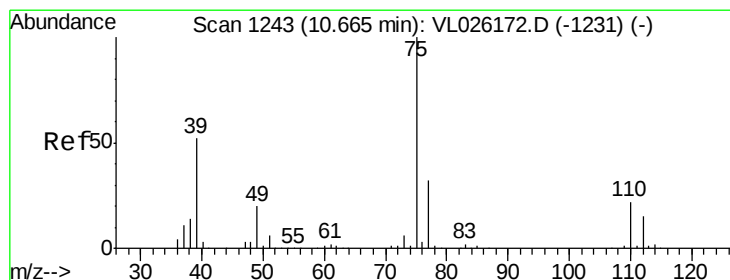
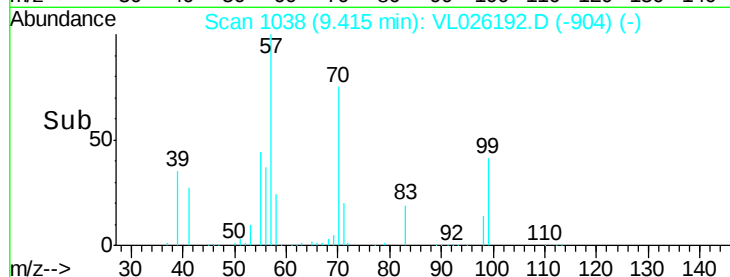
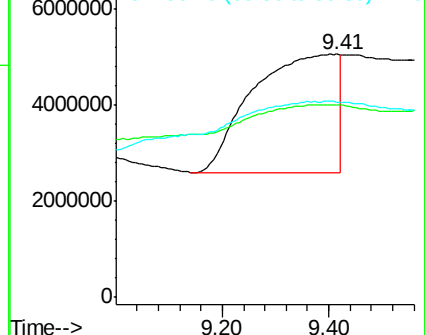
56 0.0 26.4 39.6#



Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#45

t-1,3-Dichloropropene

Concen: 0.08 ppbv

RT: 10.75 min Scan# 1257

Delta R.T. 0.09 min

Lab File: VL026192.D

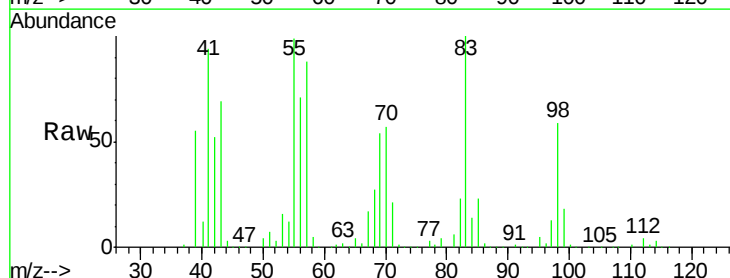
Acq: 10 Oct 2015 1:36

Tgt Ion: 75 Resp: 1312

Ion Ratio Lower Upper

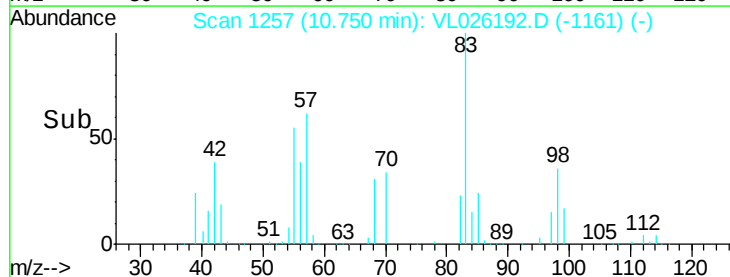
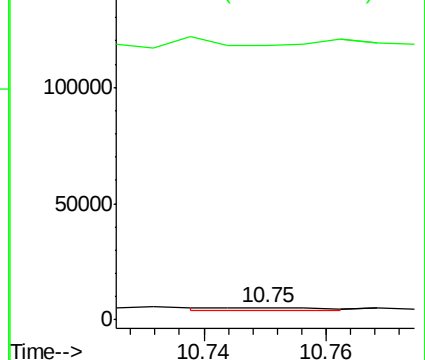
75 100

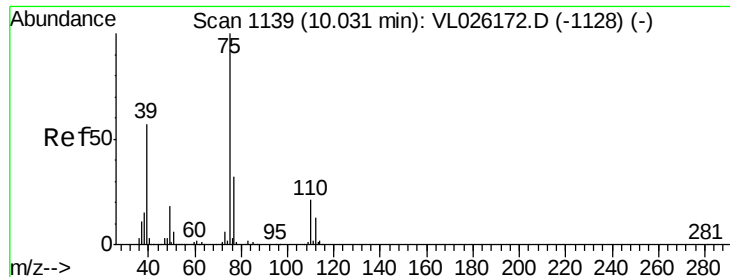
77 2209.6 25.5 38.3#



Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





#46

cis-1,3-Dichloropropene

Concen: 0.08 ppbv

RT: 10.10 min Scan# 1150

Delta R.T. 0.07 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

ClientSampleId :

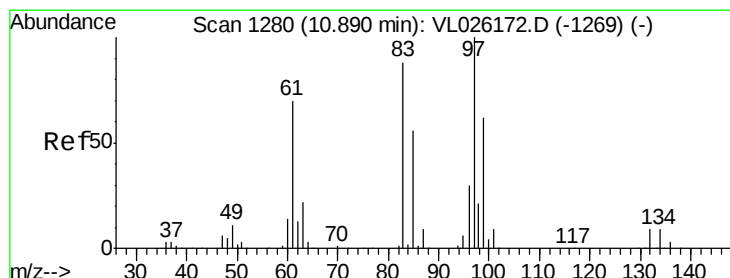
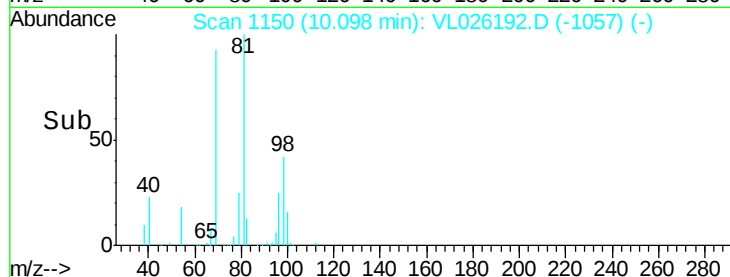
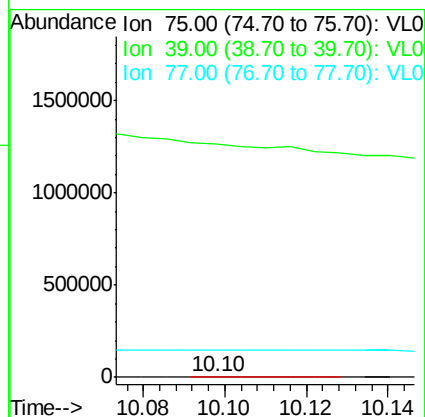
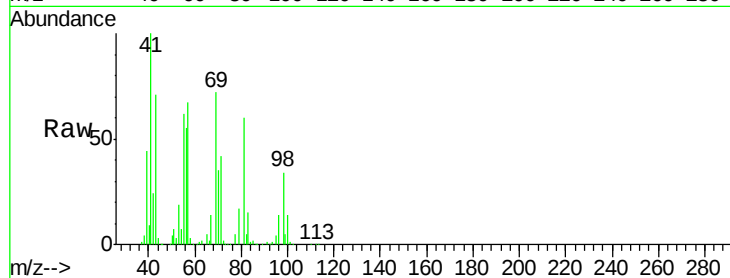
Tot Ion: 75 Resp: 1516

Ion Ratio Lower Upper

75 100

39 4388.6 45.4 68.2#

77 177.3 25.4 38.2#



#47

1,1,2-Trichloroethane

Concen: 139.67 ppbv

RT: 10.88 min Scan# 1278

Delta R.T. -0.01 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Tgt Ion: 97 Resp: 2099081

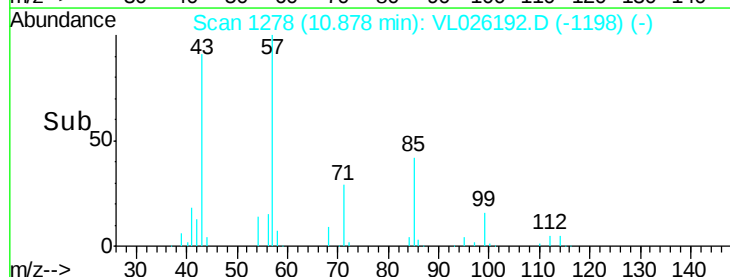
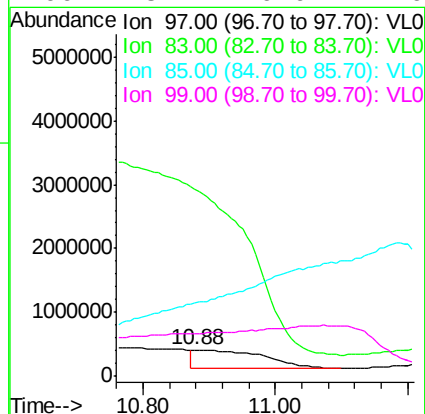
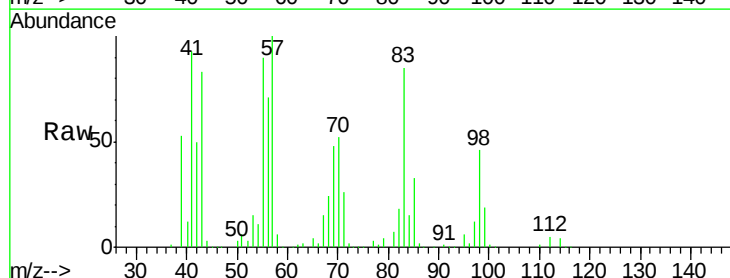
Ion Ratio Lower Upper

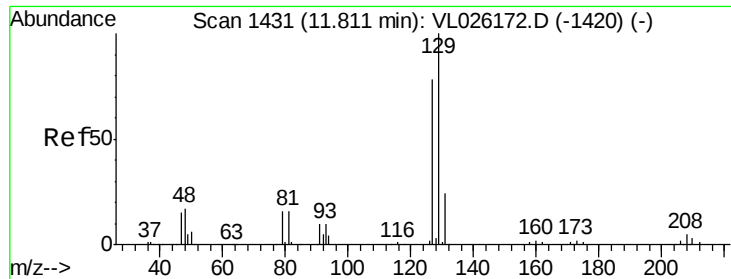
97 100

83 902.3 70.6 106.0#

85 8.9 45.1 67.7#

99 3.1 49.9 74.9#





#48

Dibromochloromethane

Concen: 0.10 ppbv

RT: 11.91 min Scan# 1448

Delta R.T. 0.10 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

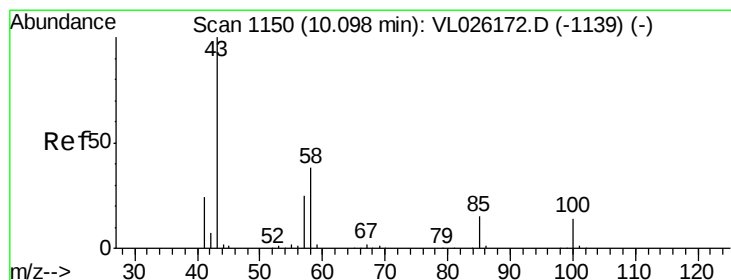
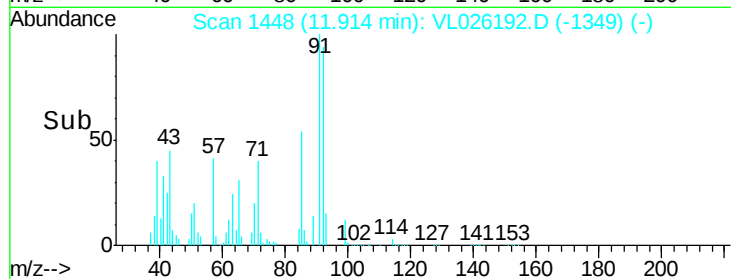
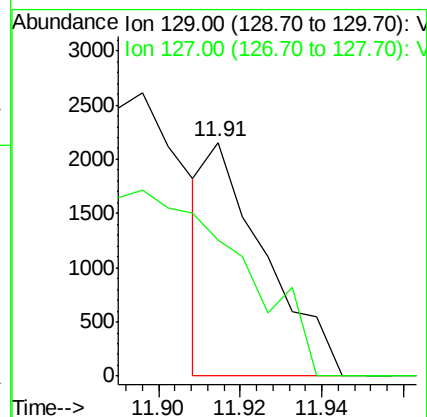
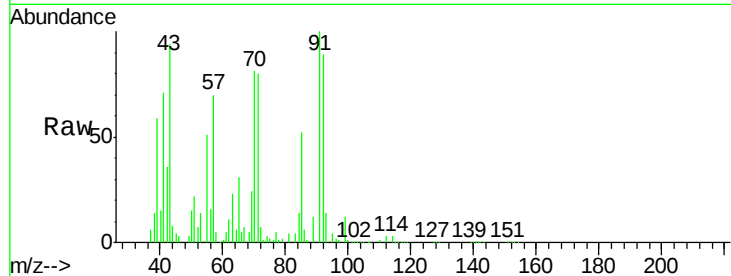
ClientSampled :

Tot Ion:129 Resp: 2146

Ion Ratio Lower Upper

129 100

127 0.0 39.0 117.0#



#50

4-Methyl-2-Pentanone

Concen: 73.14 ppbv

RT: 9.87 min Scan# 1112

Delta R.T. -0.23 min

Lab File: VL026192.D

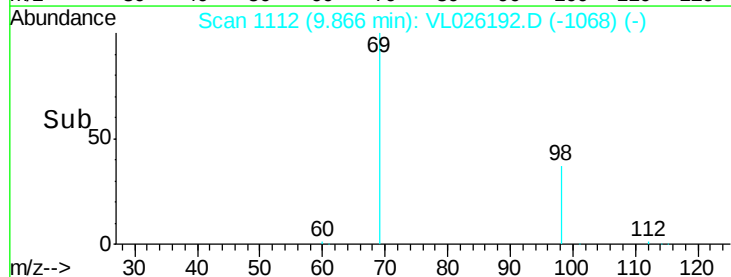
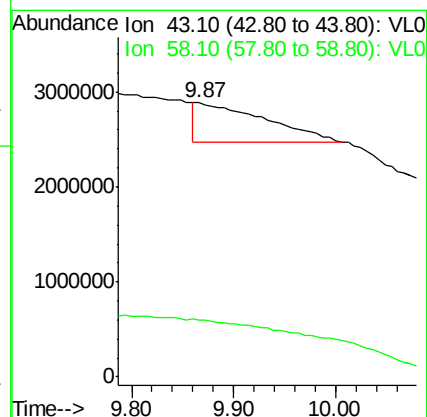
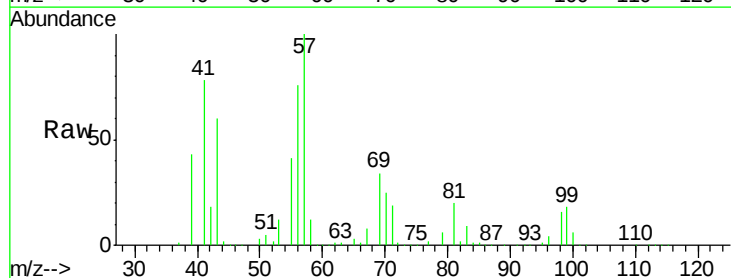
Acq: 10 Oct 2015 1:36

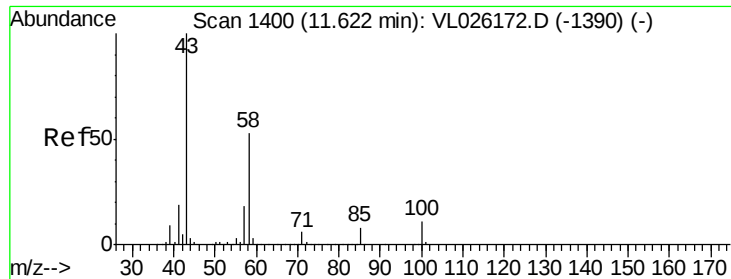
Tgt Ion: 43 Resp: 1898324

Ion Ratio Lower Upper

43 100

58 0.0 30.4 45.6#





#51

2-Hexanone

Concen: 1824.92 ppbv

RT: 11.74 min Scan# 1419

Delta R.T. 0.12 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

ClientSampleId :

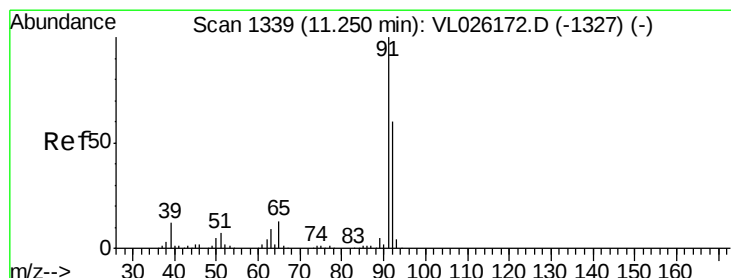
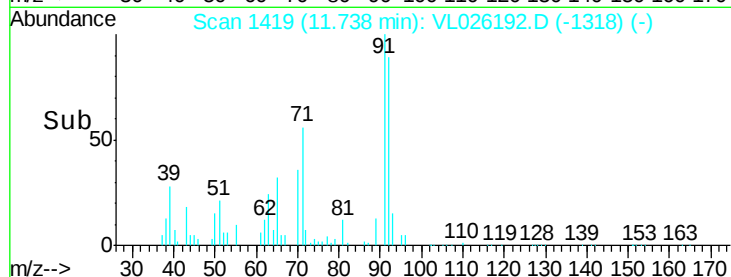
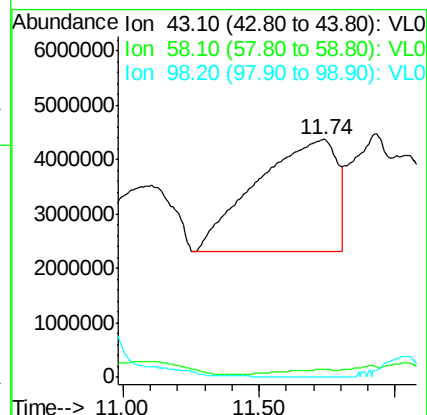
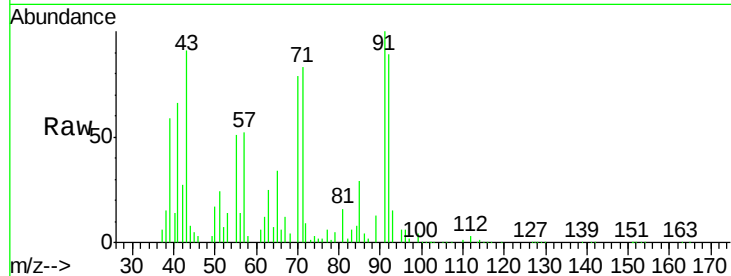
Tot Ion: 43 Resp:42583884

Ion Ratio Lower Upper

43 100

58 2.7 42.2 63.4#

98 0.0 0.2 0.2#



#53

Toluene

Concen: 1664.53 ppbv

RT: 11.60 min Scan# 1396

Delta R.T. 0.35 min

Lab File: VL026192.D

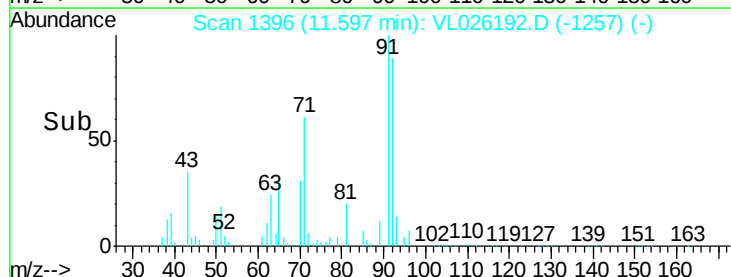
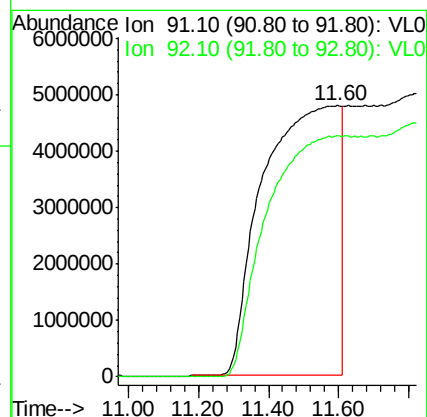
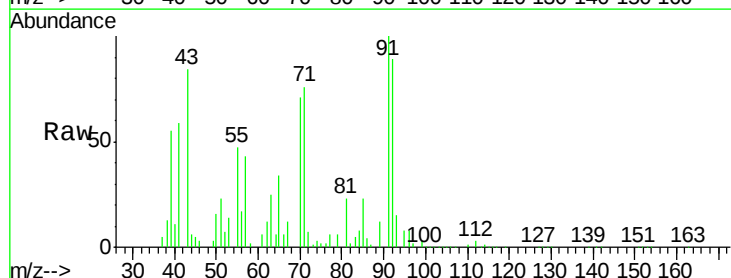
Acq: 10 Oct 2015 1:36

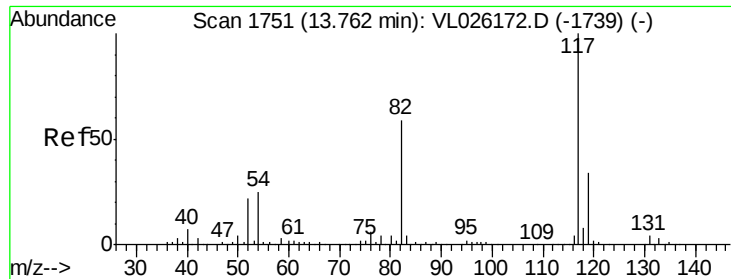
Tgt Ion: 91 Resp:72341935

Ion Ratio Lower Upper

91 100

92 101.2 48.5 72.7#





#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 14.07 min Scan# 1801

Delta R.T. 0.30 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

ClientSampleId :

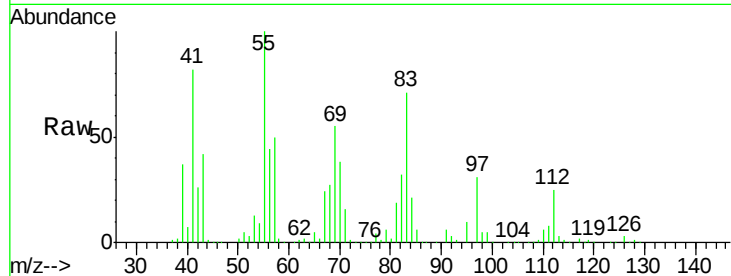
Tot Ion:117 Resp: 145252

Ion Ratio Lower Upper

117 100

82 0.0 47.7 71.5#

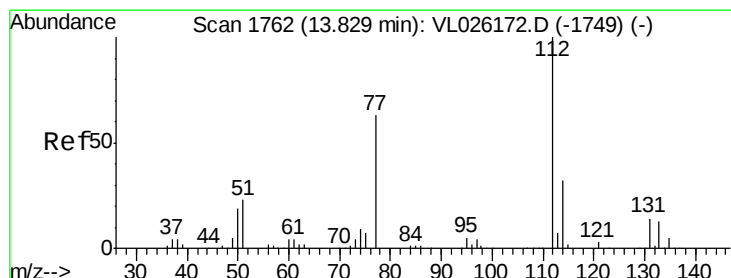
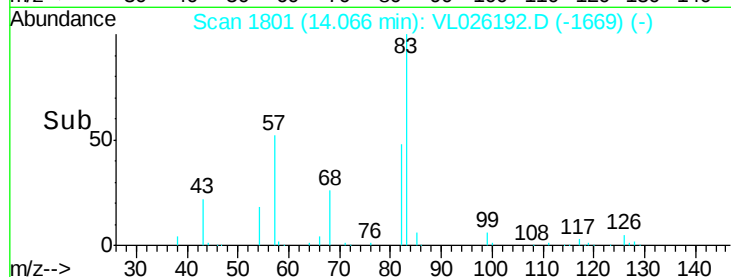
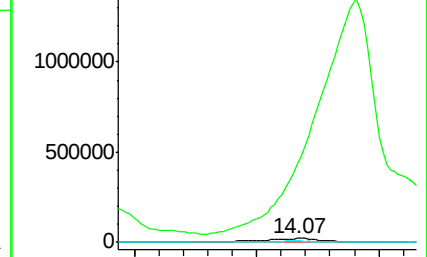
119 34.9 43.7 65.5#



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#57

Chlorobenzene

Concen: 331.33 ppbv

RT: 14.16 min Scan# 1816

Delta R.T. 0.33 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

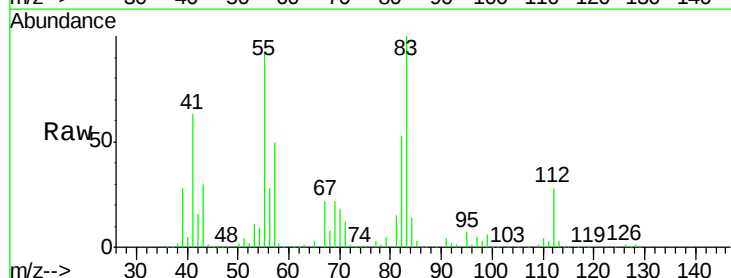
Tgt Ion:112 Resp: 4343727

Ion Ratio Lower Upper

112 100

77 8.6 51.0 76.4#

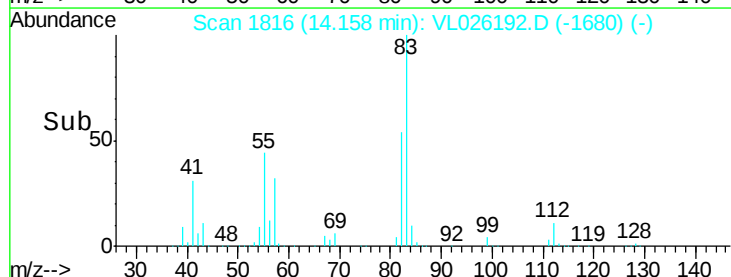
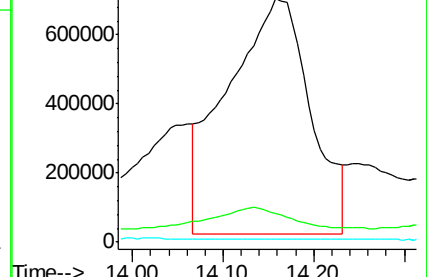
114 0.2 29.0 35.4#

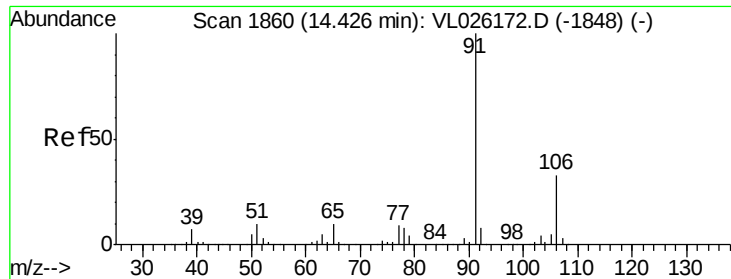


Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V

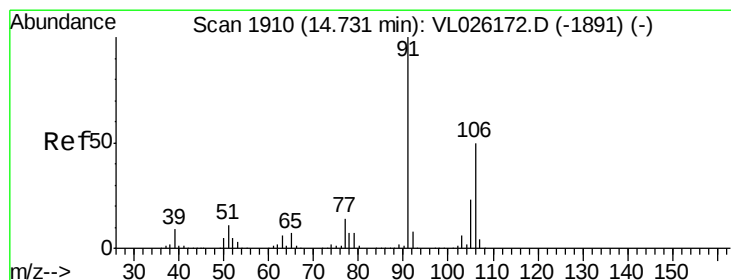
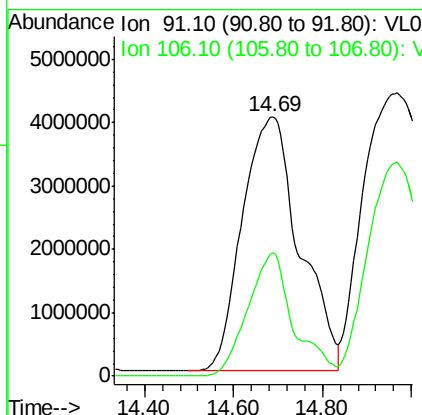
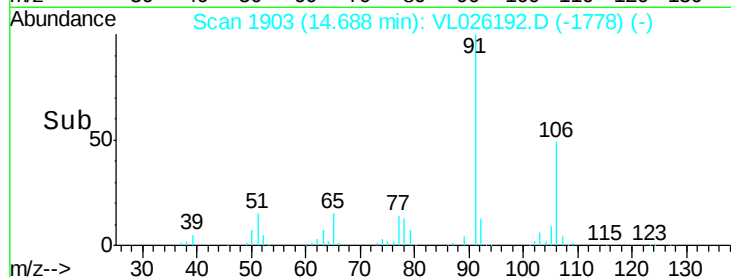
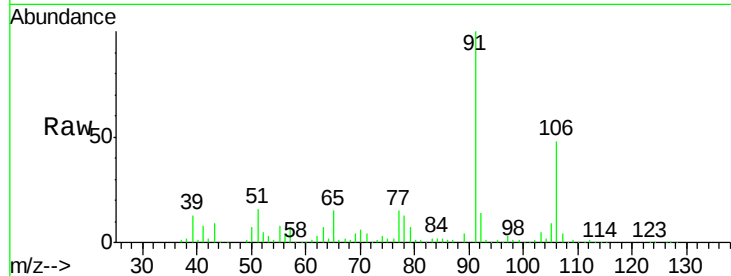




#58  
Ethyl Benzene  
Concen: 1696.32 ppbv  
RT: 14.69 min Scan# 1903  
Delta R.T. 0.26 min  
Lab File: VL026192.D  
Acq: 10 Oct 2015 1:36

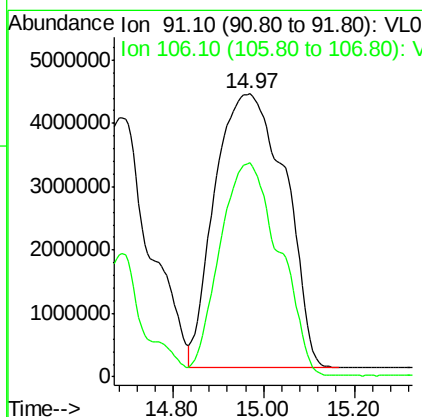
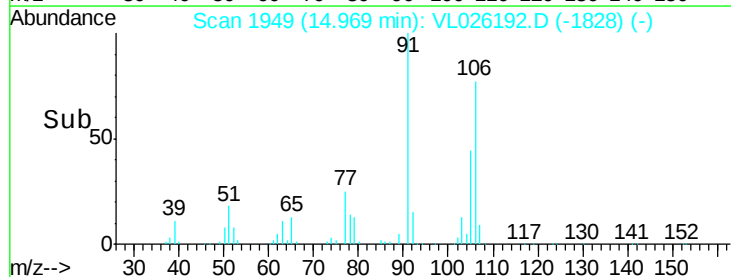
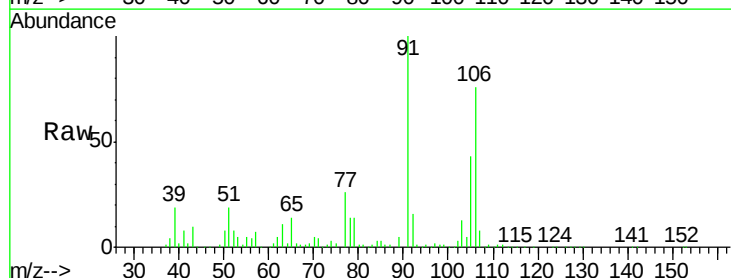
Instrument :  
MSVOA\_L  
ClientSampleId :

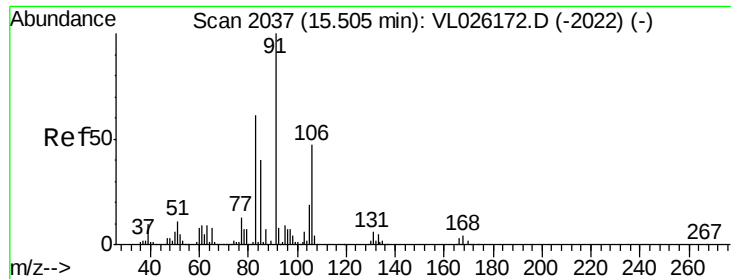
Tot Ion: 91 Resp:35789533  
Ion Ratio Lower Upper  
91 100  
106 48.8 26.1 39.1#



#59  
m/p-Xylene  
Concen: 2742.51 ppbv  
RT: 14.97 min Scan# 1949  
Delta R.T. 0.24 min  
Lab File: VL026192.D  
Acq: 10 Oct 2015 1:36

Tgt Ion: 91 Resp:46435027  
Ion Ratio Lower Upper  
91 100  
106 66.4 40.2 60.4#

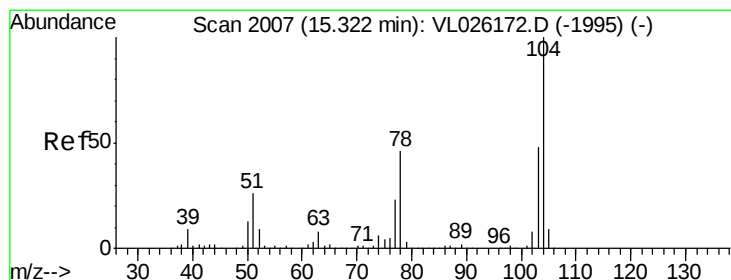
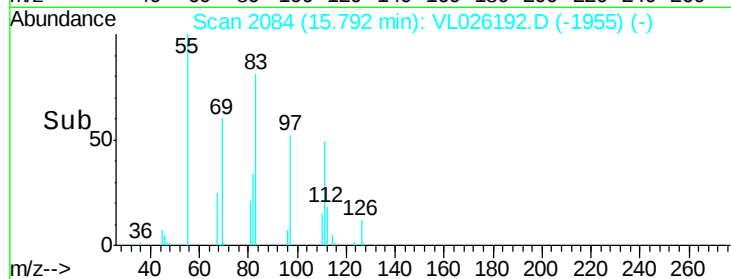
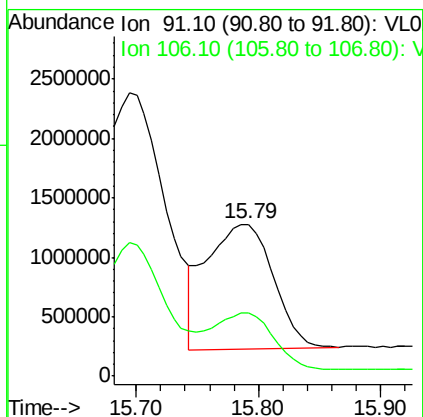
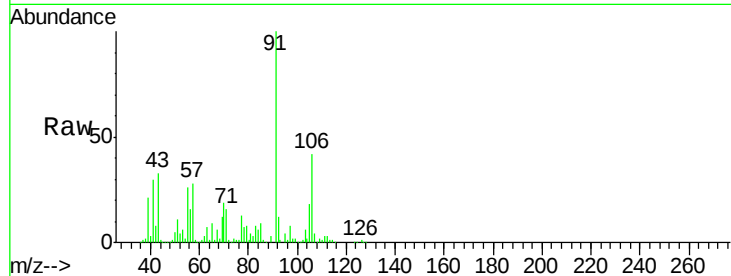




#60  
o-Xylene  
Concen: 222.80 ppbv  
RT: 15.79 min Scan# 2084  
Delta R.T. 0.29 min  
Lab File: VL026192.D  
Acq: 10 Oct 2015 1:36

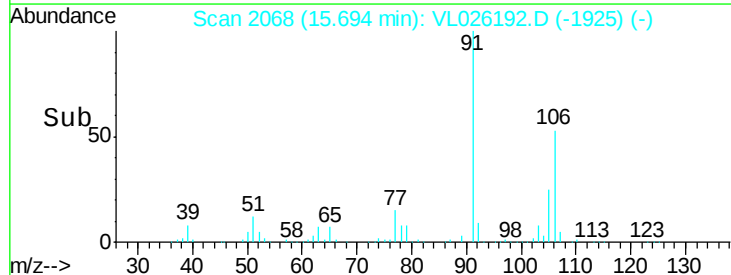
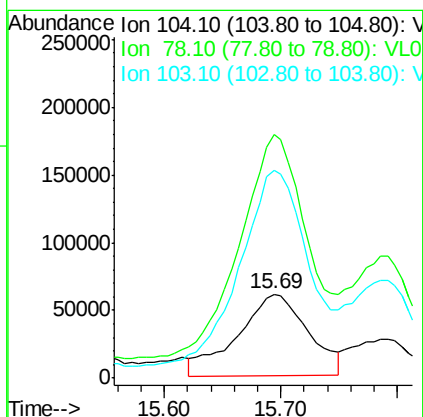
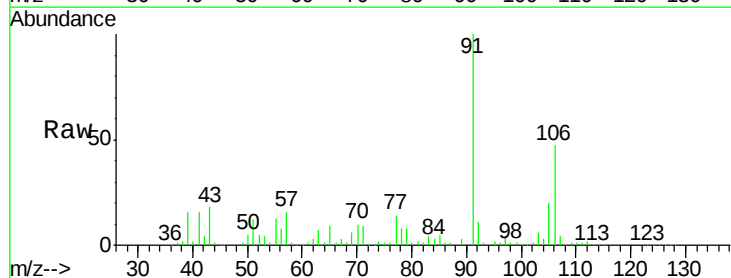
Instrument :  
MSVOA\_L  
ClientSampled :

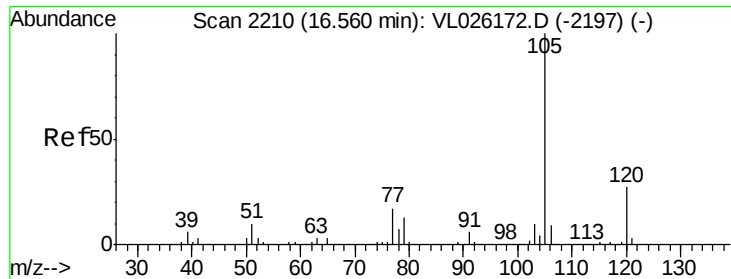
Tot Ion: 91 Resp: 3953213  
Ion Ratio Lower Upper  
91 100  
106 36.7 23.4 70.3



#61  
Styrene  
Concen: 34.94 ppbv  
RT: 15.69 min Scan# 2068  
Delta R.T. 0.37 min  
Lab File: VL026192.D  
Acq: 10 Oct 2015 1:36

Tgt Ion: 104 Resp: 253611  
Ion Ratio Lower Upper  
104 100  
78 289.0 36.1 54.1#  
103 253.4 37.5 56.3#





#62

Isopropylbenzene

Concen: 3.06 ppbv

RT: 16.69 min Scan# 2232

Delta R.T. 0.13 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

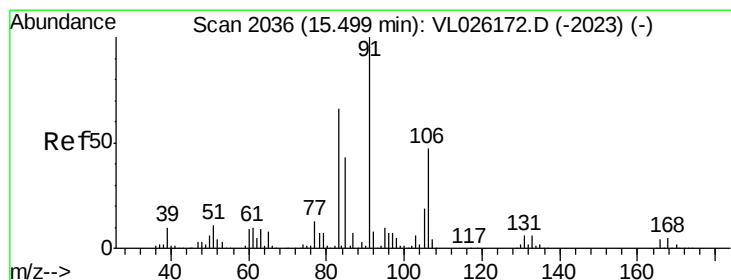
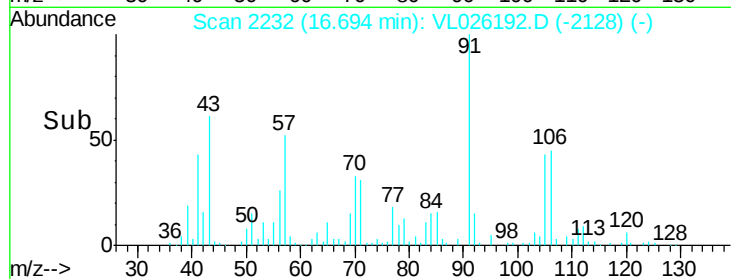
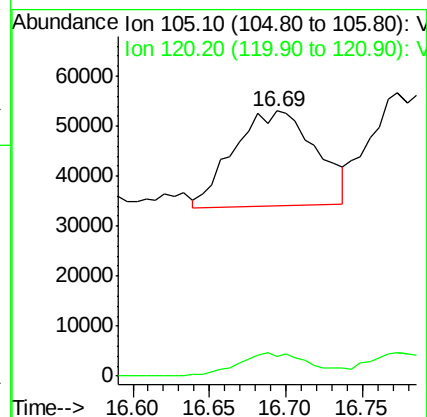
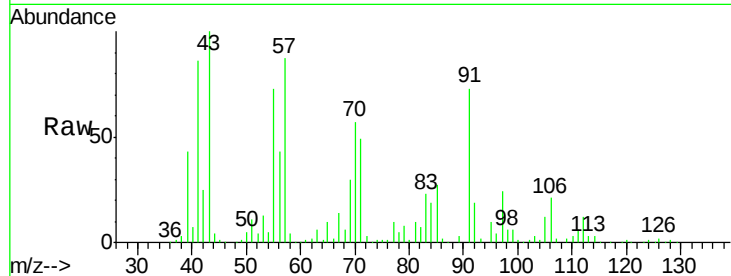
ClientSampleId :

Tot Ion: 105 Resp: 71590

Ion Ratio Lower Upper

105 100

120 22.3 21.8 32.6



#63

1,1,2,2-Tetrachloroethane

Concen: 4.26 ppbv

RT: 15.85 min Scan# 2094

Delta R.T. 0.35 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

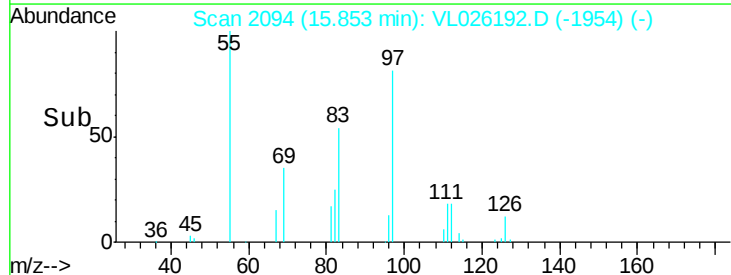
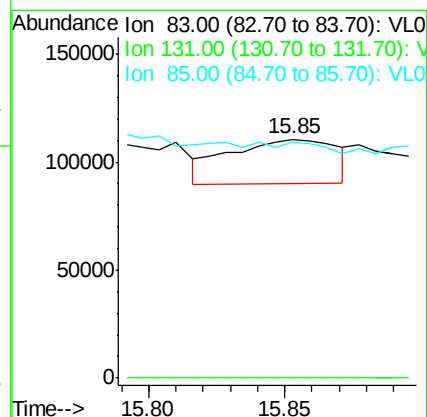
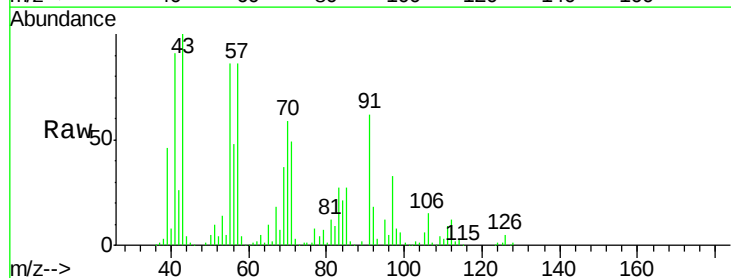
Tgt Ion: 83 Resp: 56207

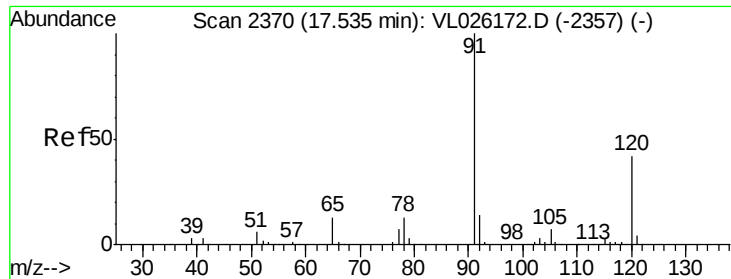
Ion Ratio Lower Upper

83 100

131 0.0 4.5 13.7#

85 0.0 32.6 97.7#

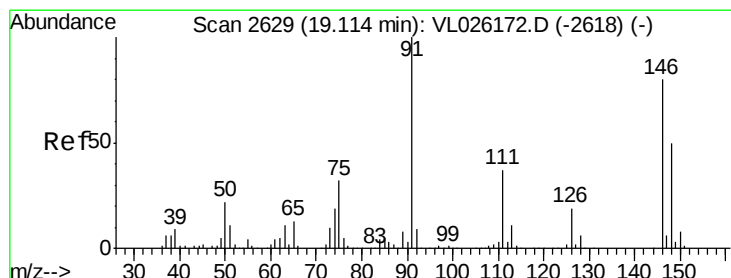
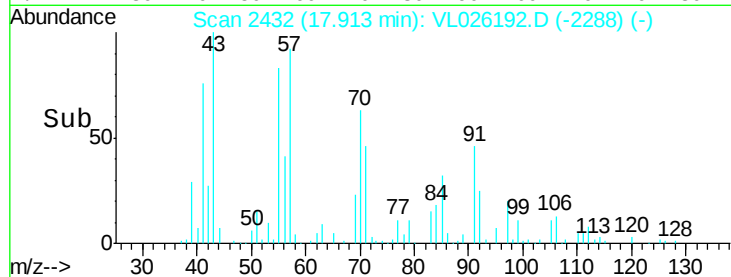
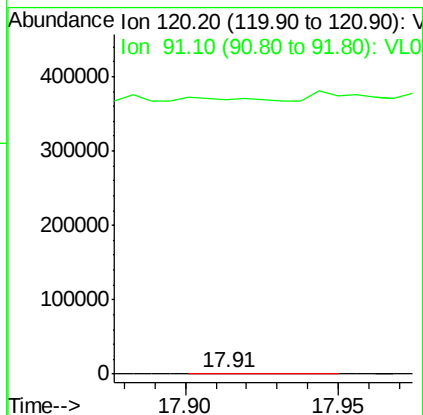
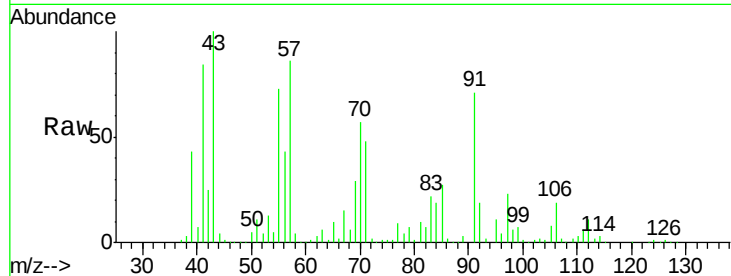




#64  
 n-propylbenzene  
 Concen: 0.37 ppbv  
 RT: 17.91 min Scan# 2432  
 Delta R.T. 0.38 min  
 Lab File: VL026192.D  
 Acq: 10 Oct 2015 1:36

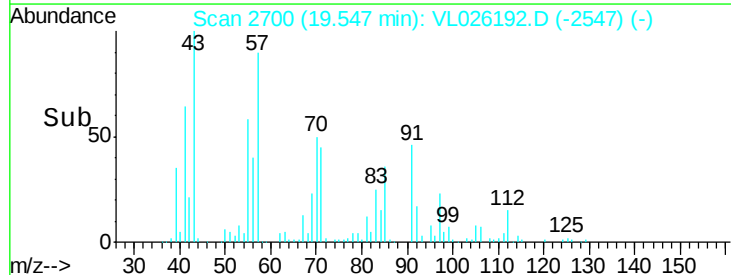
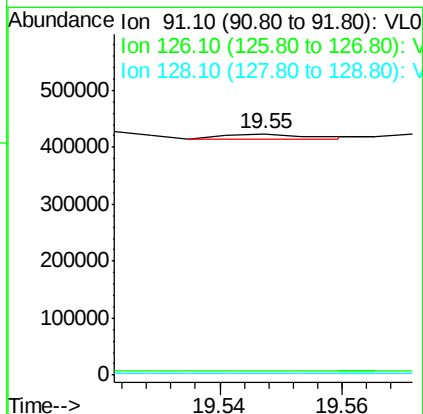
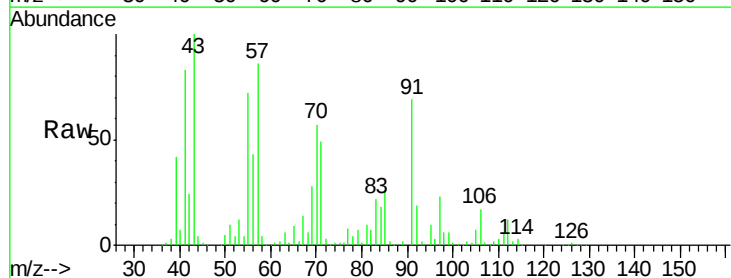
Instrument :  
 MSVOA\_L  
 ClientSampleId :

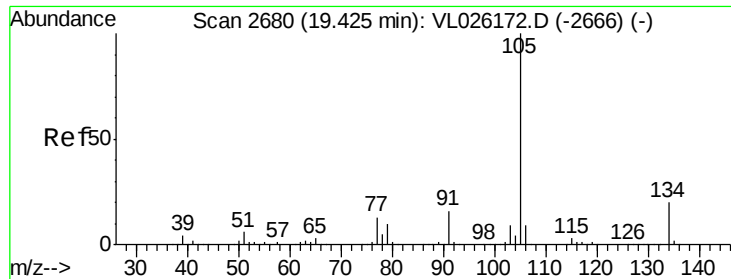
Tot Ion:120 Resp: 2331  
 Ion Ratio Lower Upper  
 120 100  
 91 0.0 353.4 530.2#



#66  
 Benzyl Chloride  
 Concen: 1.30 ppbv  
 RT: 19.55 min Scan# 2700  
 Delta R.T. 0.43 min  
 Lab File: VL026192.D  
 Acq: 10 Oct 2015 1:36

Tgt Ion: 91 Resp: 7959  
 Ion Ratio Lower Upper  
 91 100  
 126 0.0 15.2 22.8#  
 128 0.0 4.8 7.2#

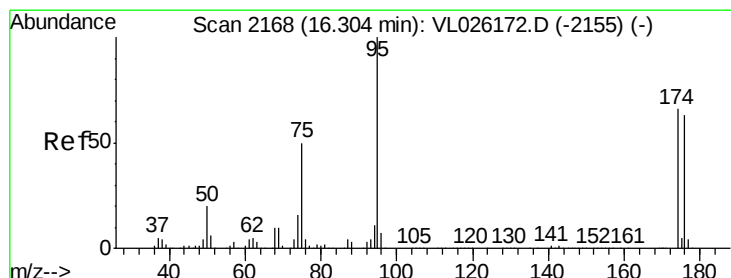
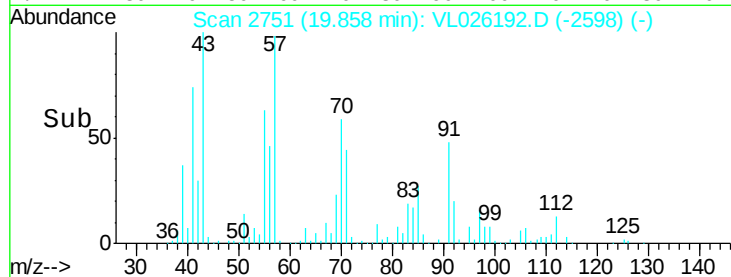
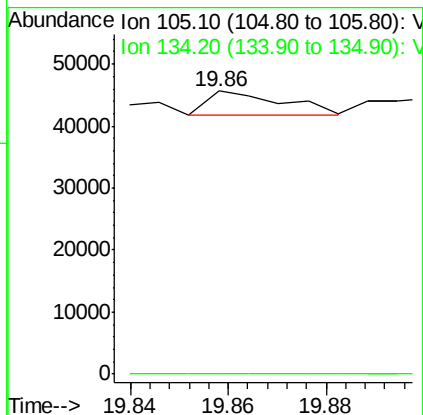
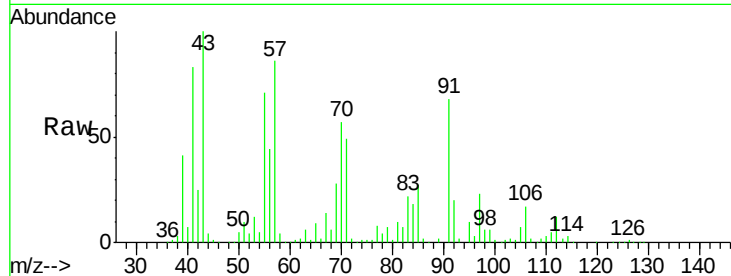




#67  
 sec-Butylbenzene  
 Concen: 0.14 ppbv  
 RT: 19.86 min Scan# 2751  
 Delta R.T. 0.43 min  
 Lab File: VL026192.D  
 Acq: 10 Oct 2015 1:36

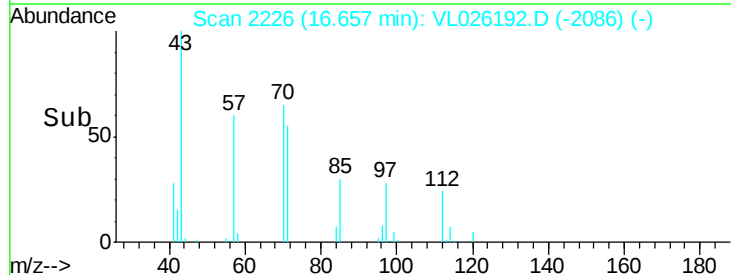
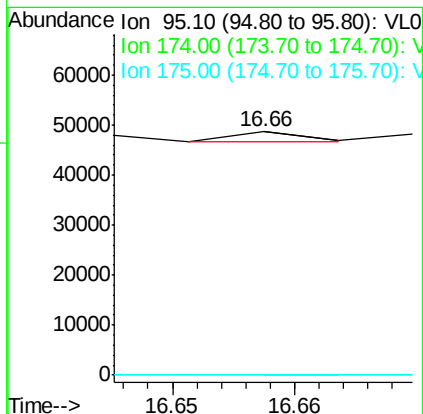
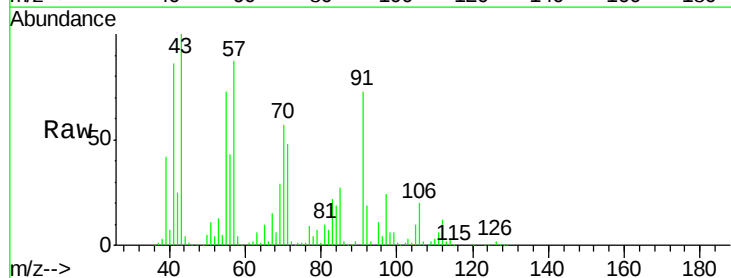
Instrument :  
 MSVOA\_L  
 ClientSampleId :

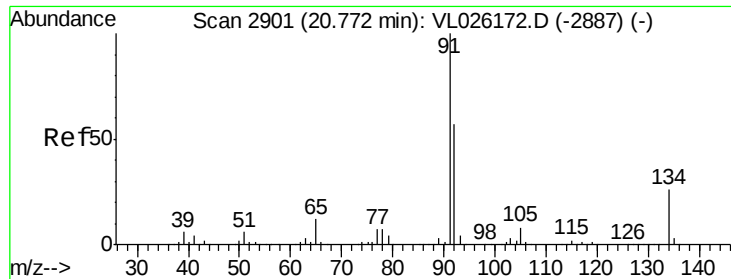
Tot Ion: 105 Resp: 4144  
 Ion Ratio Lower Upper  
 105 100  
 134 0.0 15.9 23.9#



#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 0.08 ppbv  
 RT: 16.66 min Scan# 2226  
 Delta R.T. 0.35 min  
 Lab File: VL026192.D  
 Acq: 10 Oct 2015 1:36

Tgt Ion: 95 Resp: 899  
 Ion Ratio Lower Upper  
 95 100  
 174 0.0 52.2 78.4#  
 175 0.0 3.9 5.9#





#70

n-Butylbenzene

Concen: 1.76 ppbv

RT: 21.25 min Scan# 2979

Delta R.T. 0.48 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

ClientSampleId :

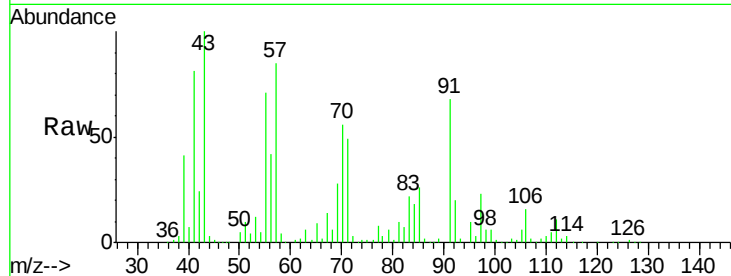
Tot Ion: 91 Resp: 38873

Ion Ratio Lower Upper

91 100

92 35.4 45.0 67.6#

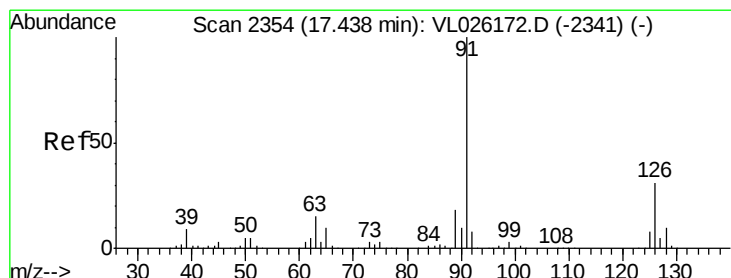
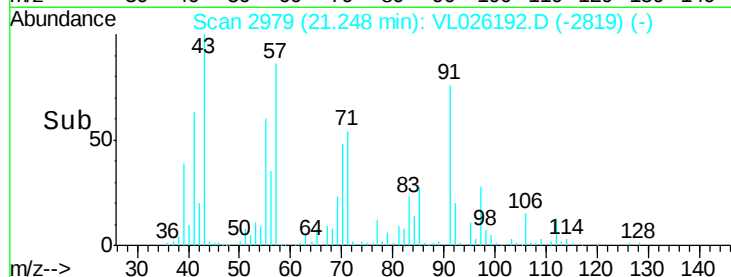
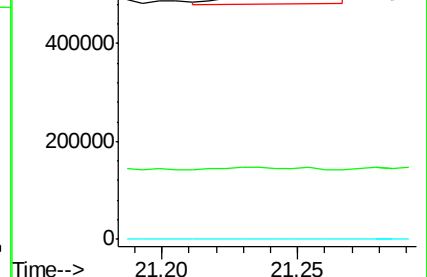
134 0.0 19.8 29.8#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

Ion 134.20 (133.90 to 134.90): VL0



#71

2-Chlorotoluene

Concen: 0.50 ppbv

RT: 17.65 min Scan# 2388

Delta R.T. 0.21 min

Lab File: VL026192.D

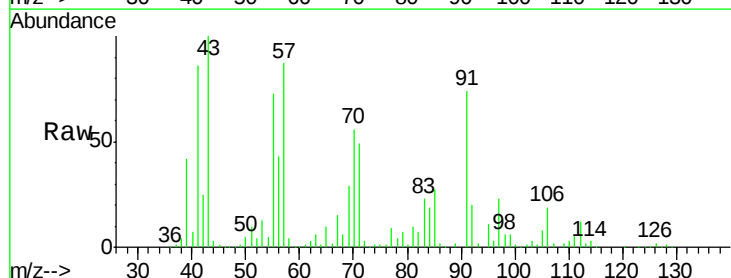
Acq: 10 Oct 2015 1:36

Tgt Ion: 91 Resp: 8510

Ion Ratio Lower Upper

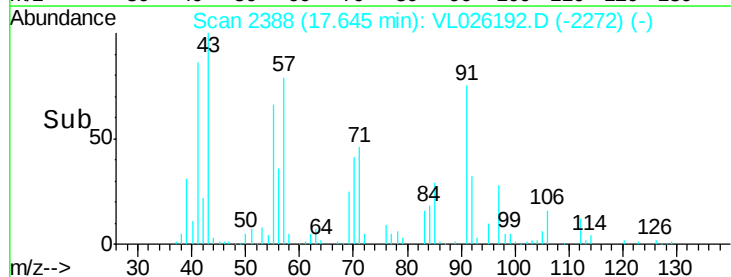
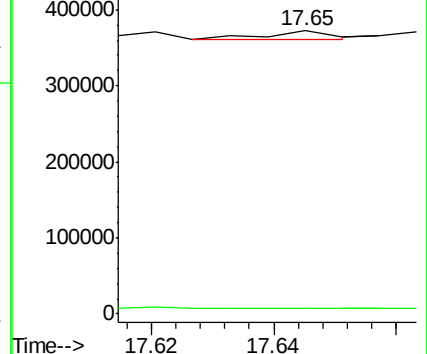
91 100

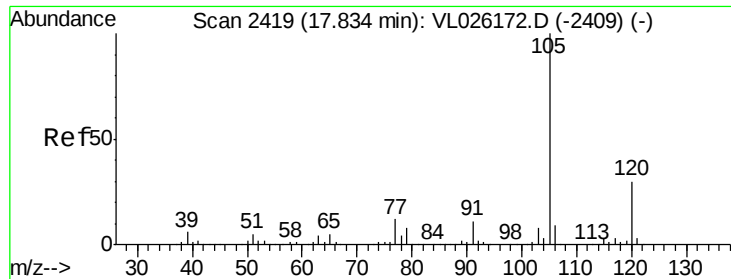
126 36.1 12.8 51.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): VL0





#72

4-Ethyltoluene

Concen: 0.04 ppbv

RT: 18.24 min Scan# 2485

Delta R.T. 0.40 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

ClientSampled :

Tot Ion:105 Resp: 734

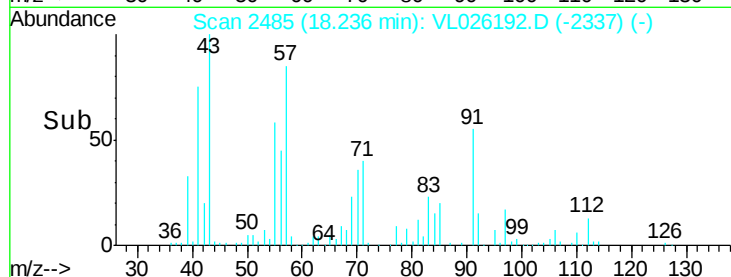
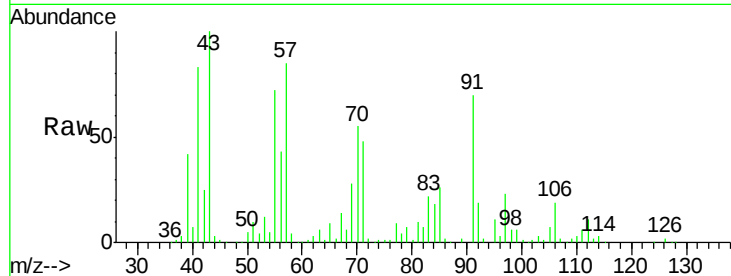
Ion Ratio Lower Upper

105 100

120 0.0 24.7 37.1#

91 3080.0 9.2 13.8#

77 1310.1 9.8 14.8#

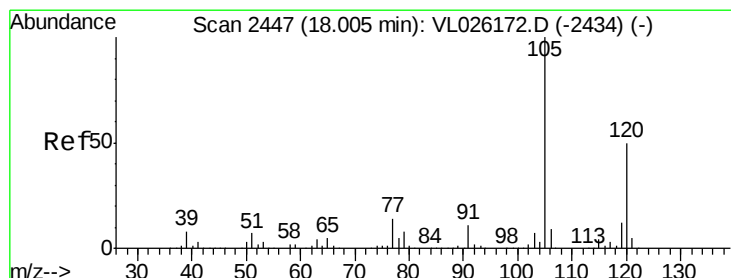
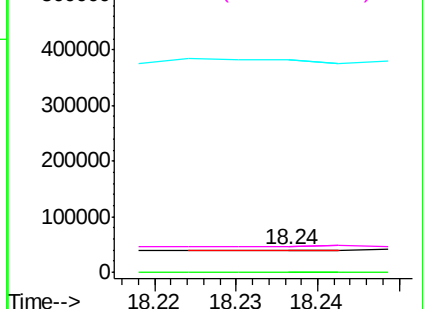


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#73

1,3,5-Trimethylbenzene

Concen: 0.13 ppbv

RT: 18.39 min Scan# 2511

Delta R.T. 0.39 min

Lab File: VL026192.D

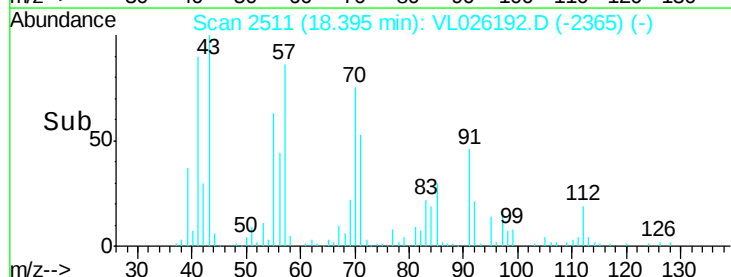
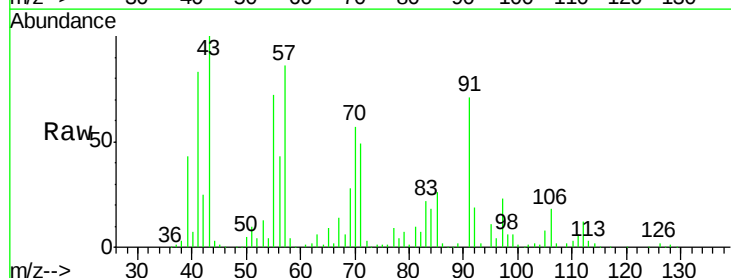
Acq: 10 Oct 2015 1:36

Tgt Ion:105 Resp: 2260

Ion Ratio Lower Upper

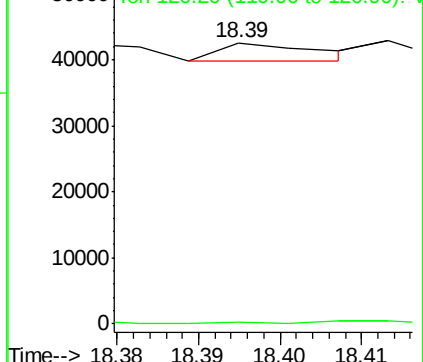
105 100

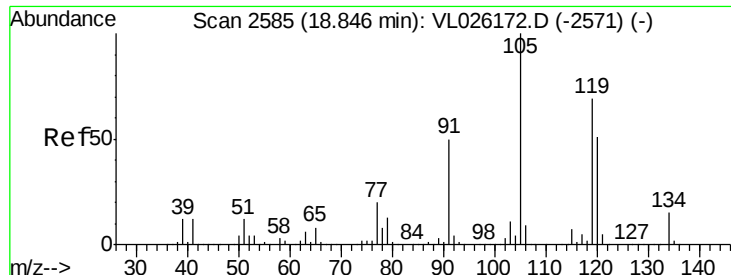
120 11.8 40.1 60.1#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#74

1,2,4-Trimethylbenzene

Concen: 0.07 ppbv

RT: 19.27 min Scan# 2654

Delta R.T. 0.42 min

Lab File: VL026192.D

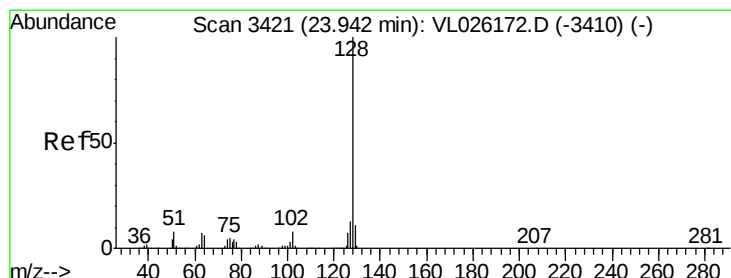
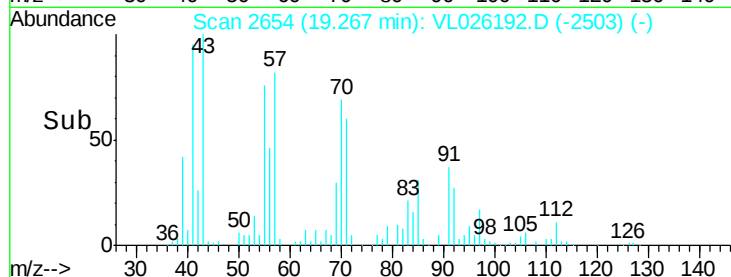
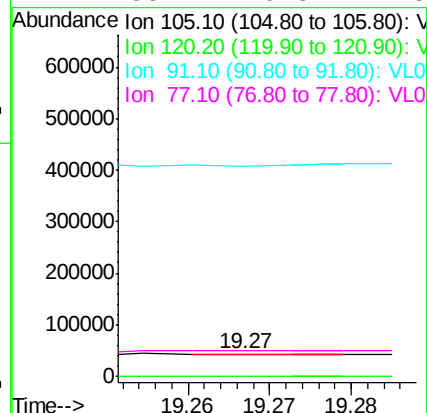
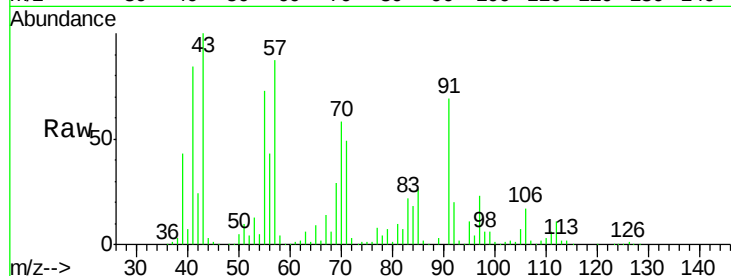
Acq: 10 Oct 2015 1:36

Instrument :

MSVOA\_L

ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 105   | Resp: | 1270  |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 19.3  | 41.1  | 61.7# |
| 91       | 0.0   | 39.8  | 59.6# |
| 77       | 35.1  | 16.3  | 24.5# |



#79

Naphthalene

Concen: 0.05 ppbv

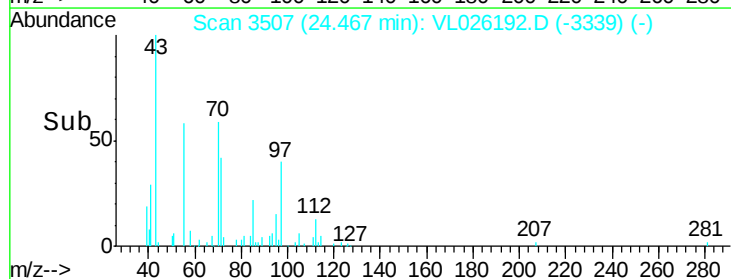
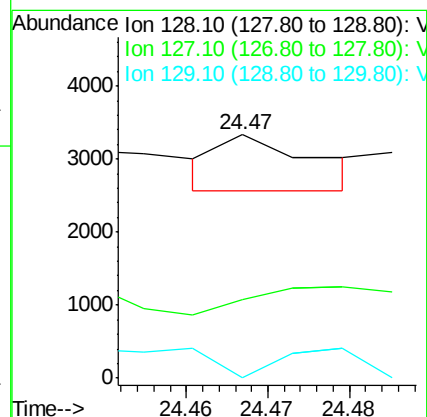
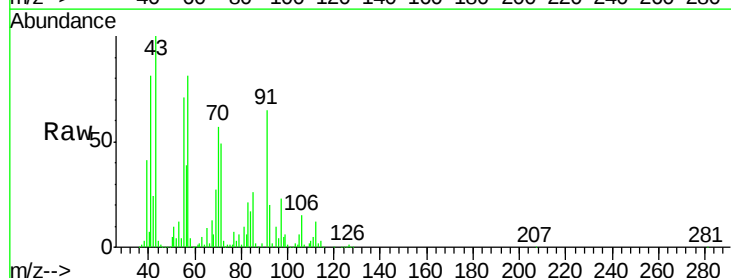
RT: 24.47 min Scan# 3507

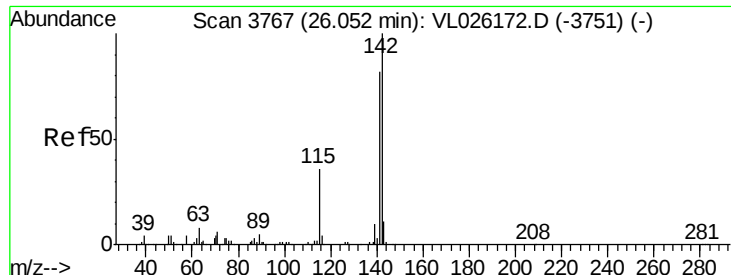
Delta R.T. 0.52 min

Lab File: VL026192.D

Acq: 10 Oct 2015 1:36

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 621   |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 127      | 61.8  | 10.2  | 15.2# |
| 129      | 0.0   | 8.7   | 13.1# |





#80  
 Naphthalene, 2-methyl-  
 Concen: 12.80 ppbv  
 RT: 26.68 min Scan# 3870  
 Delta R.T. 0.63 min  
 Lab File: VL026192.D  
 Acq: 10 Oct 2015 1:36

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Tot Ion:142 Resp: 33654  
 Ion Ratio Lower Upper  
 142 100  
 141 0.0 66.6 99.8#  
 115 1274.4 28.4 42.6#

