

Data Path : W:\HPCHEM1\MSVOA\_L\DATA\VL020916\  
 Data File : VL026840.D  
 Acq On : 10 Feb 2016 4:52  
 Operator : SY/AP  
 Sample : H1388-01DL 10X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IAS-1DL

Quant Time: Feb 10 06:07:32 2016

Quant Method : W:\HPCHEM1\MSVOA\_L\METHODS\VL020916AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Feb 10 03:14:04 2016

QLast Update : Wed Feb 10 03:14:04 2016

Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 6.69  | 49   | 1710801  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 8.37  | 114  | 4808569  | 10.00 | ppbv  | -0.01    |
| 55) Chlorobenzene-d5    | 13.79 | 117  | 4613614  | 10.00 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 16.33  | 95    | 3262337  | 9.85     | ppbv | -0.01  |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 98.50% |

#### Target Compounds

|                                |       |     |         |       |        | Qvalue |
|--------------------------------|-------|-----|---------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.67  | 85  | 22451   | 0.06  | ppbv   | 97     |
| 3) Chlorodifluoromethane       | 3.60  | 51  | 436949  | 1.57  | ppbv   | 93     |
| 4) Chloromethane               | 3.78  | 50  | 6830    | 0.06  | ppbv   | 98     |
| 5) Vinyl Chloride              | 3.64  | 62  | 970     | 0.01  | ppbv # | 42     |
| 8) Dichlorotetrafluoroethane   | 3.84  | 85  | 782     | 0.00  | ppbv   | 85     |
| 9) Propene                     | 3.64  | 41  | 22779   | 0.30  | ppbv # | 82     |
| 10) Heptane                    | 9.39  | 43  | 6505    | 0.03  | ppbv # | 64     |
| 11) Trichlorofluoromethane     | 4.73  | 101 | 14503   | 0.03  | ppbv   | 98     |
| 12) 1,1,2-Trichlorotrifluoroet | 5.04  | 101 | 358     | 0.00  | ppbv   | 89     |
| 13) Ethanol                    | 4.35  | 45  | 759379  | 58.88 | ppbv   | 99     |
| 15) Acetone                    | 4.63  | 43  | 3751359 | 15.96 | ppbv   | 100    |
| 16) 1,3-Butadiene              | 3.98  | 39  | 6380    | 0.07  | ppbv # | 3      |
| 17) tert-Butyl alcohol         | 4.80  | 59  | 15051   | 0.10  | ppbv   | 97     |
| 19) Isopropyl Alcohol          | 4.79  | 45  | 341470  | 4.07  | ppbv # | 92     |
| 20) Methylene Chloride         | 5.18  | 84  | 14266   | 0.12  | ppbv   | 92     |
| 21) Allyl Chloride             | 5.26  | 41  | 368     | 0.00  | ppbv # | 18     |
| 23) Vinyl Acetate              | 6.03  | 43  | 13555   | 0.04  | ppbv # | 79     |
| 25) Ethyl Acetate              | 6.72  | 43  | 47886   | 0.14  | ppbv # | 93     |
| 26) Hexane                     | 6.70  | 57  | 10976   | 0.06  | ppbv # | 1      |
| 27) Carbon Disulfide           | 5.44  | 76  | 3597    | 0.01  | ppbv # | 1      |
| 28) Methyl tert-Butyl Ether    | 6.14  | 73  | 4555    | 0.01  | ppbv # | 1      |
| 29) Chloroform                 | 6.79  | 83  | 1106    | 0.00  | ppbv   | 88     |
| 30) Cyclohexane                | 8.35  | 84  | 6704    | 0.04  | ppbv # | 20     |
| 31) cis-1,2-Dichloroethene     | 6.72  | 61  | 5459    | 0.03  | ppbv # | 22     |
| 32) 1,1,1-Trichloroethane      | 7.64  | 97  | 246     | 0.00  | ppbv # | 23     |
| 34) 2-Butanone                 | 6.25  | 43  | 15354   | 0.07  | ppbv   | 99     |
| 35) Carbon Tetrachloride       | 8.20  | 117 | 2856    | 0.01  | ppbv # | 74     |
| 36) Benzene                    | 8.06  | 78  | 15435   | 0.04  | ppbv   | 94     |
| 37) 1,2-Dichloroethane         | 7.41  | 62  | 131     | 0.00  | ppbv # | 80     |
| 38) Trichloroethene            | 9.11  | 130 | 512     | 0.00  | ppbv # | 38     |
| 41) Tetrahydrofuran            | 7.20  | 42  | 468     | 0.00  | ppbv # | 34     |
| 42) Bromodichloromethane       | 8.77  | 83  | 245     | 0.00  | ppbv # | 24     |
| 43) Methyl Methacrylate        | 9.32  | 69  | 4099    | 0.03  | ppbv # | 86     |
| 44) 2,2,4-Trimethylpentane     | 9.12  | 57  | 4594    | 0.01  | ppbv # | 5      |
| 50) 4-Methyl-2-Pentanone       | 10.16 | 43  | 1207    | 0.00  | ppbv # | 37     |
| 51) 2-Hexanone                 | 11.96 | 43  | 124376  | 0.53  | ppbv # | 51     |
| 52) Tetrachloroethene          | 12.83 | 164 | 10310   | 0.07  | ppbv # | 81     |
| 53) Toluene                    | 11.28 | 91  | 65139   | 0.15  | ppbv   | 93     |
| 57) Chlorobenzene              | 13.86 | 112 | 286     | 0.00  | ppbv # | 62     |
| 58) Ethyl Benzene              | 14.46 | 91  | 6693    | 0.01  | ppbv # | 87     |
| 59) m/p-Xylene                 | 14.76 | 91  | 3830    | 0.01  | ppbv # | 29     |

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Instrument :  
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 IAS-1DL

Quant Time: Feb 10 06:07:32 2016

Quant Method : W:\HPCHEM1\MSVOA\_L\METHODS\VL020916AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Feb 10 03:14:04 2016

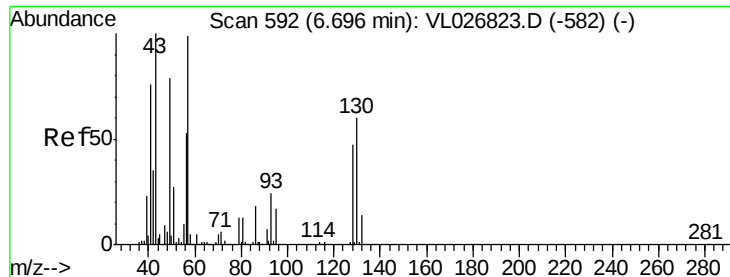
QLast Update : Wed Feb 10 03:14:04 2016

Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|------|--------|----------|
| 60) o-Xylene                  | 15.54 | 91   | 5890     | 0.01 | ppbv   | 84       |
| 61) Styrene                   | 15.36 | 104  | 310      | 0.00 | ppbv # | 28       |
| 62) Isopropylbenzene          | 16.59 | 105  | 450      | 0.00 | ppbv # | 49       |
| 63) 1,1,2,2-Tetrachloroethane | 15.42 | 83   | 480      | 0.00 | ppbv # | 25       |
| 64) n-propylbenzene           | 17.79 | 120  | 111      | 0.00 | ppbv # | 1        |
| 65) tert-Butylbenzene         | 18.90 | 119  | 437      | 0.00 | ppbv # | 21       |
| 66) Benzyl Chloride           | 18.89 | 91   | 255      | 0.00 | ppbv # | 1        |
| 67) sec-Butylbenzene          | 19.80 | 105  | 258      | 0.00 | ppbv # | 56       |
| 69) p-Isopropyltoluene        | 19.83 | 119  | 564      | 0.00 | ppbv # | 48       |
| 71) 2-Chlorotoluene           | 17.56 | 91   | 613      | 0.00 | ppbv # | 44       |
| 72) 4-Ethyltoluene            | 17.86 | 105  | 646      | 0.00 | ppbv # | 55       |
| 73) 1,3,5-Trimethylbenzene    | 18.04 | 105  | 781      | 0.00 | ppbv # | 28       |
| 74) 1,2,4-Trimethylbenzene    | 18.89 | 105  | 4577     | 0.01 | ppbv # | 65       |
| 79) Naphthalene               | 23.99 | 128  | 154      | 0.00 | ppbv # | 70       |

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





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 6.69 min Scan# 591

Delta R.T. -0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

IAS-1DL

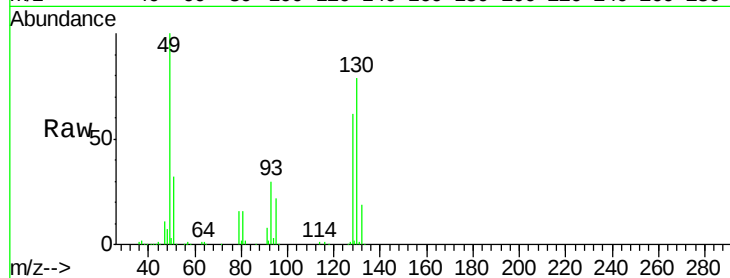
Tgt Ion: 49 Resp: 1710801

Ion Ratio Lower Upper

49 100

128 62.6 29.7 89.1

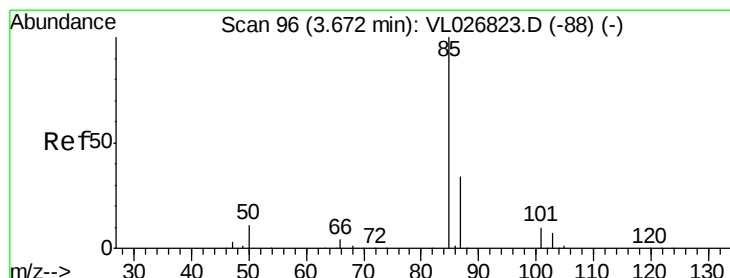
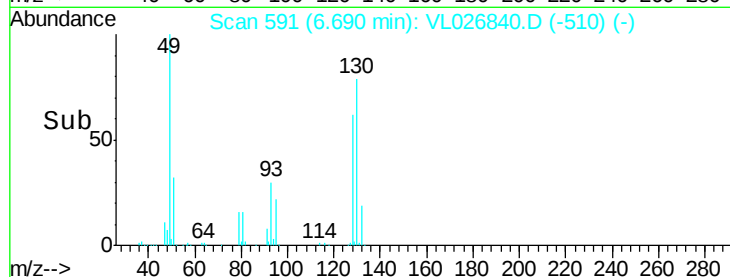
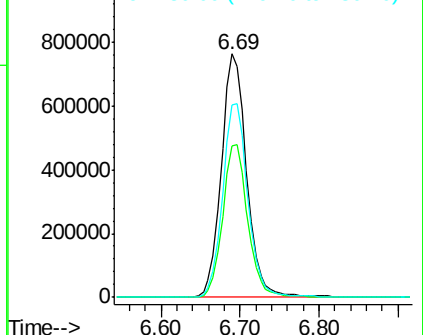
130 80.4 38.3 114.8



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: 0.06 ppbv

RT: 3.67 min Scan# 96

Delta R.T. -0.00 min

Lab File: VL026840.D

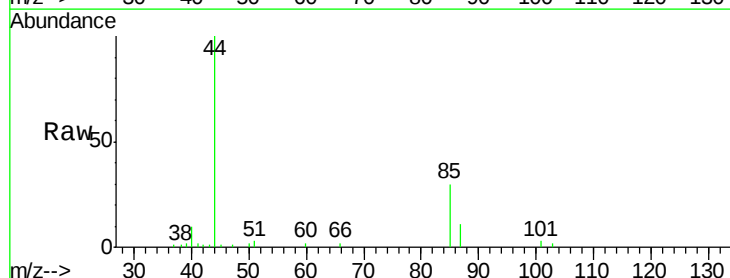
Acq: 10 Feb 2016 4:52

Tgt Ion: 85 Resp: 22451

Ion Ratio Lower Upper

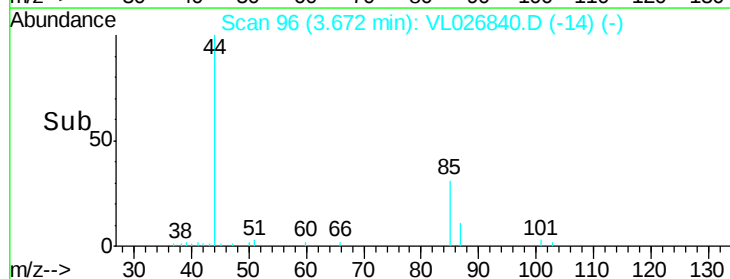
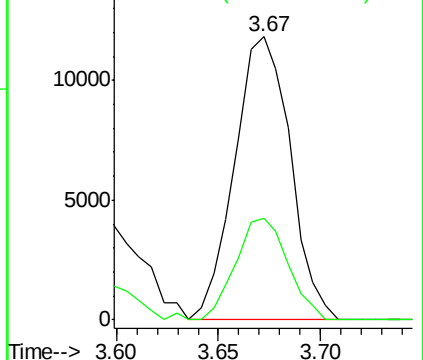
85 100

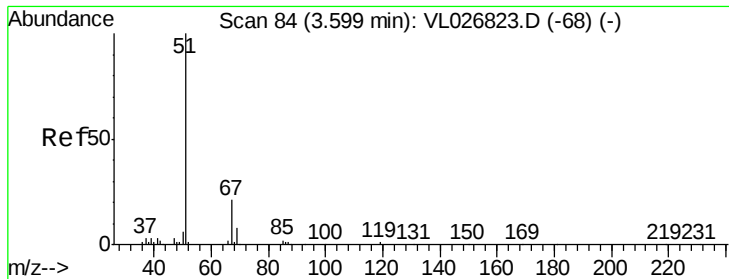
87 35.9 27.3 40.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 1.57 ppbv

RT: 3.60 min Scan# 84

Delta R.T. -0.00 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

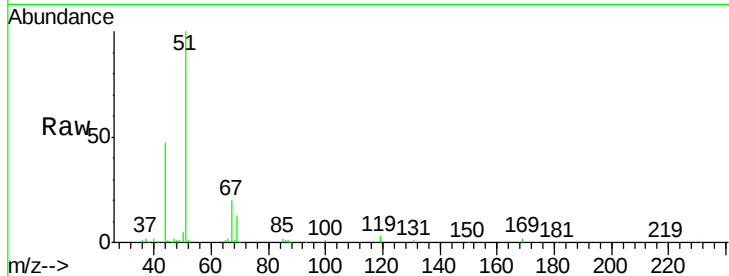
IAS-1DL

Tgt Ion: 51 Resp: 436949

Ion Ratio Lower Upper

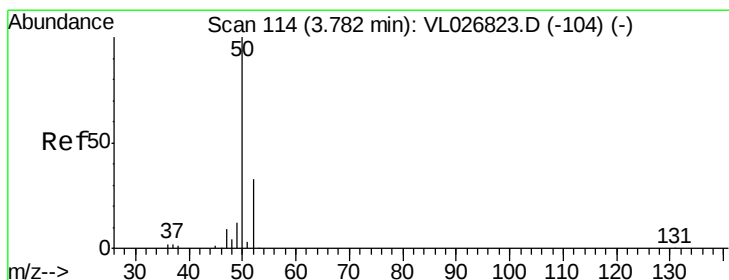
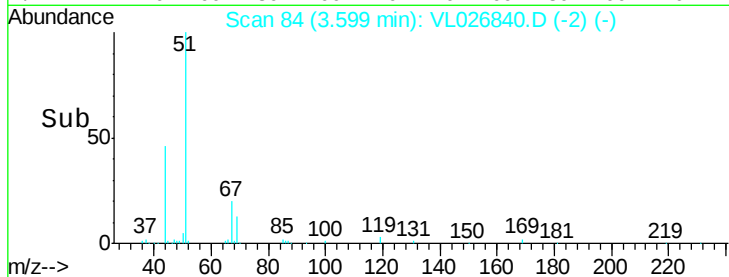
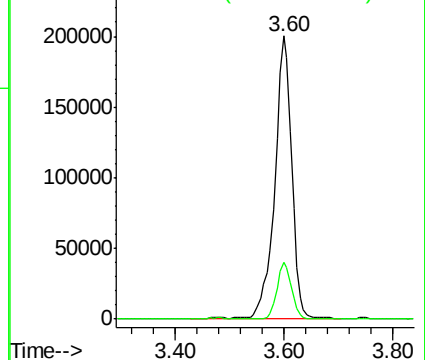
51 100

67 17.1 16.4 24.6



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.06 ppbv

RT: 3.78 min Scan# 114

Delta R.T. -0.00 min

Lab File: VL026840.D

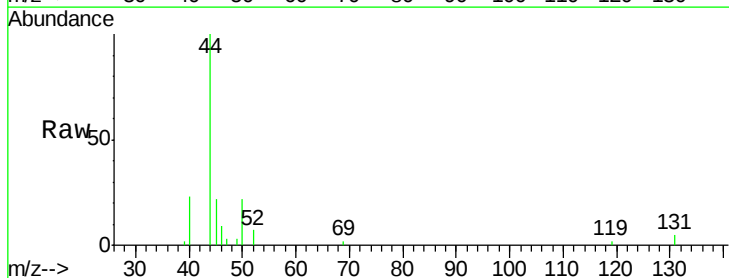
Acq: 10 Feb 2016 4:52

Tgt Ion: 50 Resp: 6830

Ion Ratio Lower Upper

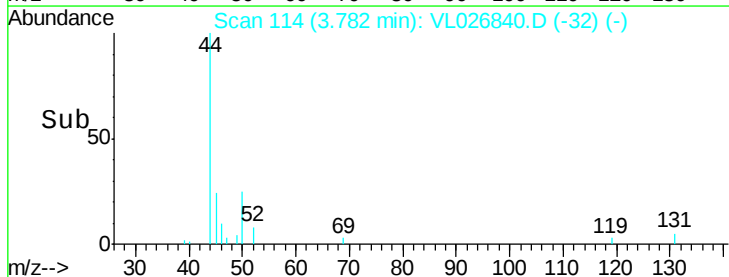
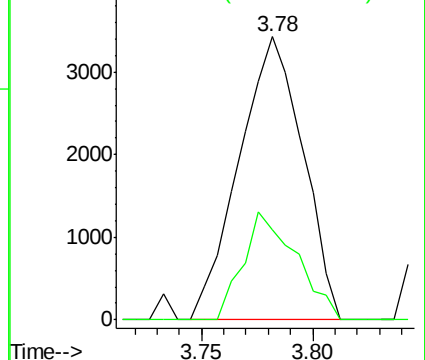
50 100

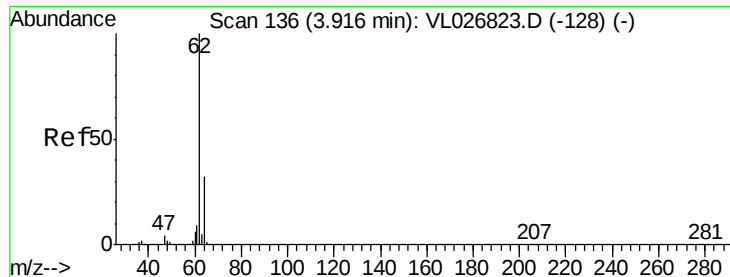
52 31.7 26.3 39.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.01 ppbv

RT: 3.64 min Scan# 91

Delta R.T. -0.27 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

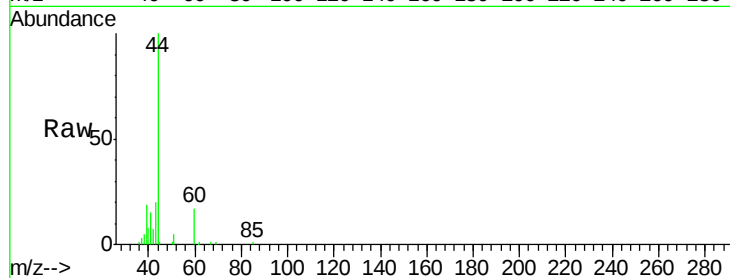
IAS-1DL

Tgt Ion: 62 Resp: 970

Ion Ratio Lower Upper

62 100

64 0.0 25.8 38.6#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0

3.64

600

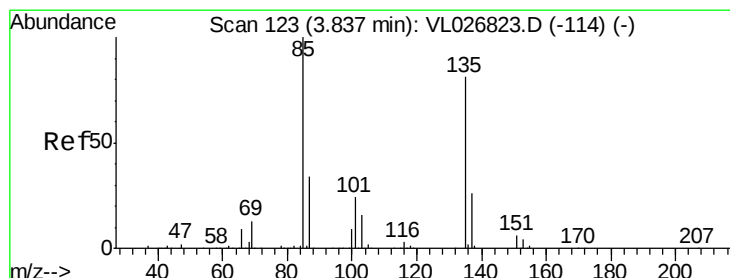
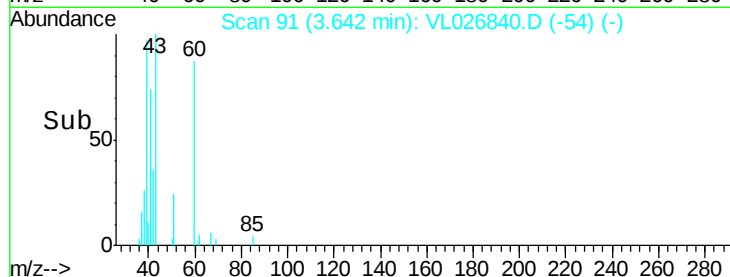
400

200

0

3.62 3.64 3.66

Time-->



#8

Dichlorotetrafluoroethane

Concen: 0.00 ppbv

RT: 3.84 min Scan# 124

Delta R.T. 0.01 min

Lab File: VL026840.D

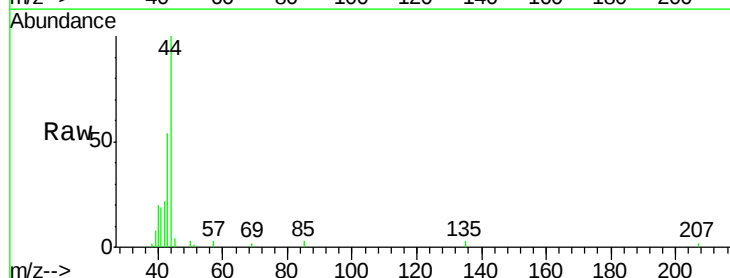
Acq: 10 Feb 2016 4:52

Tgt Ion: 85 Resp: 782

Ion Ratio Lower Upper

85 100

135 92.2 63.2 94.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V

800

600

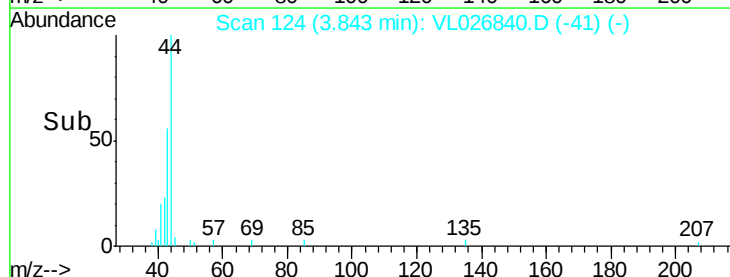
400

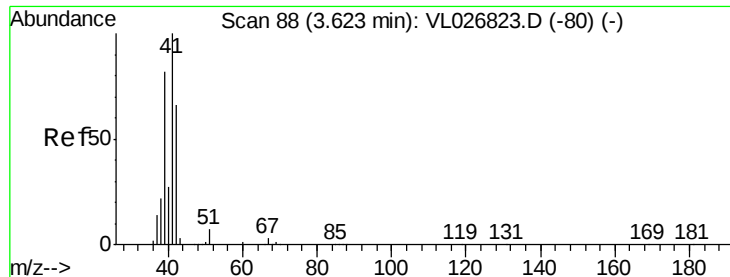
200

0

3.82 3.84 3.86

Time-->





#9

Propene

Concen: 0.30 ppbv

RT: 3.64 min Scan# 90

Delta R.T. 0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

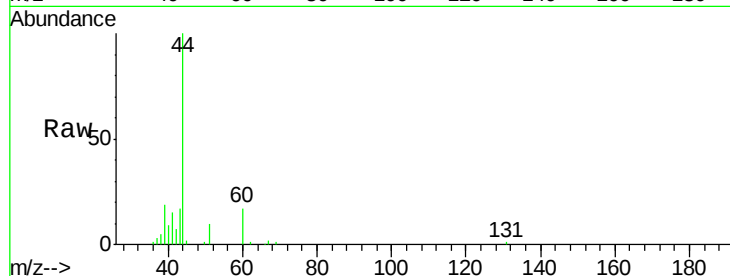
IAS-1DL

Tgt Ion: 41 Resp: 22779

Ion Ratio Lower Upper

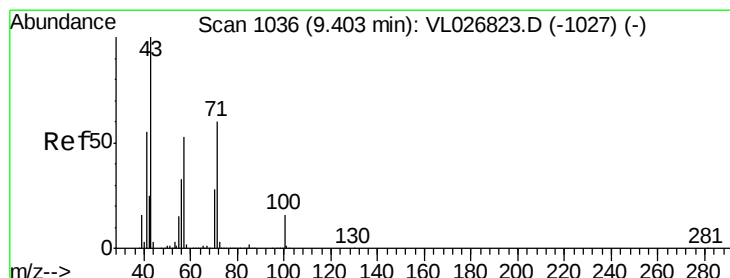
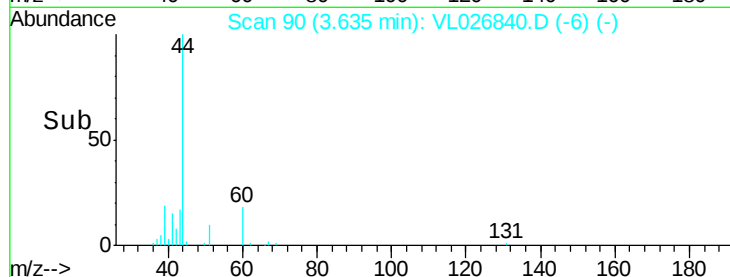
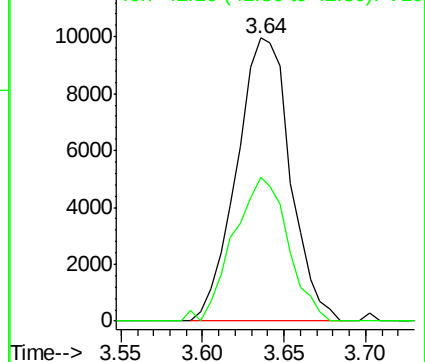
41 100

42 51.6 52.8 79.2#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.03 ppbv

RT: 9.39 min Scan# 1034

Delta R.T. -0.01 min

Lab File: VL026840.D

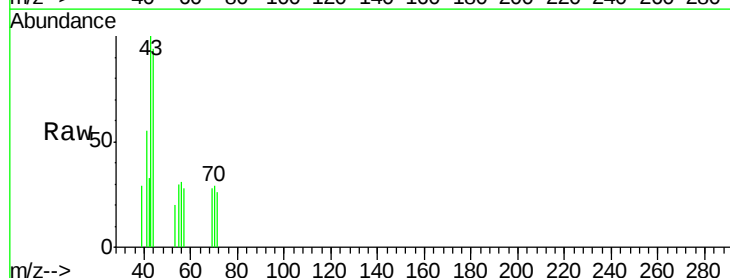
Acq: 10 Feb 2016 4:52

Tgt Ion: 43 Resp: 6505

Ion Ratio Lower Upper

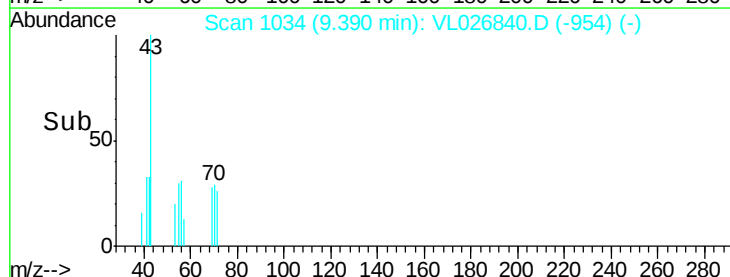
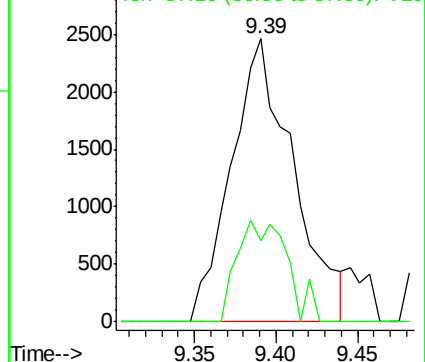
43 100

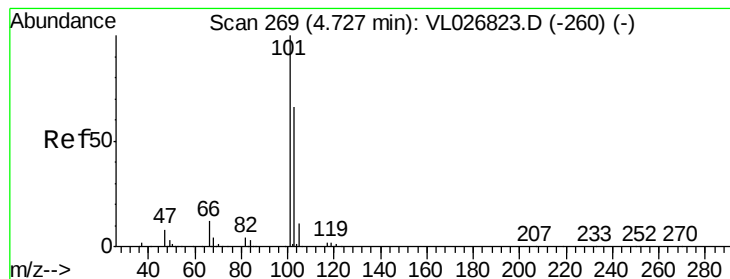
57 28.9 44.0 66.0#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#11

Trichlorofluoromethane

Concen: 0.03 ppbv

RT: 4.73 min Scan# 270

Delta R.T. 0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

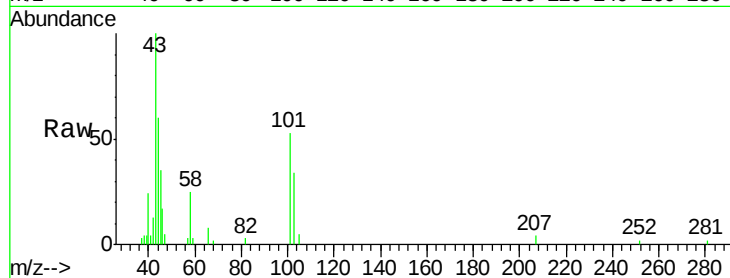
IAS-1DL

Tgt Ion:101 Resp: 14503

Ion Ratio Lower Upper

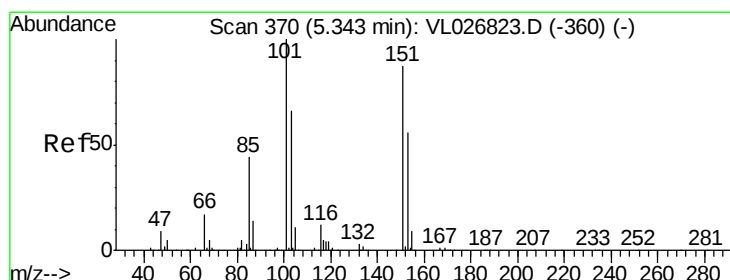
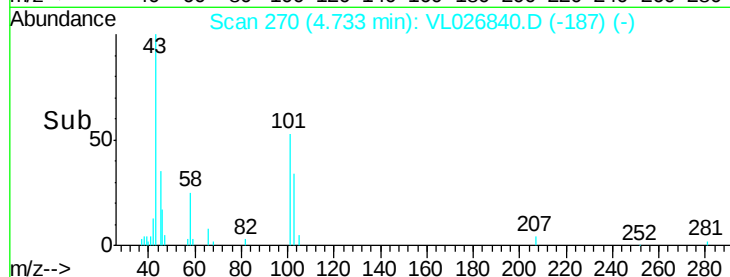
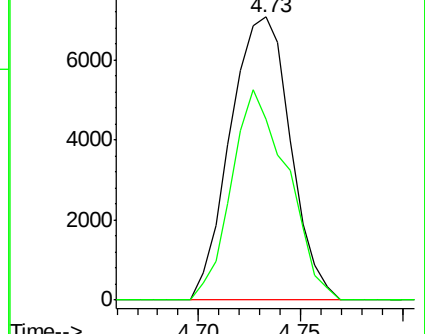
101 100

103 64.1 52.7 79.1



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.00 ppbv

RT: 5.04 min Scan# 320

Delta R.T. -0.30 min

Lab File: VL026840.D

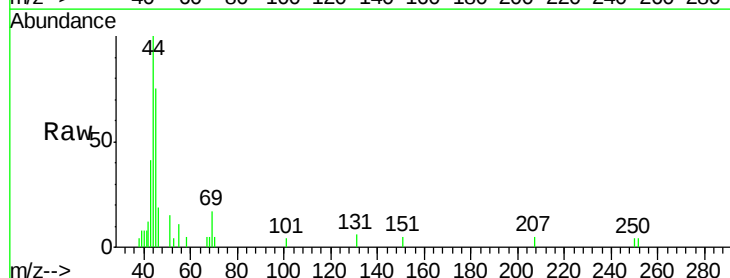
Acq: 10 Feb 2016 4:52

Tgt Ion:101 Resp: 358

Ion Ratio Lower Upper

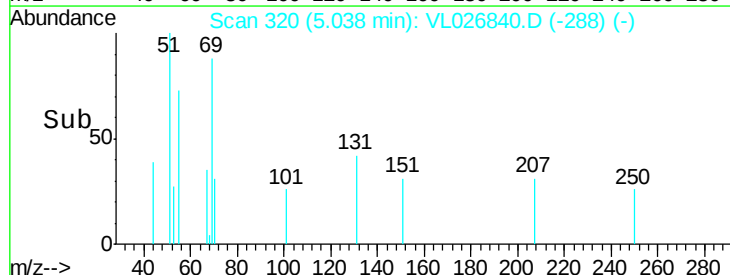
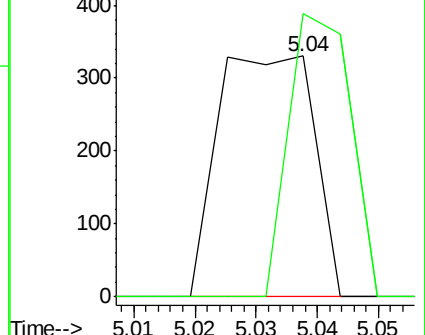
101 100

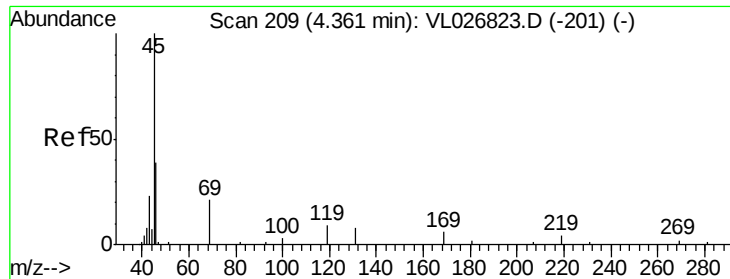
151 76.5 69.4 104.0



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 58.88 ppbv

RT: 4.35 min Scan# 208

Delta R.T. -0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

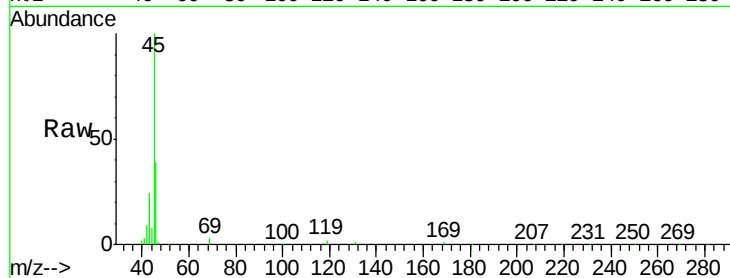
IAS-1DL

Tgt Ion: 45 Resp: 759379

Ion Ratio Lower Upper

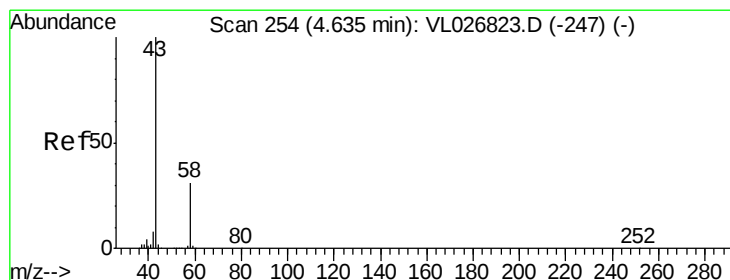
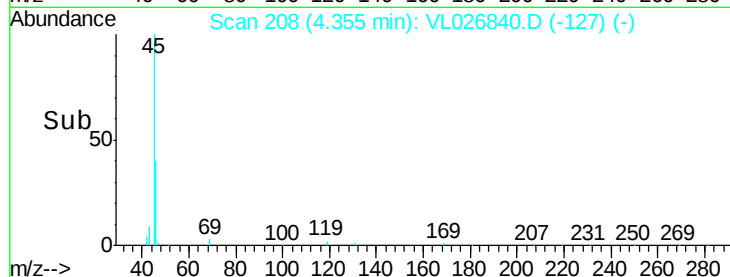
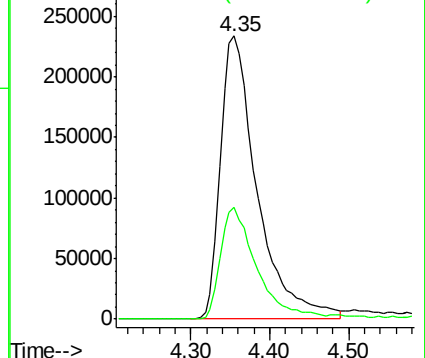
45 100

46 40.5 15.8 63.4



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0



#15

Acetone

Concen: 15.96 ppbv

RT: 4.63 min Scan# 253

Delta R.T. -0.01 min

Lab File: VL026840.D

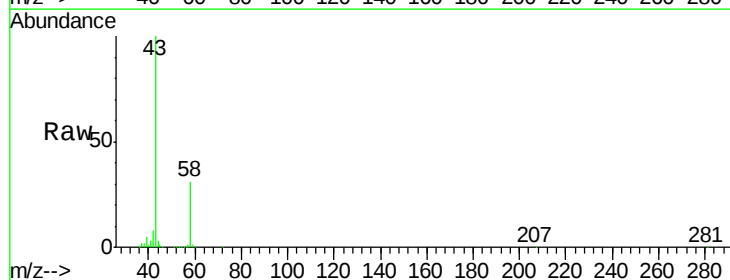
Acq: 10 Feb 2016 4:52

Tgt Ion: 43 Resp: 3751359

Ion Ratio Lower Upper

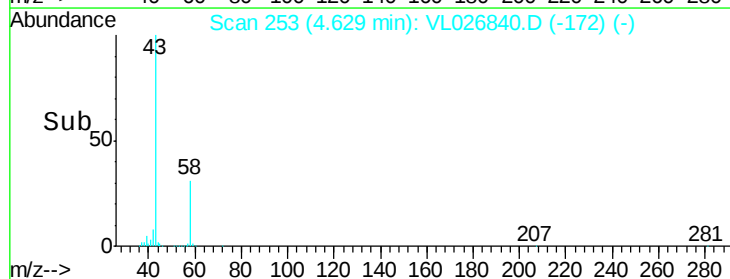
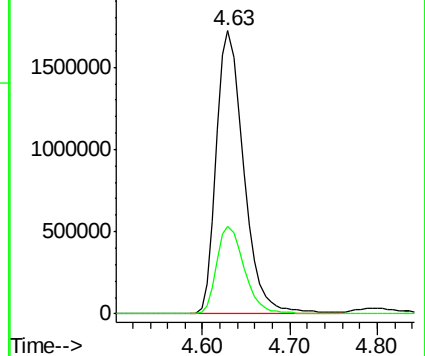
43 100

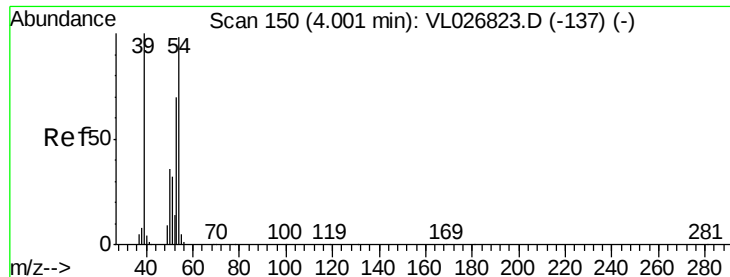
58 31.3 25.2 37.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

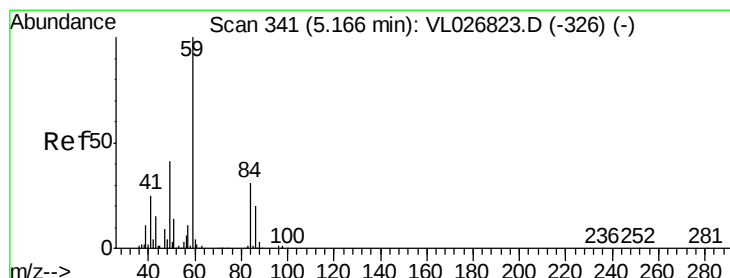
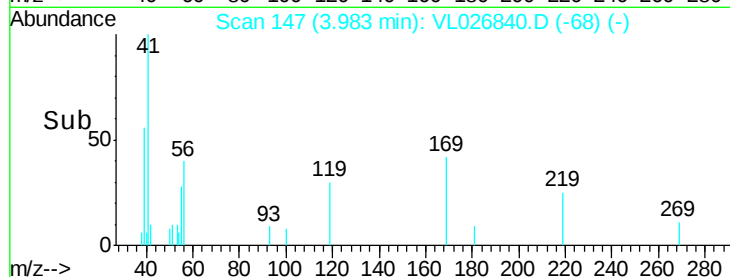
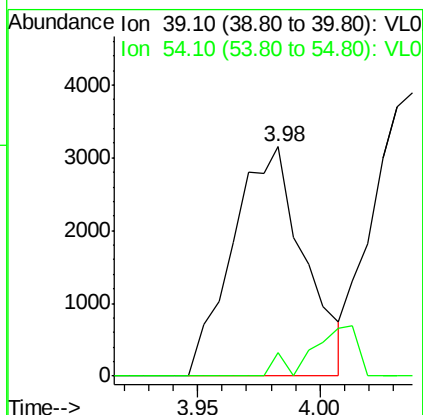
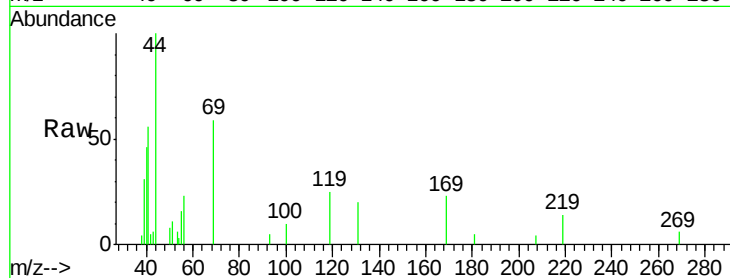




#16  
1,3-Butadiene  
Concen: 0.07 ppbv  
RT: 3.98 min Scan# 147  
Delta R.T. -0.02 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

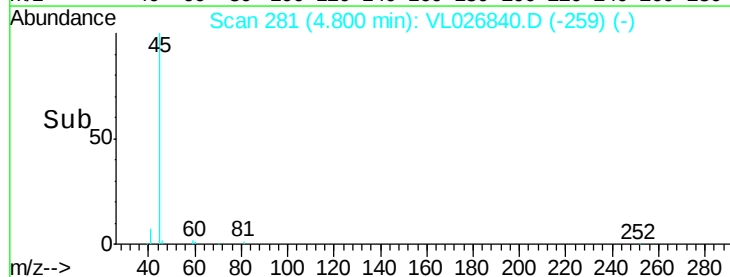
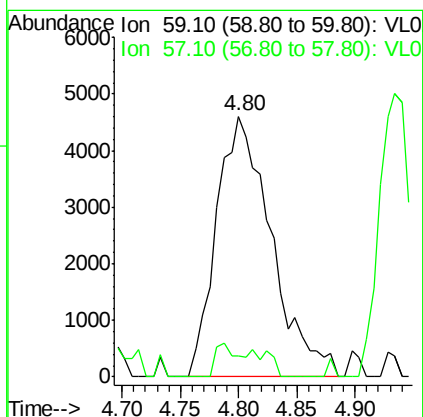
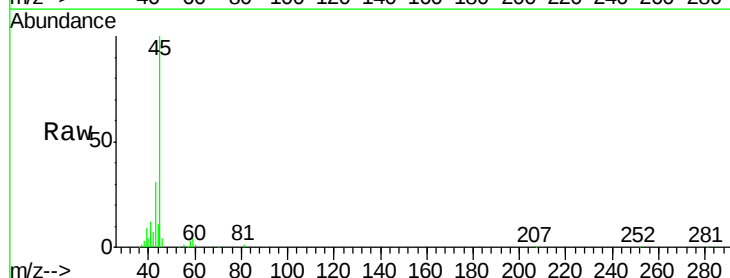
Instrument :  
MSVOA\_L  
ClientSampleId :  
IAS-1DL

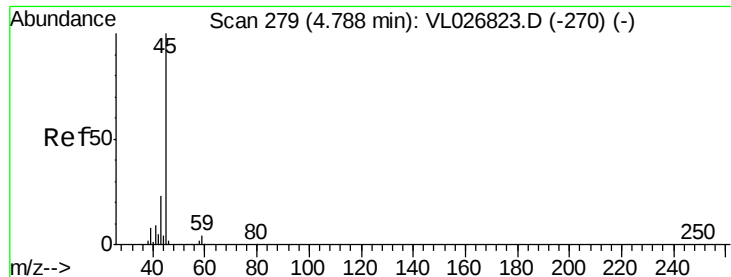
Tgt Ion: 39 Resp: 6380  
Ion Ratio Lower Upper  
39 100  
54 0.0 74.7 112.1#



#17  
tert-Butyl alcohol  
Concen: 0.10 ppbv  
RT: 4.80 min Scan# 281  
Delta R.T. -0.37 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

Tgt Ion: 59 Resp: 15051  
Ion Ratio Lower Upper  
59 100  
57 9.3 8.5 12.7





#19

Isopropyl Alcohol

Concen: 4.07 ppbv

RT: 4.79 min Scan# 280

Delta R.T. 0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

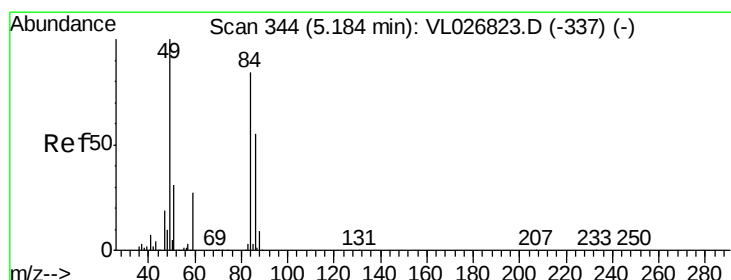
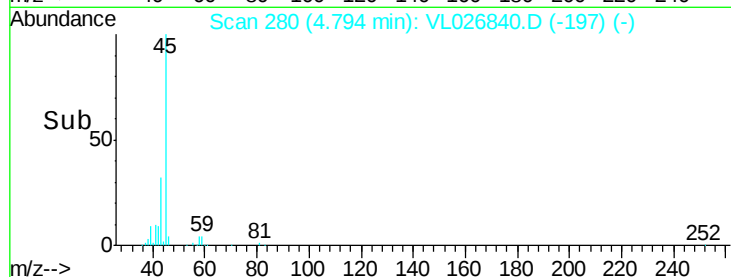
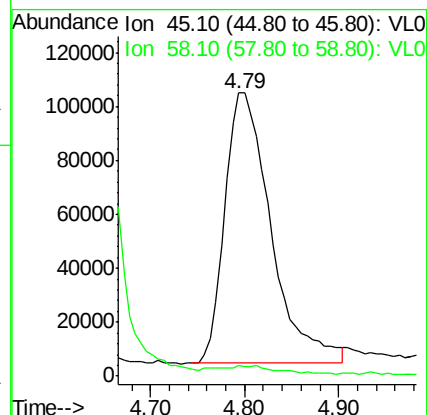
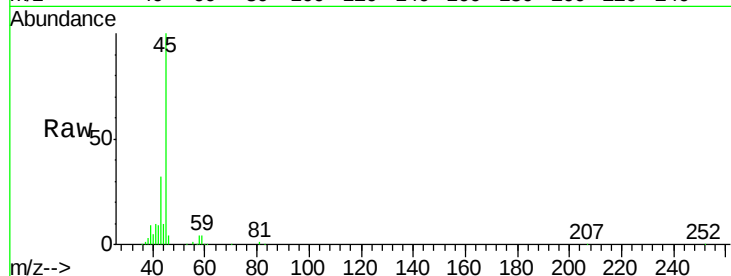
IAS-1DL

Tgt Ion: 45 Resp: 341470

Ion Ratio Lower Upper

45 100

58 0.0 2.2 3.2#



#20

Methylene Chloride

Concen: 0.12 ppbv

RT: 5.18 min Scan# 344

Delta R.T. -0.00 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Tgt Ion: 84 Resp: 14266

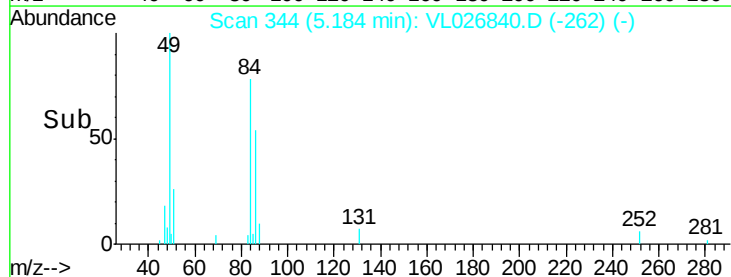
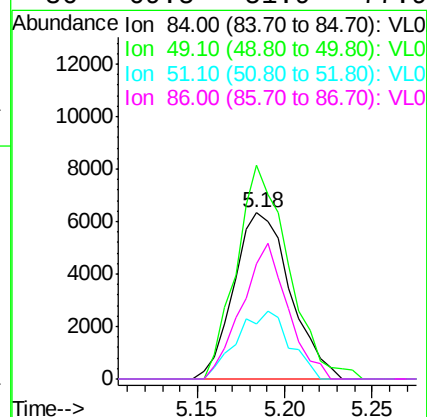
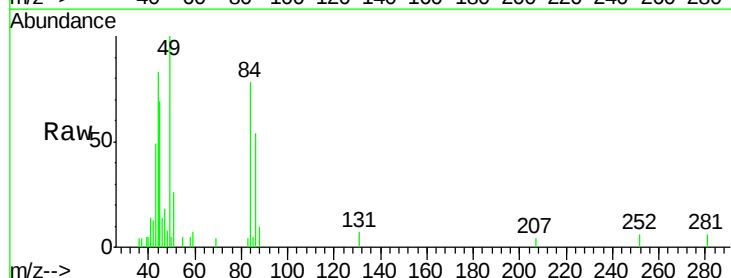
Ion Ratio Lower Upper

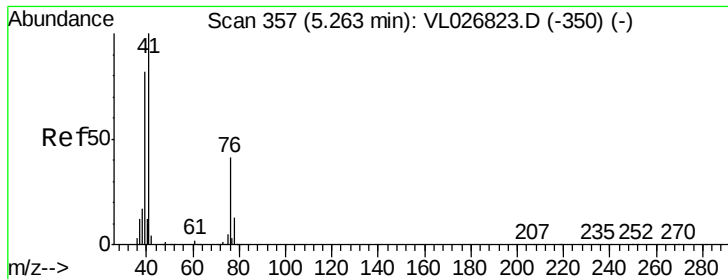
84 100

49 128.6 94.9 142.3

51 32.9 29.5 44.3

86 69.5 51.9 77.9





#21

Allyl Chloride

Concen: 0.00 ppbv

RT: 5.26 min Scan# 357

Delta R.T. -0.00 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

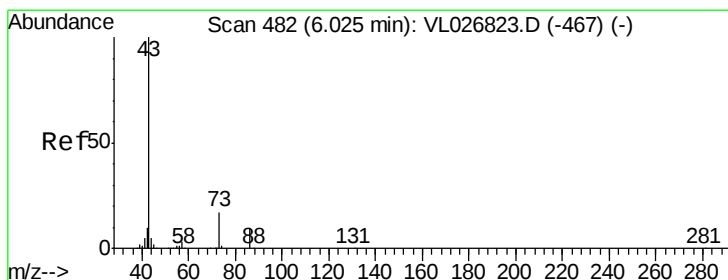
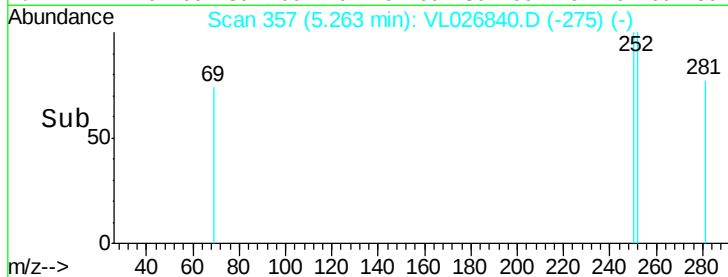
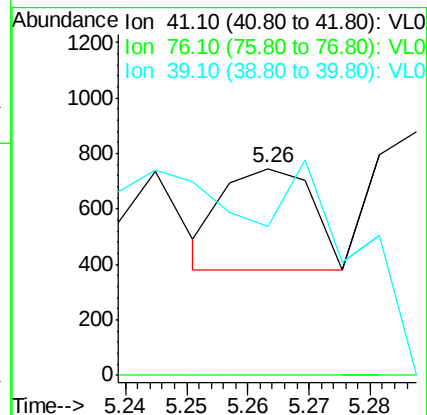
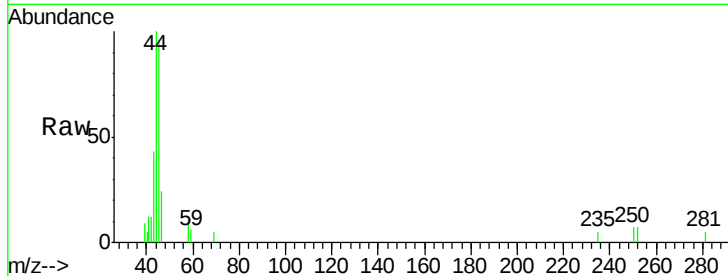
MSVOA\_L

ClientSampleId :

IAS-1DL

Tgt Ion: 41 Resp: 368

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 41  | 100   |       |       |
| 76  | 0.0   | 32.0  | 48.0# |
| 39  | 0.0   | 64.6  | 96.8# |



#23

Vinyl Acetate

Concen: 0.04 ppbv

RT: 6.03 min Scan# 483

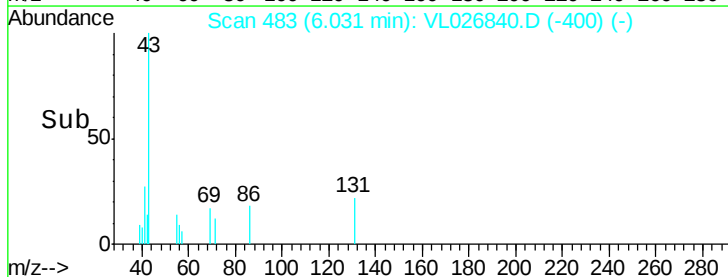
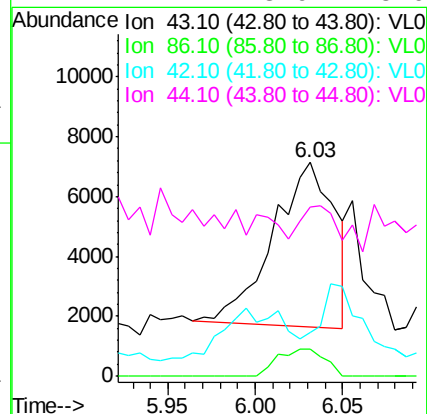
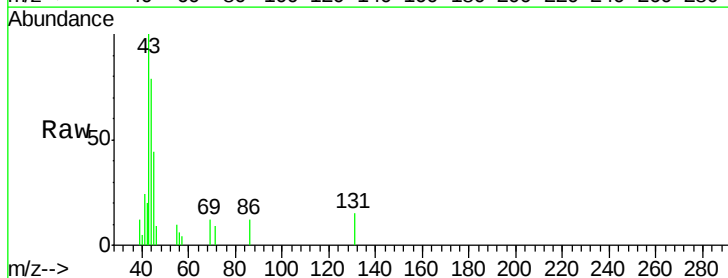
Delta R.T. 0.01 min

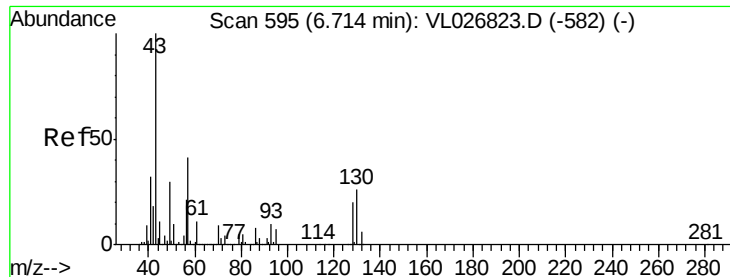
Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Tgt Ion: 43 Resp: 13555

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 86  | 16.9  | 7.7   | 11.5# |
| 42  | 13.0  | 7.8   | 11.8# |
| 44  | 21.1  | 3.9   | 5.9#  |

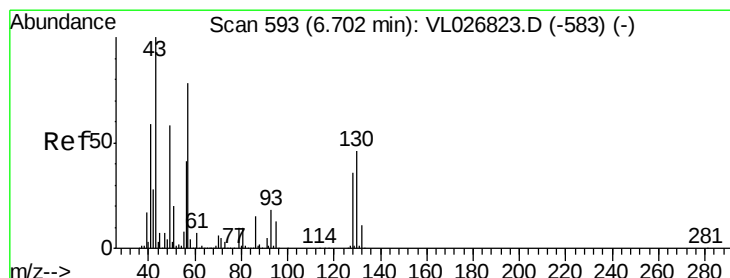
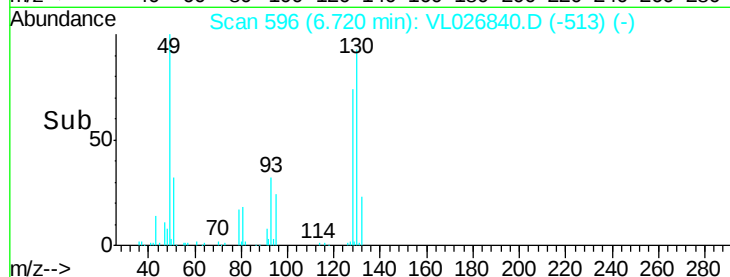
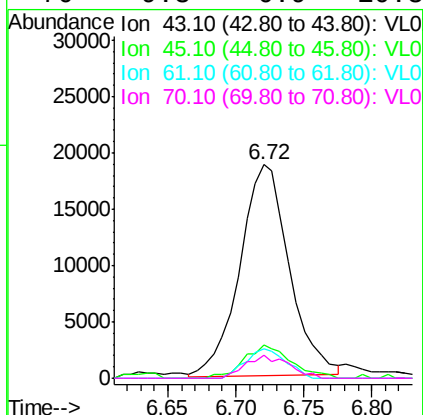
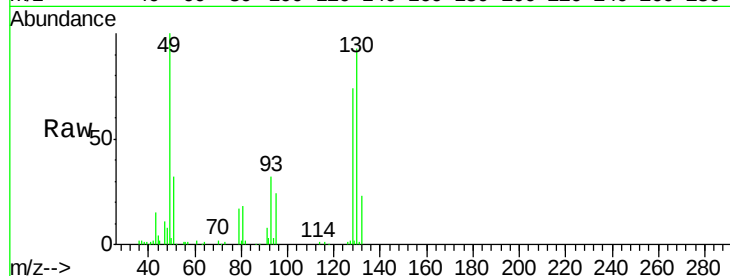




#25  
Ethyl Acetate  
Concen: 0.14 ppbv  
RT: 6.72 min Scan# 596  
Delta R.T. 0.01 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

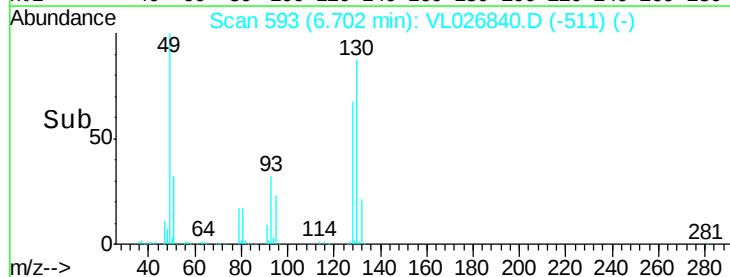
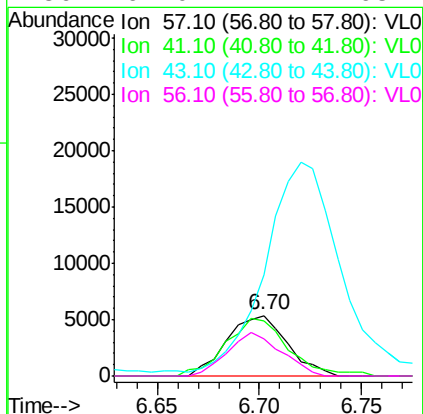
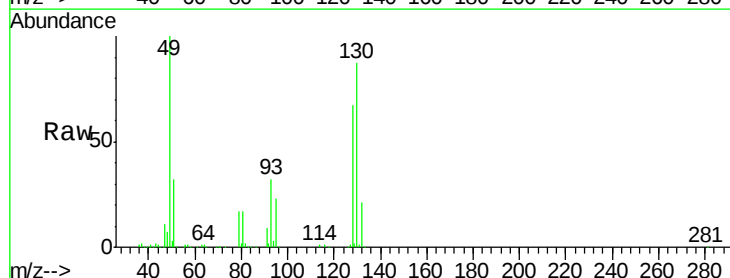
Instrument :  
MSVOA\_L  
ClientSampleId :  
IAS-1DL

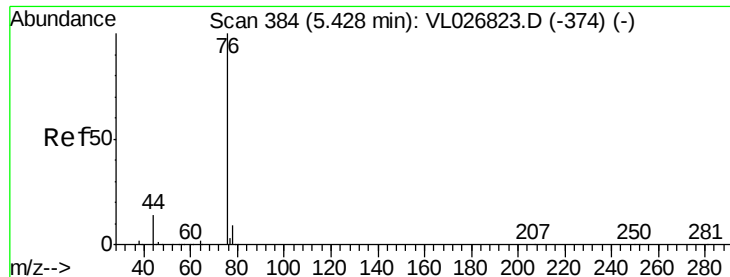
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 47886 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 15.0  | 7.8   | 11.8# |
| 61       | 11.4  | 7.9   | 11.9  |
| 70       | 9.3   | 6.9   | 10.3  |



#26  
Hexane  
Concen: 0.06 ppbv  
RT: 6.70 min Scan# 593  
Delta R.T. -0.00 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 10976  |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 99.3  | 63.3  | 94.9#  |
| 43       | 492.0 | 151.4 | 227.2# |
| 56       | 64.0  | 42.2  | 63.2#  |





#27

Carbon Disulfide

Concen: 0.01 ppbv

RT: 5.44 min Scan# 386

Delta R.T. 0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

IAS-1DL

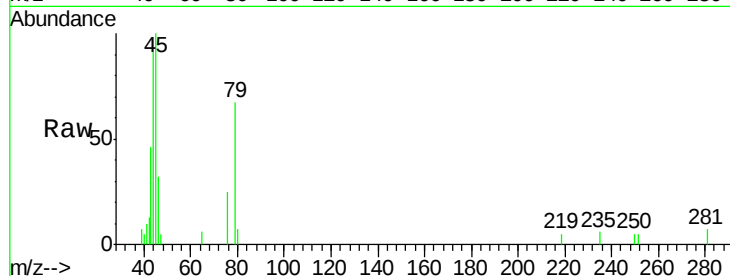
Tgt Ion: 76 Resp: 3597

Ion Ratio Lower Upper

76 100

44 243.4 12.1 18.1#

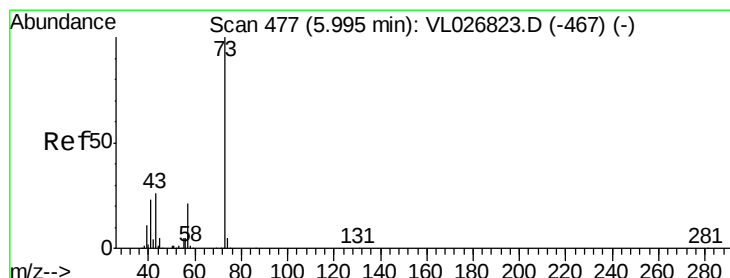
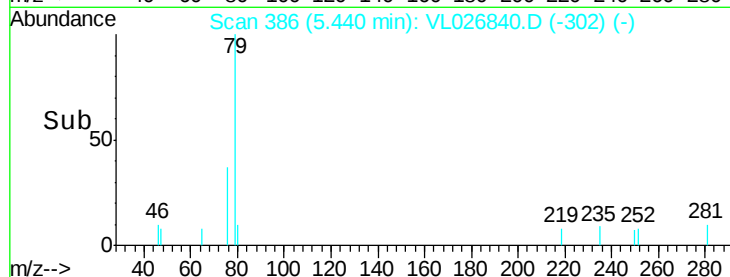
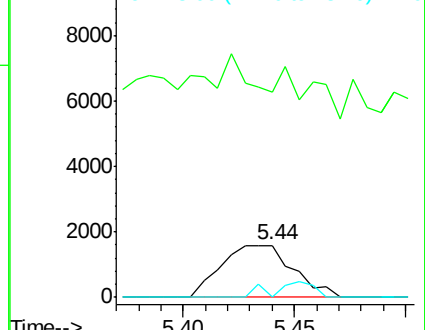
78 16.2 7.7 11.5#



Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0



#28

Methyl tert-Butyl Ether

Concen: 0.01 ppbv

RT: 6.14 min Scan# 501

Delta R.T. 0.15 min

Lab File: VL026840.D

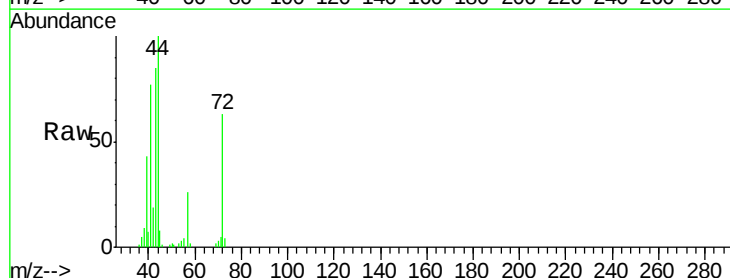
Acq: 10 Feb 2016 4:52

Tgt Ion: 73 Resp: 4555

Ion Ratio Lower Upper

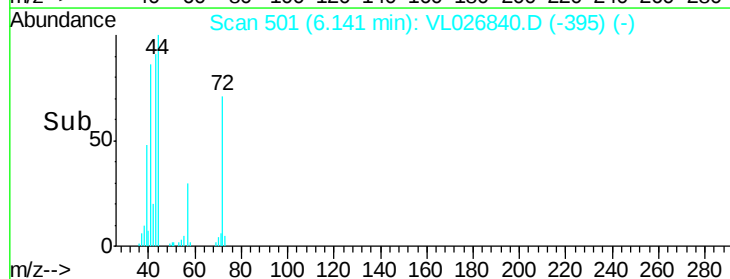
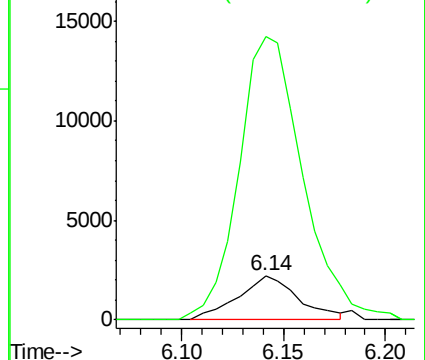
73 100

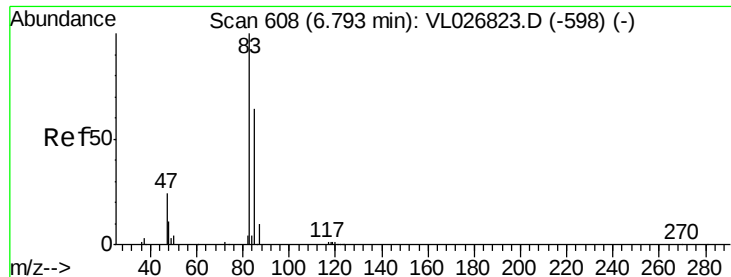
57 681.3 17.0 25.6#



Abundance Ion 73.10 (72.80 to 73.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

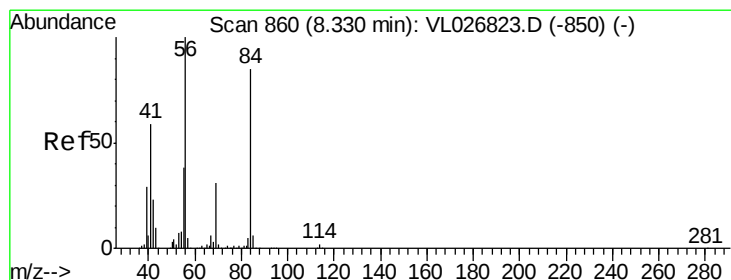
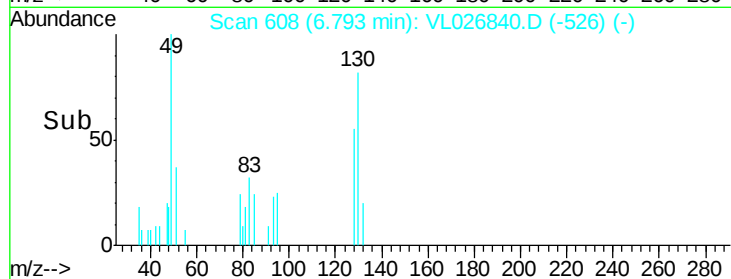
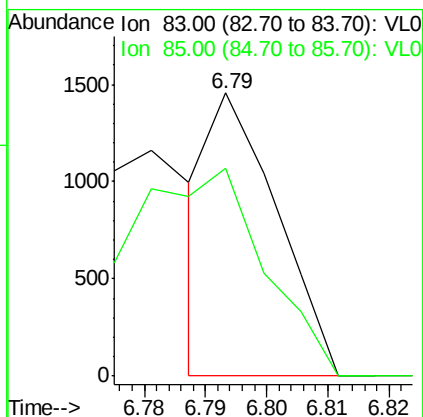
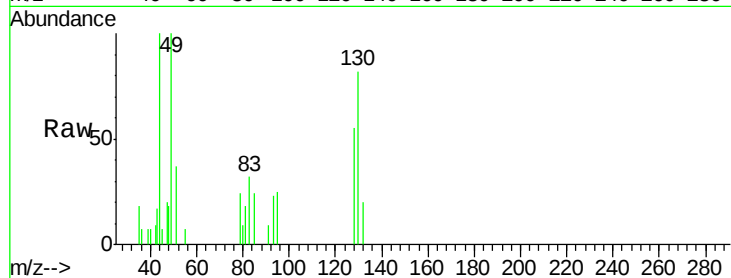




#29  
Chloroform  
Concen: 0.00 ppbv  
RT: 6.79 min Scan# 608  
Delta R.T. -0.00 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

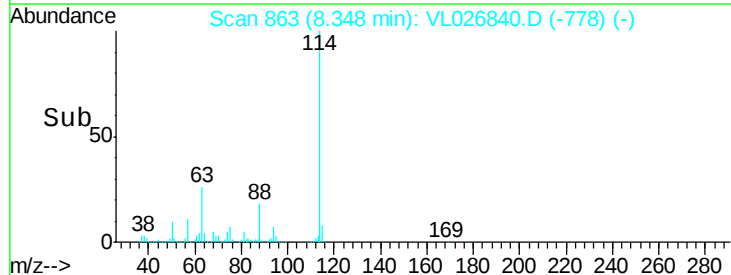
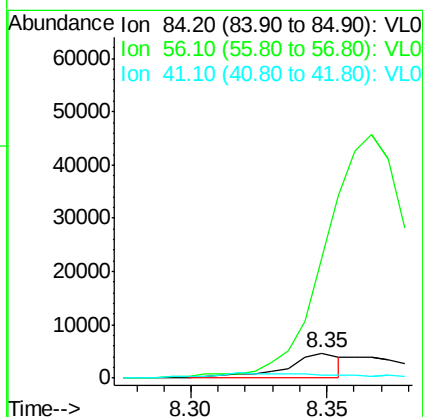
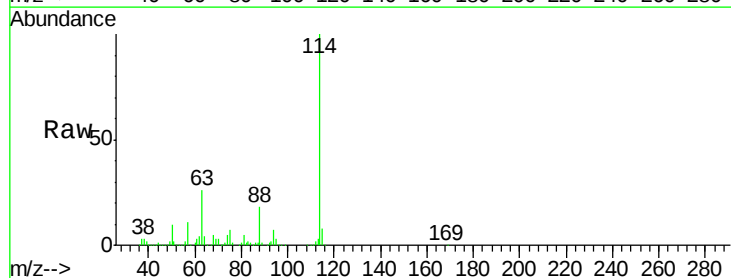
Instrument :  
MSVOA\_L  
ClientSampleId :  
IAS-1DL

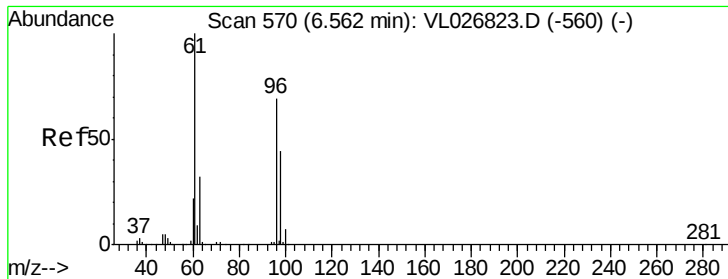
Tgt Ion: 83 Resp: 1106  
Ion Ratio Lower Upper  
83 100  
85 73.6 51.5 77.3



#30  
Cyclohexane  
Concen: 0.04 ppbv  
RT: 8.35 min Scan# 863  
Delta R.T. 0.02 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

Tgt Ion: 84 Resp: 6704  
Ion Ratio Lower Upper  
84 100  
56 0.0 99.4 149.2#  
41 47.8 56.7 85.1#





#31

cis-1,2-Dichloroethene

Concen: 0.03 ppbv

RT: 6.72 min Scan# 596

Delta R.T. 0.16 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

IAS-1DL

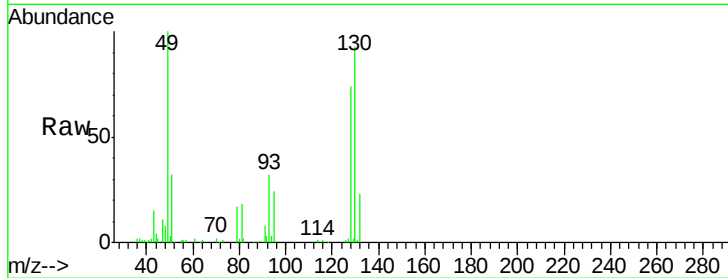
Tgt Ion: 61 Resp: 5459

Ion Ratio Lower Upper

61 100

96 0.0 55.2 82.8#

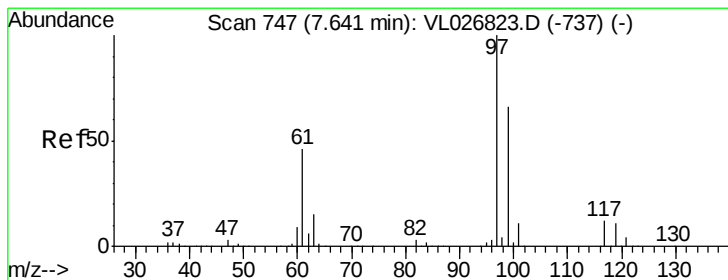
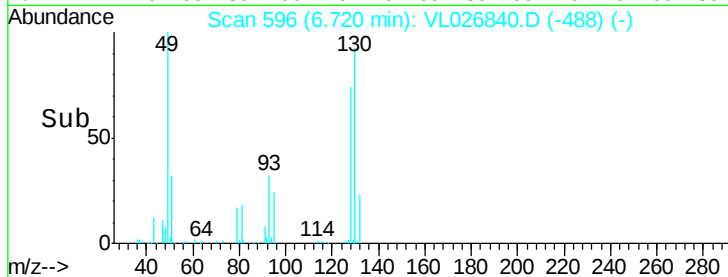
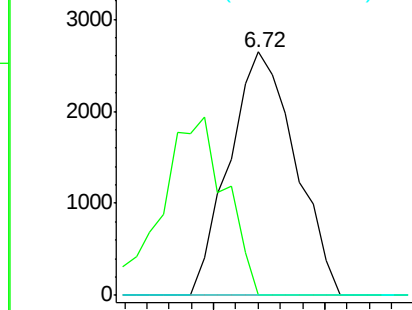
98 0.0 35.2 52.8#



Abundance Ion 61.10 (60.80 to 61.80): VL0

Ion 96.00 (95.70 to 96.70): VL0

Ion 98.00 (97.70 to 98.70): VL0



#32

1,1,1-Trichloroethane

Concen: 0.00 ppbv

RT: 7.64 min Scan# 747

Delta R.T. -0.00 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

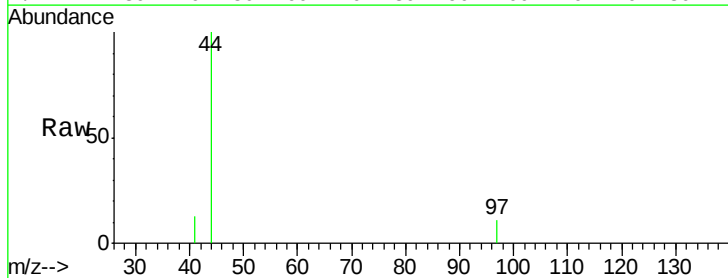
Tgt Ion: 97 Resp: 246

Ion Ratio Lower Upper

97 100

99 0.0 52.0 78.0#

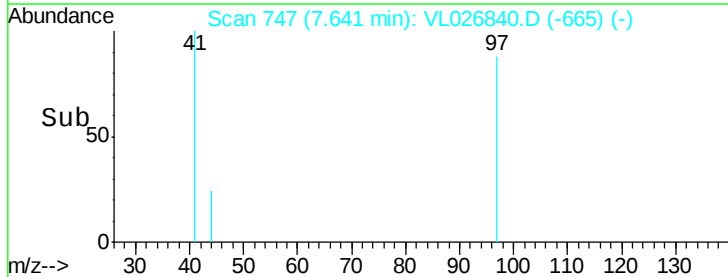
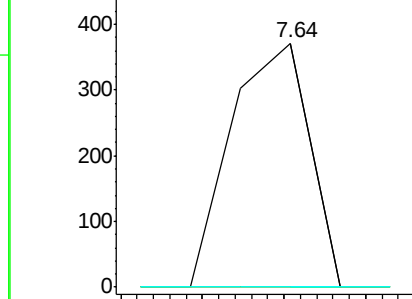
61 0.0 36.2 54.4#

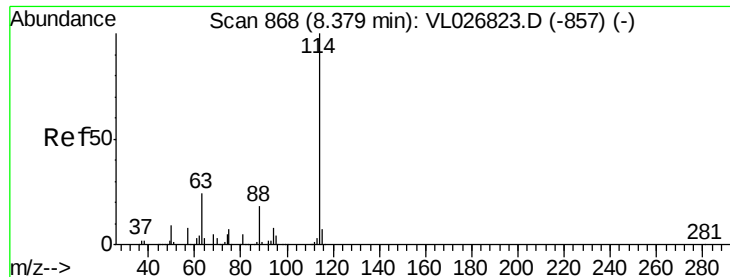


Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 99.00 (98.70 to 99.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

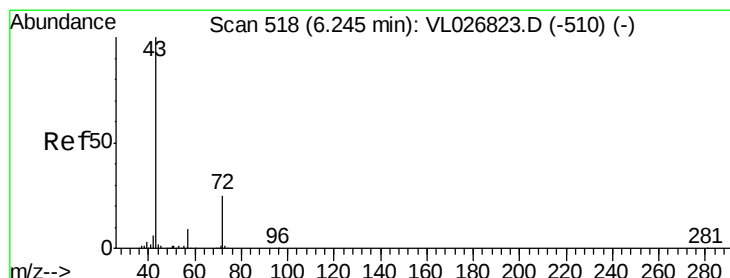
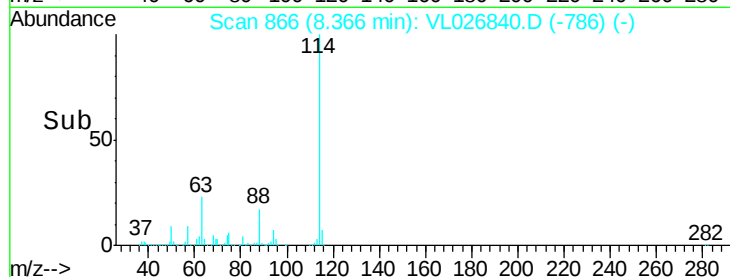
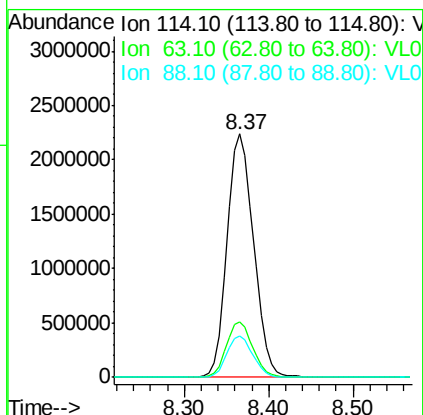
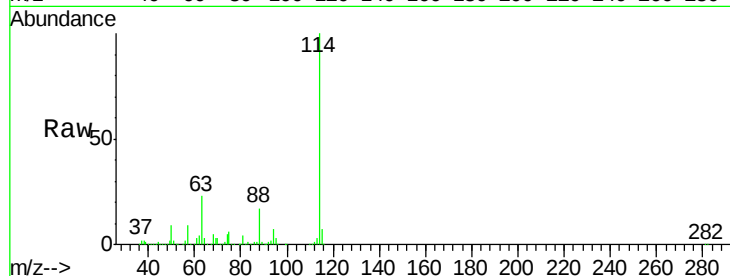




#33  
 1,4-Difluorobenzene  
 Concen: 10.00 ppbv  
 RT: 8.37 min Scan# 866  
 Delta R.T. -0.01 min  
 Lab File: VL026840.D  
 Acq: 10 Feb 2016 4:52

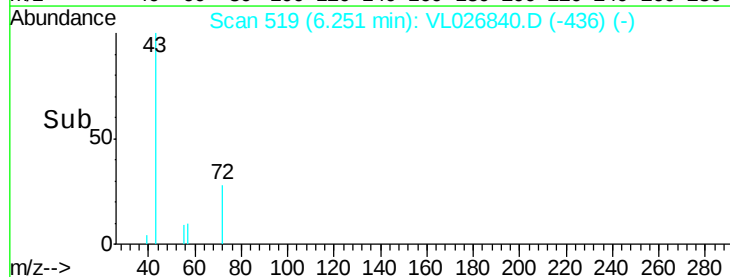
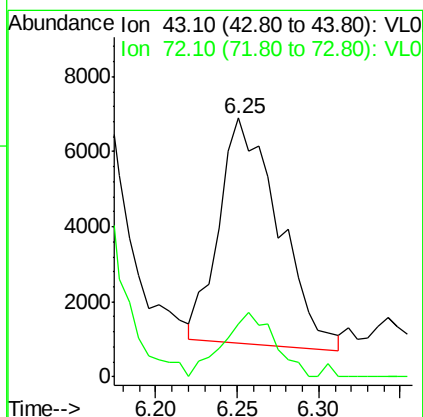
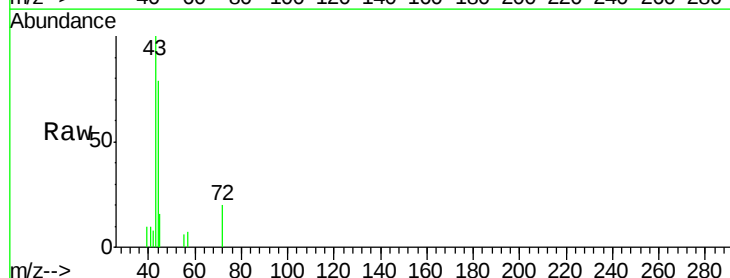
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IAS-1DL

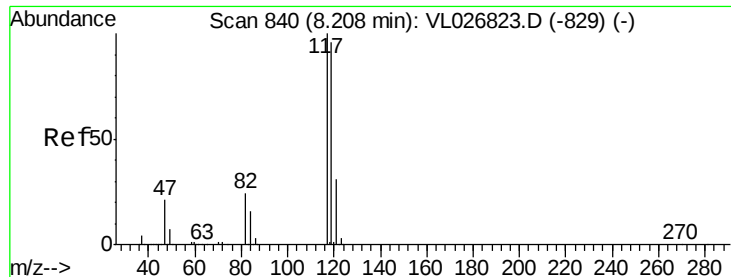
Tgt Ion: 114 Resp: 4808569  
 Ion Ratio Lower Upper  
 114 100  
 63 22.7 19.7 29.5  
 88 16.8 13.8 20.6



#34  
 2-Butanone  
 Concen: 0.07 ppbv  
 RT: 6.25 min Scan# 519  
 Delta R.T. 0.01 min  
 Lab File: VL026840.D  
 Acq: 10 Feb 2016 4:52

Tgt Ion: 43 Resp: 15354  
 Ion Ratio Lower Upper  
 43 100  
 72 25.2 19.8 29.8





#35

Carbon Tetrachloride

Concen: 0.01 ppbv

RT: 8.20 min Scan# 839

Delta R.T. -0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

IAS-1DL

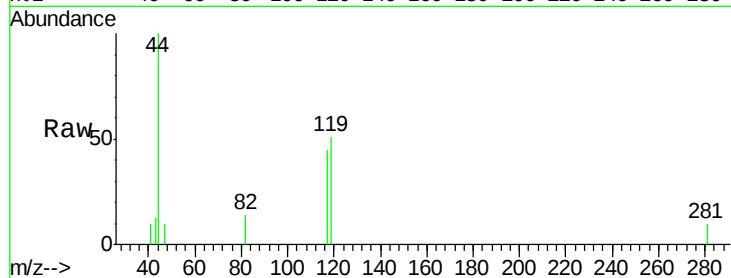
Tgt Ion: 117 Resp: 2856

Ion Ratio Lower Upper

117 100

119 111.7 76.6 115.0

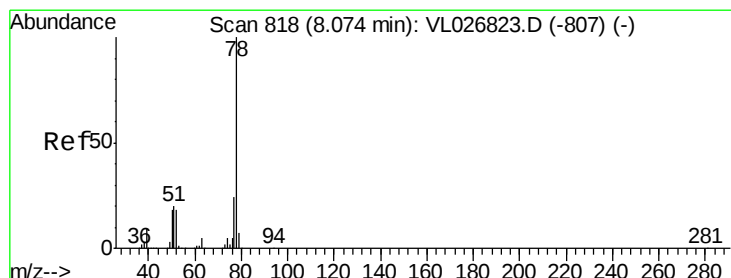
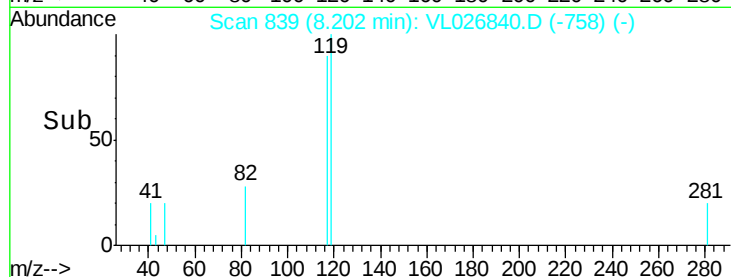
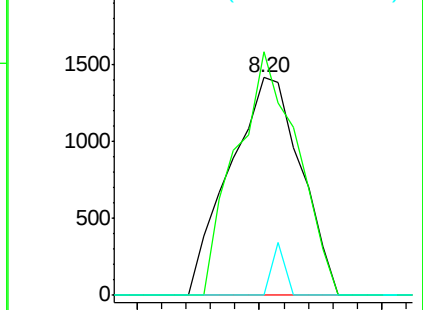
121 0.0 25.0 37.4#



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.04 ppbv

RT: 8.06 min Scan# 816

Delta R.T. -0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

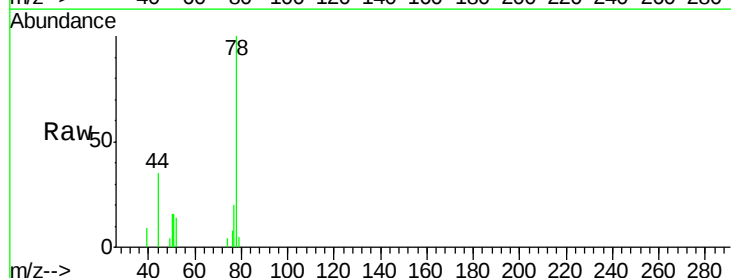
Tgt Ion: 78 Resp: 15435

Ion Ratio Lower Upper

78 100

77 20.1 19.0 28.6

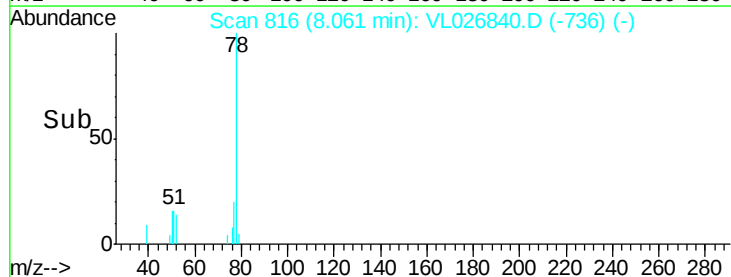
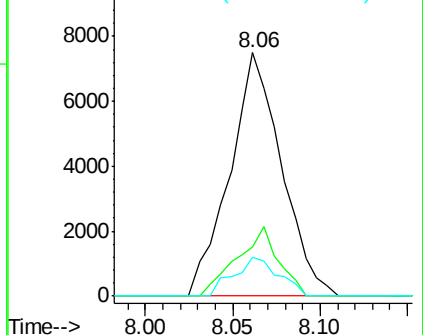
50 16.0 14.2 21.4

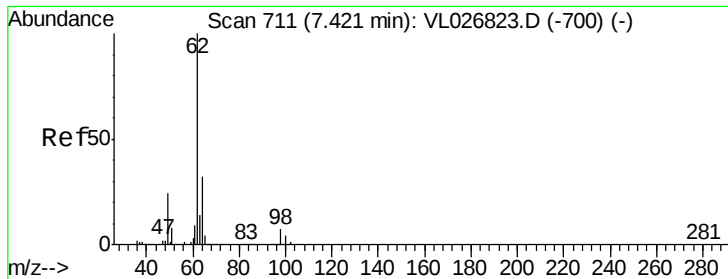


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0

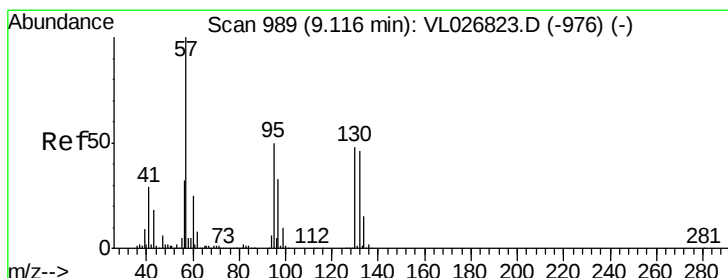
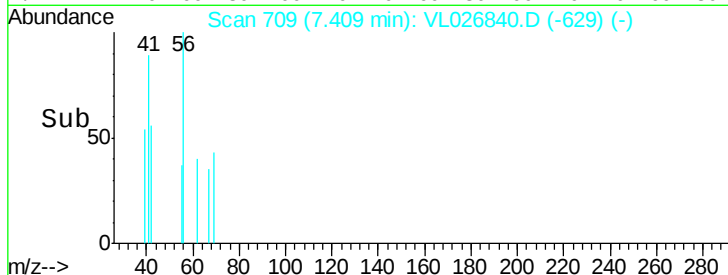
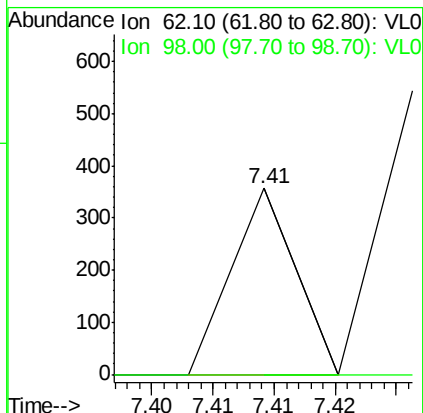
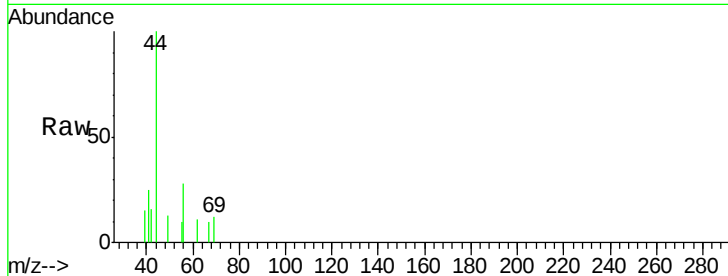




#37  
 1,2-Dichloroethane  
 Concen: 0.00 ppbv  
 RT: 7.41 min Scan# 709  
 Delta R.T. -0.01 min  
 Lab File: VL026840.D  
 Acq: 10 Feb 2016 4:52

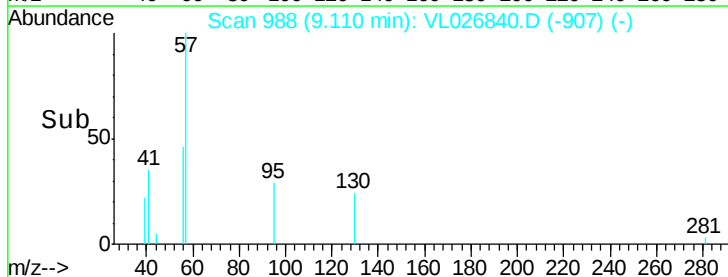
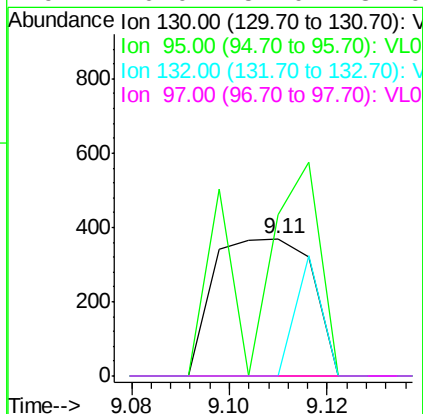
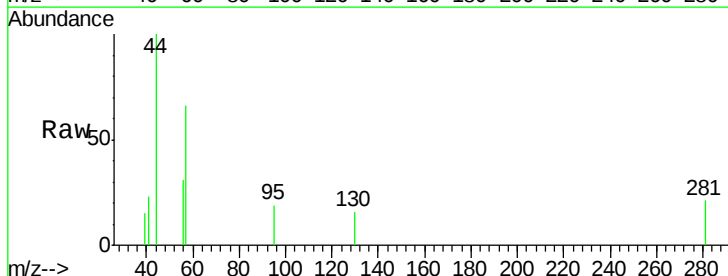
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IAS-1DL

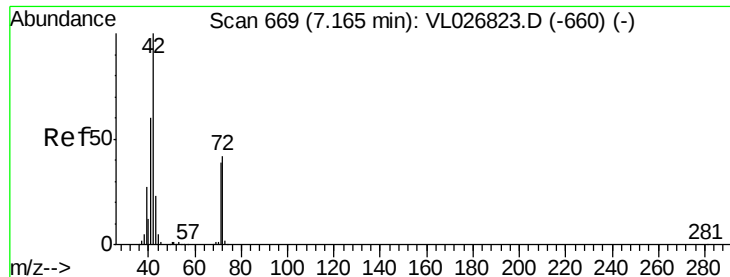
Tgt Ion: 62 Resp: 131  
 Ion Ratio Lower Upper  
 62 100  
 98 0.0 5.4 8.2#



#38  
 Trichloroethene  
 Concen: 0.00 ppbv  
 RT: 9.11 min Scan# 988  
 Delta R.T. -0.01 min  
 Lab File: VL026840.D  
 Acq: 10 Feb 2016 4:52

Tgt Ion: 130 Resp: 512  
 Ion Ratio Lower Upper  
 130 100  
 95 118.2 83.0 124.6  
 132 0.0 76.0 114.0#  
 97 0.0 54.0 81.0#





#41

Tetrahydrofuran

Concen: 0.00 ppbv

RT: 7.20 min Scan# 674

Delta R.T. 0.03 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

IAS-1DL

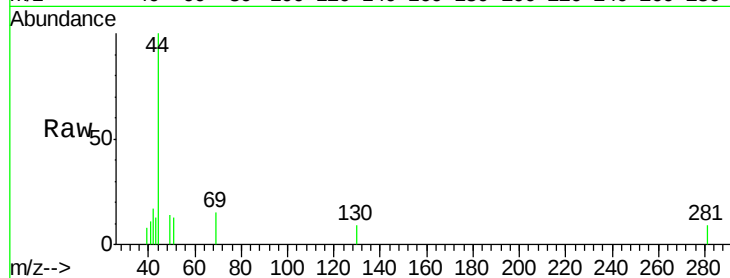
Tgt Ion: 42 Resp: 468

Ion Ratio Lower Upper

42 100

72 0.0 33.4 50.0#

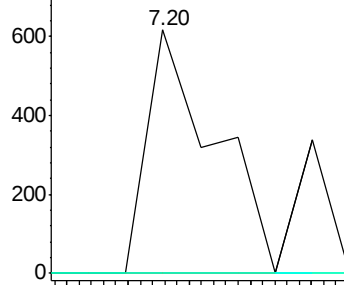
71 0.0 32.1 48.1#



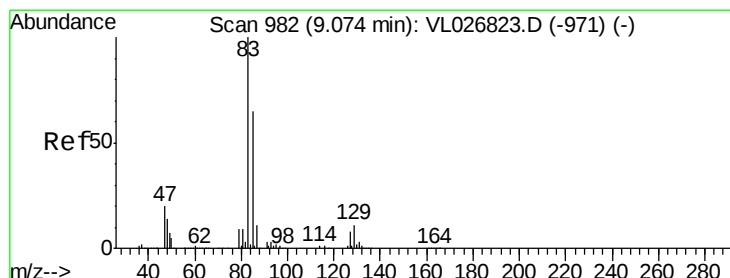
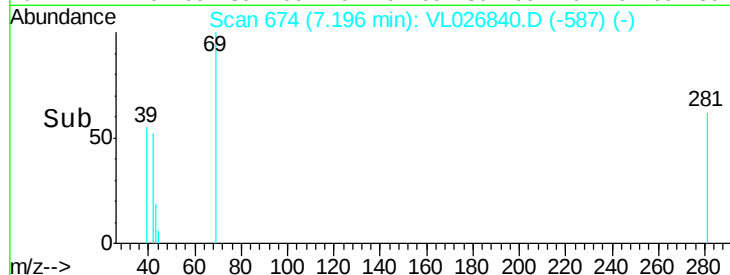
Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0



Time--> 7.18 7.19 7.20 7.21 7.22



#42

Bromodichloromethane

Concen: 0.00 ppbv

RT: 8.77 min Scan# 933

Delta R.T. -0.30 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

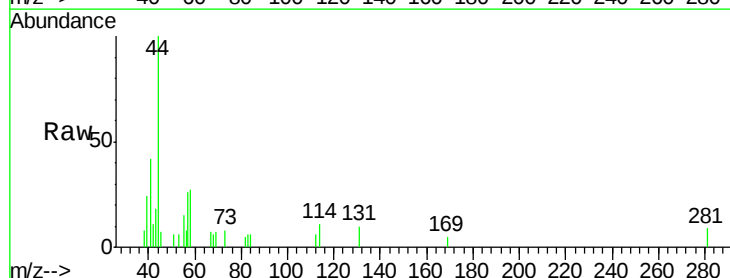
Tgt Ion: 83 Resp: 245

Ion Ratio Lower Upper

83 100

85 0.0 51.8 77.6#

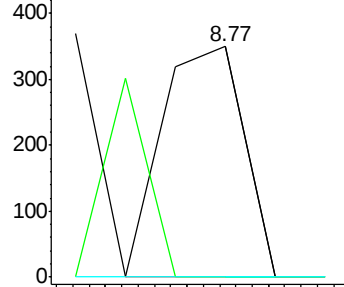
127 0.0 6.4 9.6#



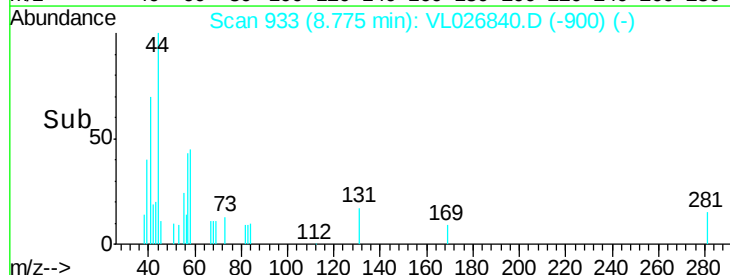
Abundance Ion 83.00 (82.70 to 83.70): VL0

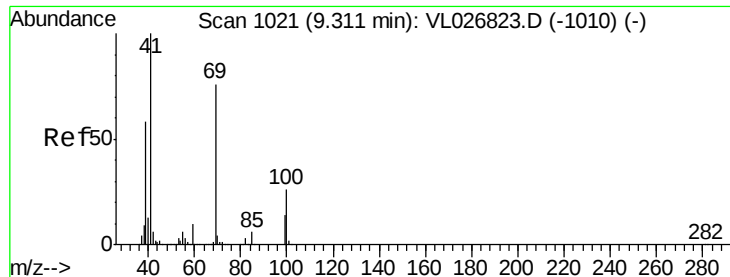
Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): V



Time-->

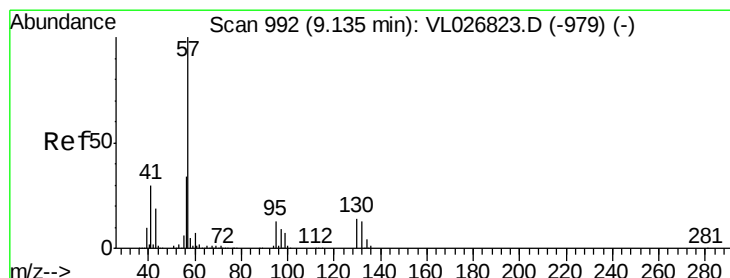
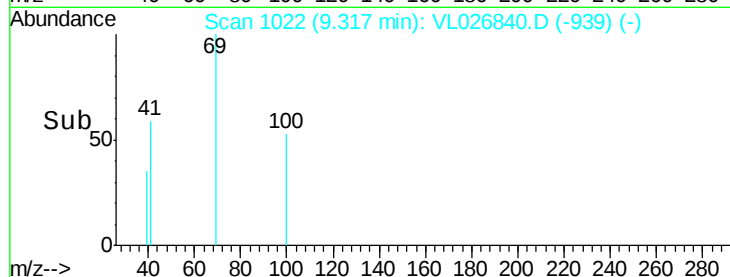
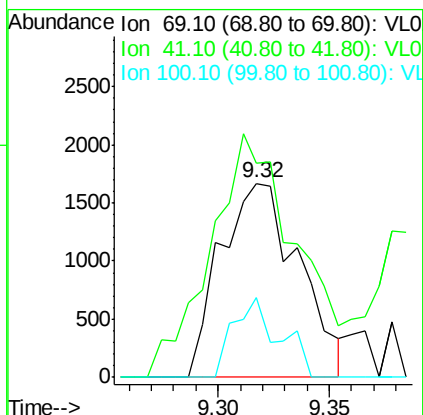
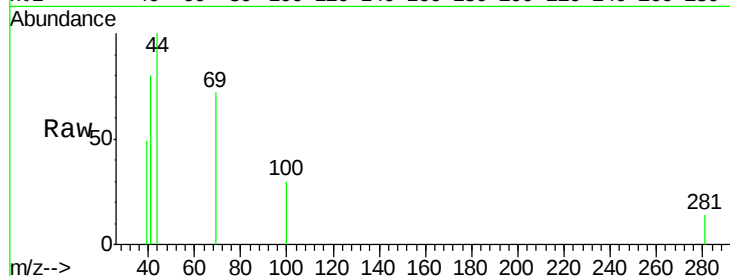




#43  
Methyl Methacrylate  
Concen: 0.03 ppbv  
RT: 9.32 min Scan# 1022  
Delta R.T. 0.01 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

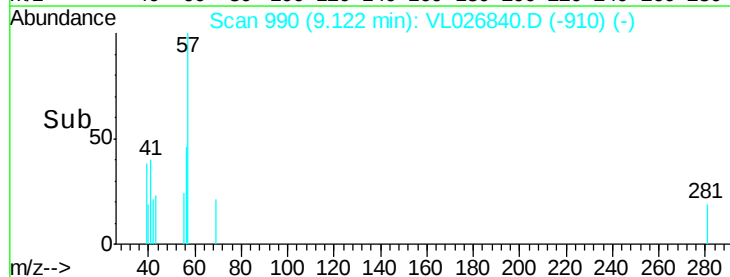
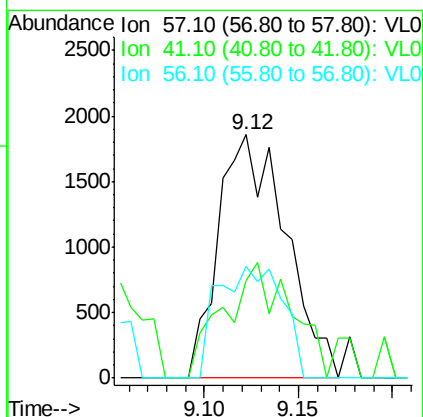
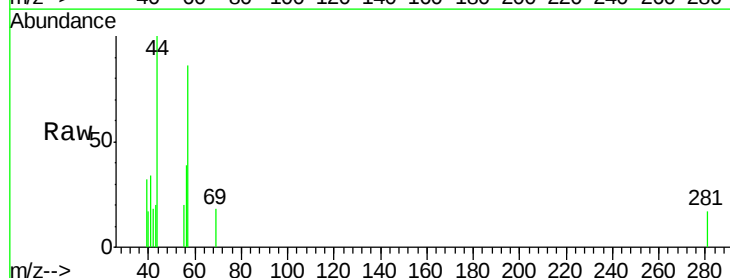
Instrument :  
MSVOA\_L  
ClientSampleId :  
IAS-1DL

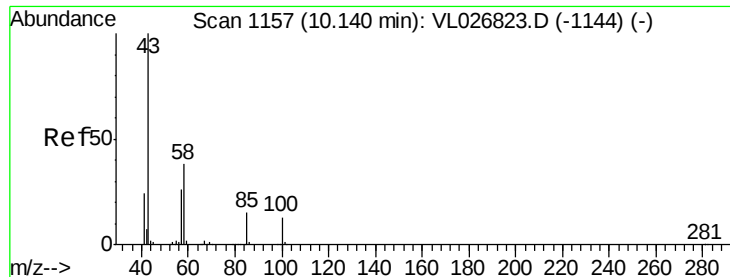
Tgt Ion: 69 Resp: 4099  
Ion Ratio Lower Upper  
69 100  
41 148.1 106.5 159.7  
100 23.8 27.2 40.8#



#44  
2,2,4-Trimethylpentane  
Concen: 0.01 ppbv  
RT: 9.12 min Scan# 990  
Delta R.T. -0.01 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

Tgt Ion: 57 Resp: 4594  
Ion Ratio Lower Upper  
57 100  
41 123.9 23.2 34.8#  
56 44.6 26.2 39.4#

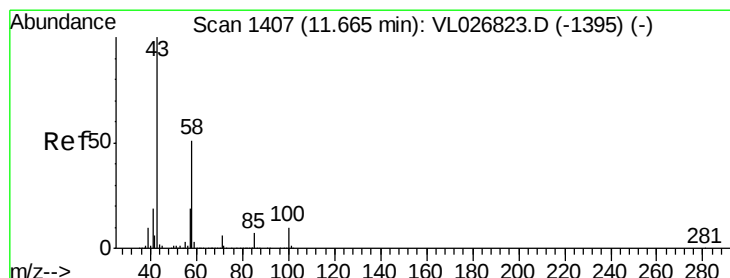
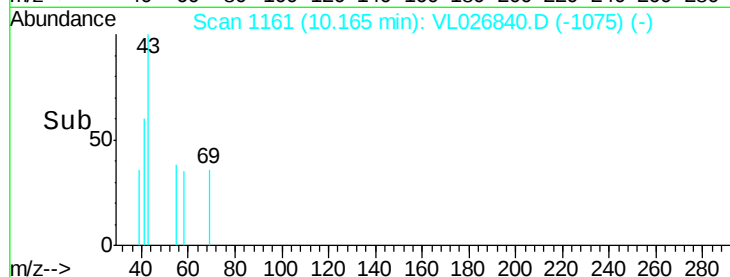
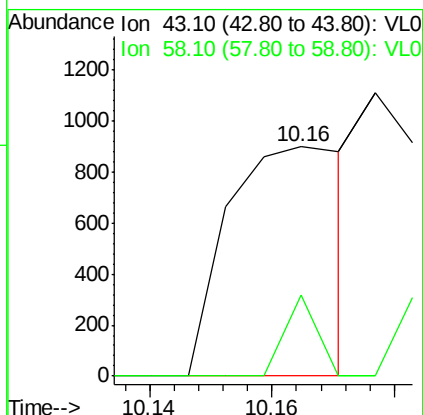
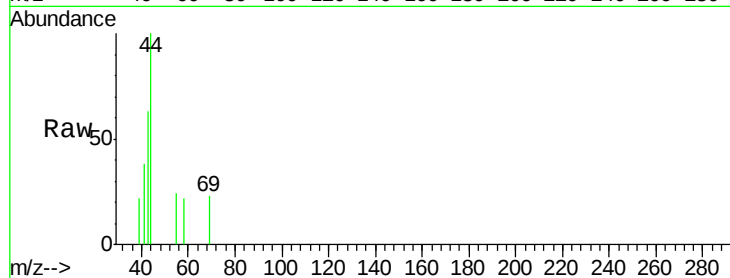




#50  
 4-Methyl-2-Pentanone  
 Concen: 0.00 ppbv  
 RT: 10.16 min Scan# 1161  
 Delta R.T. 0.02 min  
 Lab File: VL026840.D  
 Acq: 10 Feb 2016 4:52

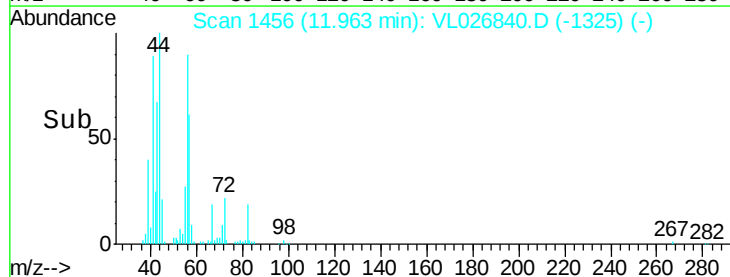
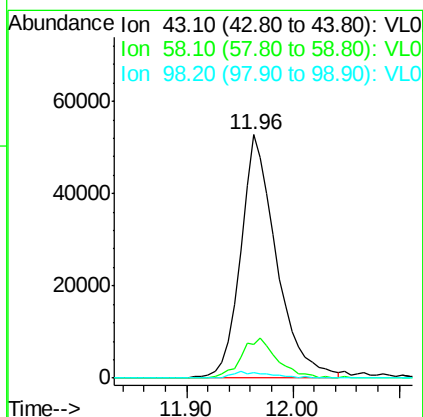
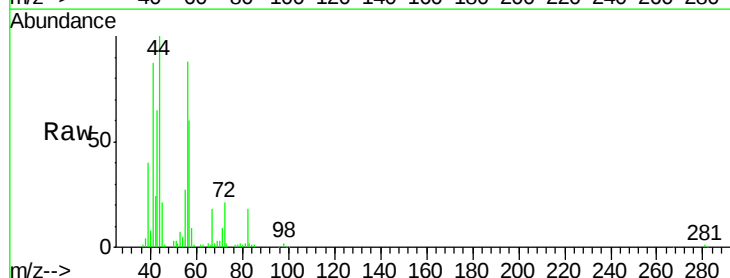
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IAS-1DL

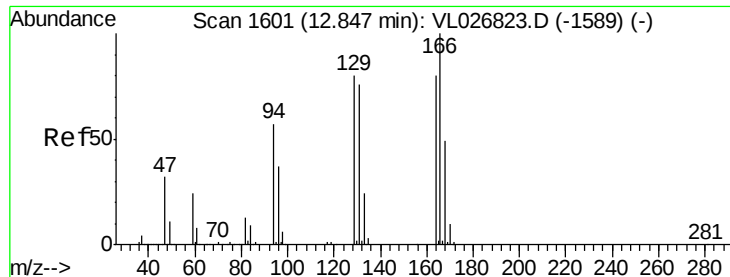
Tgt Ion: 43 Resp: 1207  
 Ion Ratio Lower Upper  
 43 100  
 58 0.0 30.3 45.5#



#51  
 2-Hexanone  
 Concen: 0.53 ppbv  
 RT: 11.96 min Scan# 1456  
 Delta R.T. 0.30 min  
 Lab File: VL026840.D  
 Acq: 10 Feb 2016 4:52

Tgt Ion: 43 Resp: 124376  
 Ion Ratio Lower Upper  
 43 100  
 58 16.5 40.4 60.6#  
 98 2.8 0.2 0.4#





#52

Tetrachloroethene

Concen: 0.07 ppbv

RT: 12.83 min Scan# 1598

Delta R.T. -0.02 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

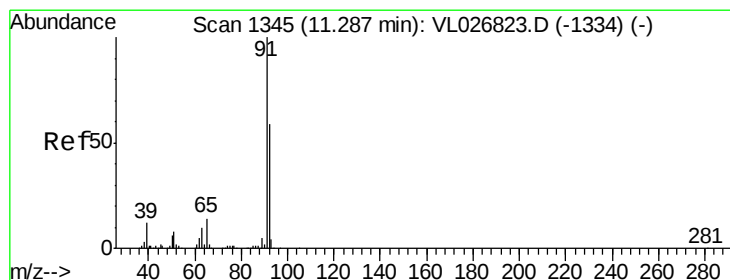
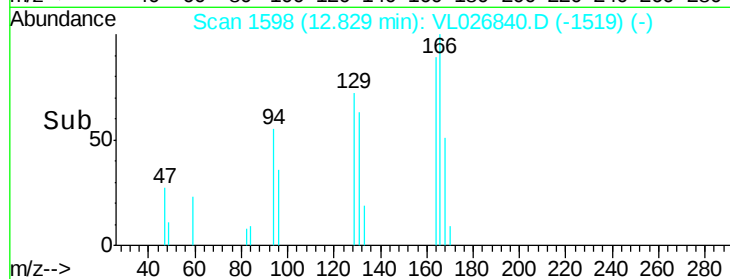
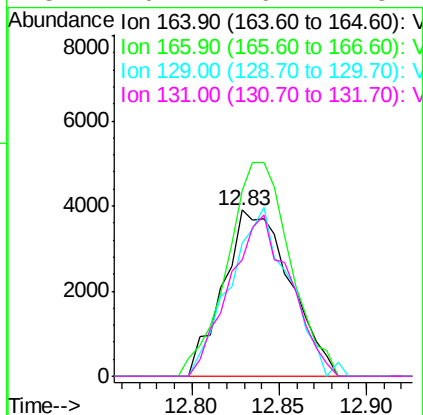
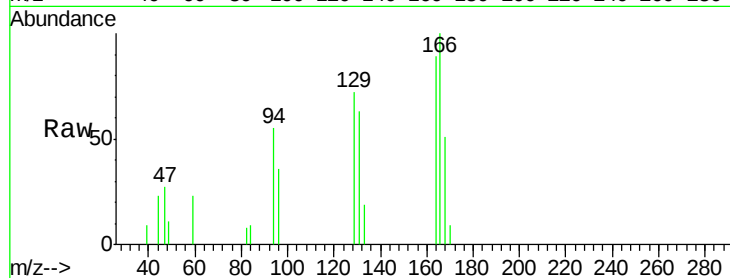
Instrument :

MSVOA\_L

ClientSampleId :

IAS-1DL

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 10310  |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 166      | 111.9 | 100.3 | 150.5  |
| 129      | 80.0  | 80.0  | 120.0  |
| 131      | 70.2  | 76.7  | 115.1# |



#53

Toluene

Concen: 0.15 ppbv

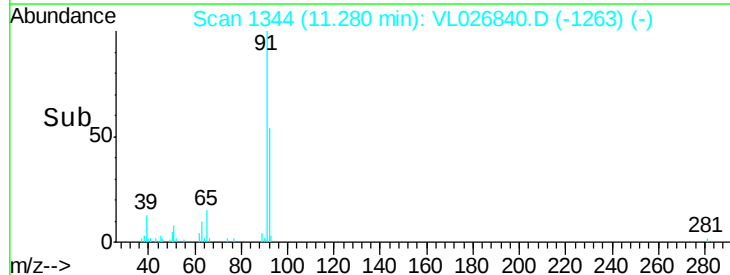
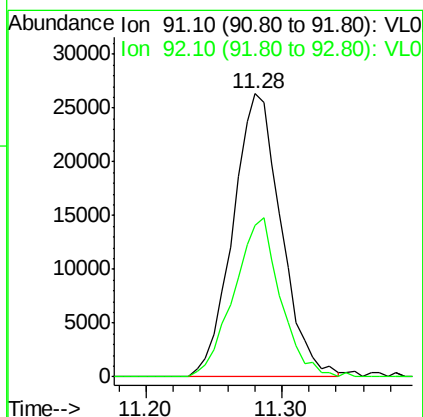
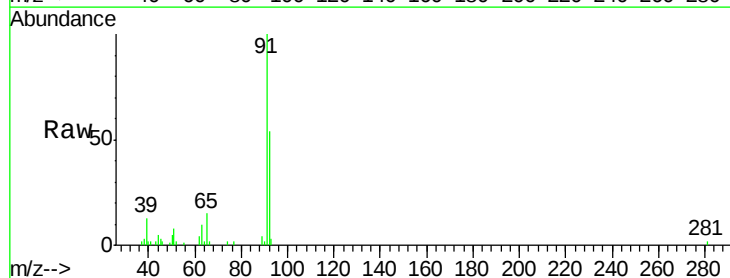
RT: 11.28 min Scan# 1344

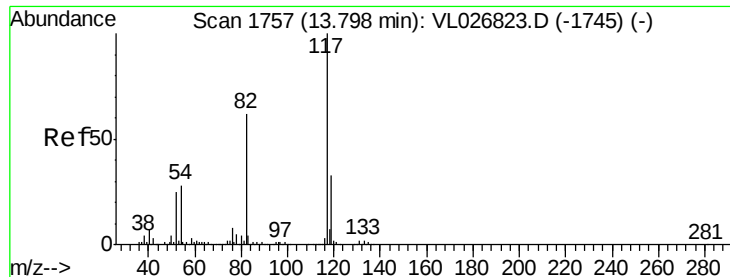
Delta R.T. -0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 91    | Resp: | 65139 |
| Ion      | Ratio | Lower | Upper |
| 91       | 100   |       |       |
| 92       | 54.0  | 47.3  | 70.9  |





#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 13.79 min Scan# 1756

Delta R.T. -0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

IAS-1DL

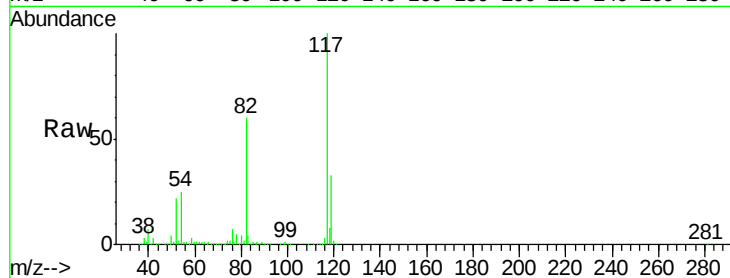
Tgt Ion:117 Resp: 4613614

Ion Ratio Lower Upper

117 100

82 0.0 51.9 77.9#

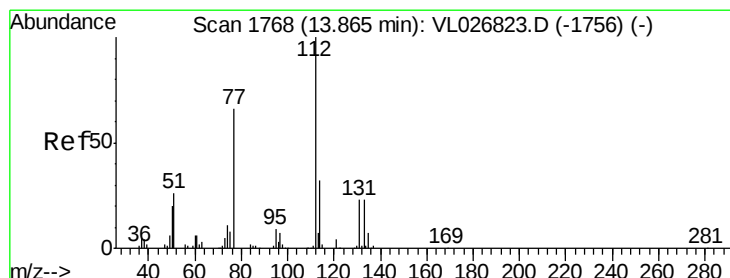
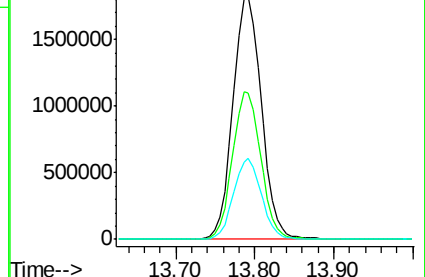
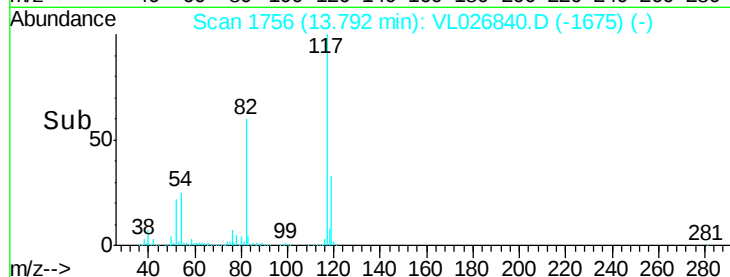
119 32.8 48.5 72.7#



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: 0.00 ppbv

RT: 13.86 min Scan# 1767

Delta R.T. -0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

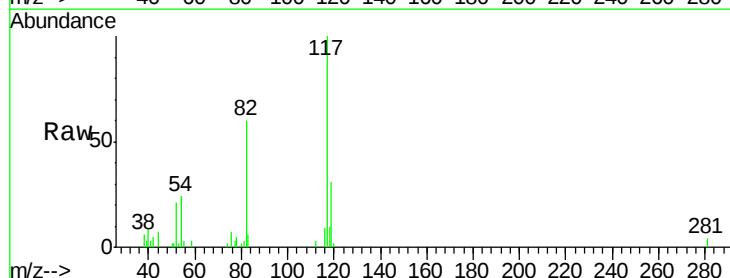
Tgt Ion:112 Resp: 286

Ion Ratio Lower Upper

112 100

77 89.5 53.3 79.9#

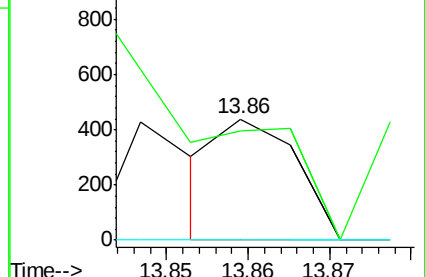
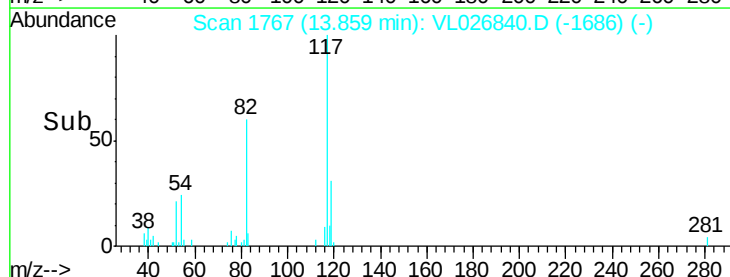
114 0.0 28.9 35.3#

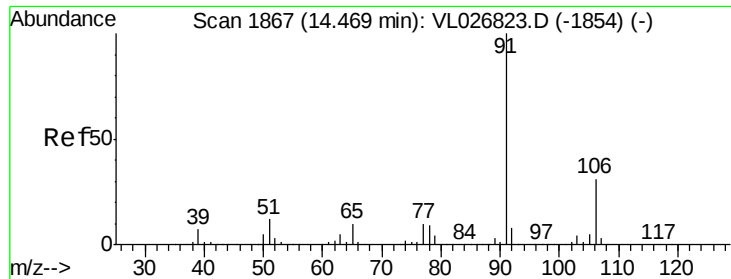


Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V





#58

Ethyl Benzene

Concen: 0.01 ppbv

RT: 14.46 min Scan# 1865

Delta R.T. -0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

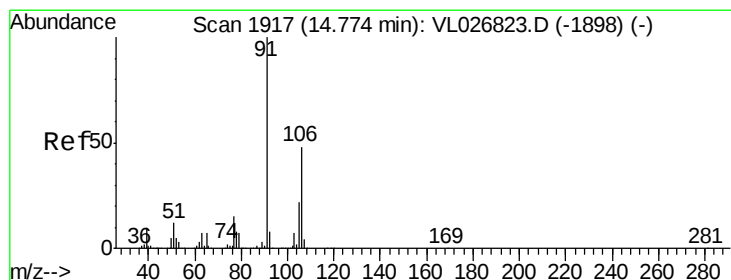
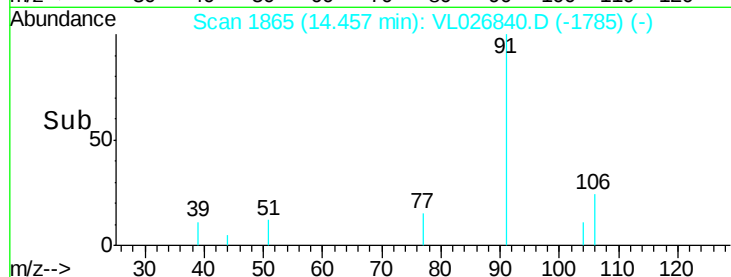
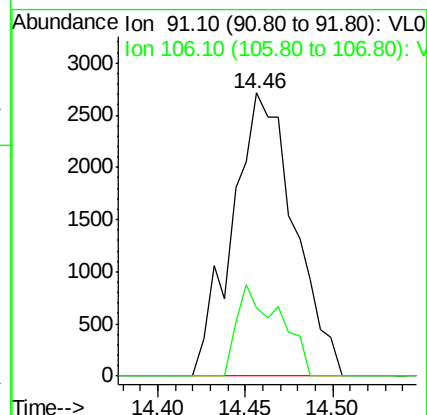
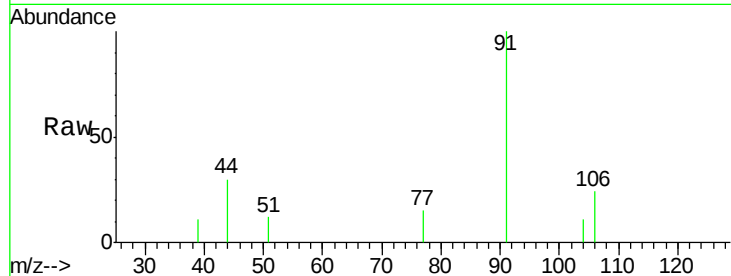
IAS-1DL

Tgt Ion: 91 Resp: 6693

Ion Ratio Lower Upper

91 100

106 24.0 24.9 37.3#



#59

m/p-Xylene

Concen: 0.01 ppbv

RT: 14.76 min Scan# 1915

Delta R.T. -0.01 min

Lab File: VL026840.D

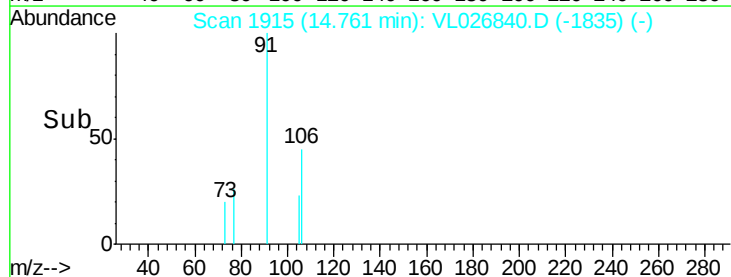
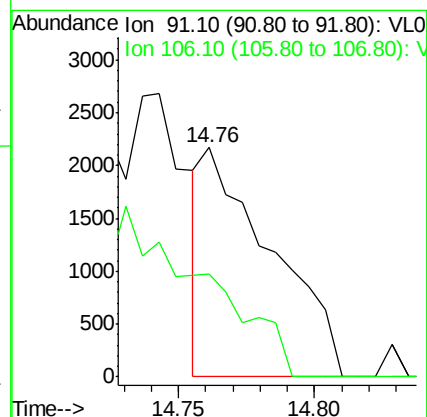
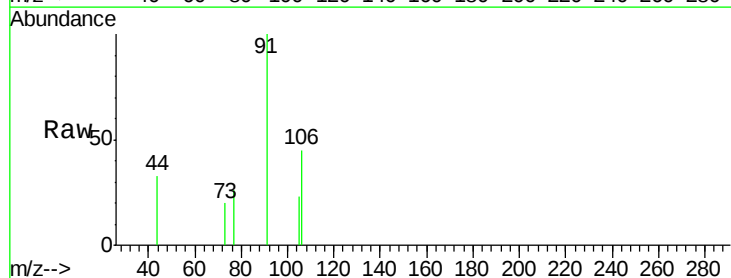
Acq: 10 Feb 2016 4:52

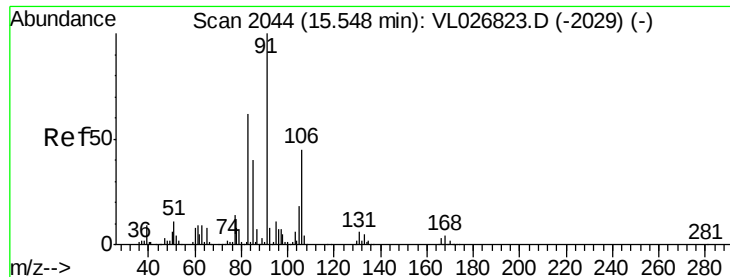
Tgt Ion: 91 Resp: 3830

Ion Ratio Lower Upper

91 100

106 0.0 38.2 57.2#

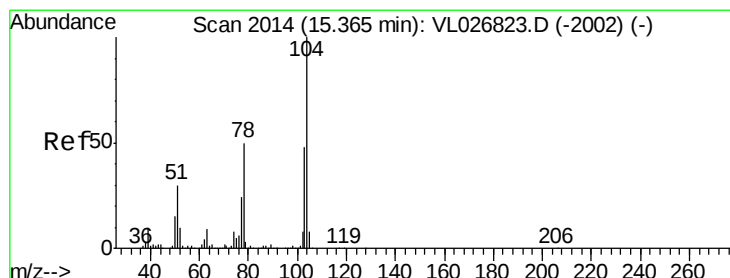
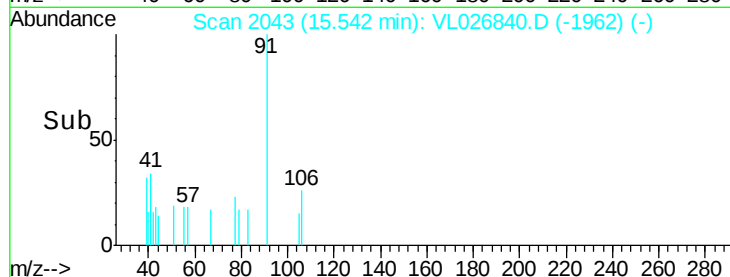
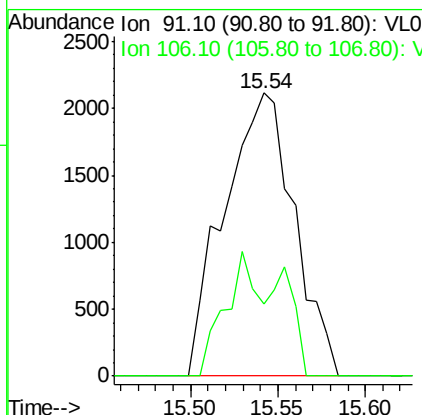
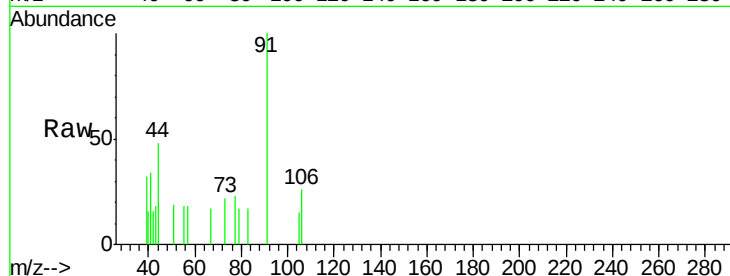




#60  
o-Xylene  
Concen: 0.01 ppbv  
RT: 15.54 min Scan# 2043  
Delta R.T. -0.01 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

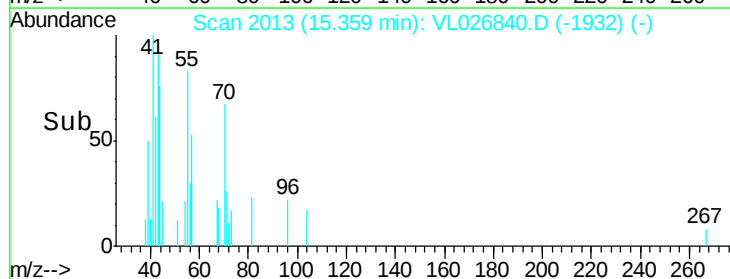
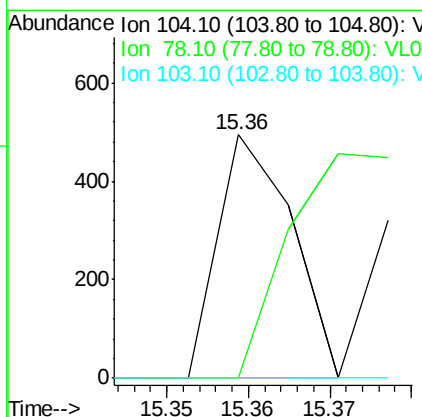
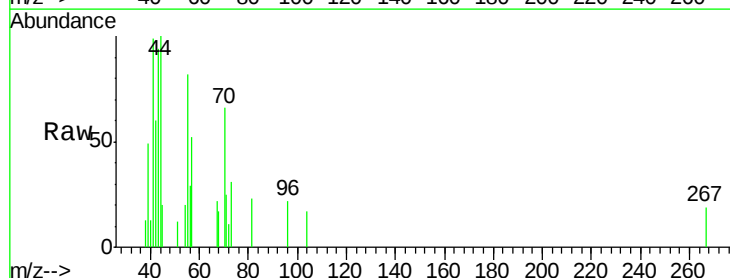
Instrument :  
MSVOA\_L  
ClientSampleId :  
IAS-1DL

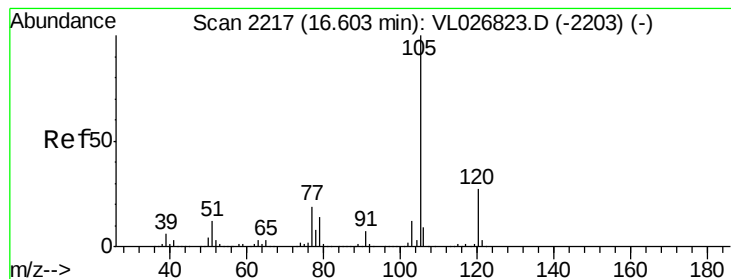
Tgt Ion: 91 Resp: 5890  
Ion Ratio Lower Upper  
91 100  
106 33.8 22.3 66.8



#61  
Styrene  
Concen: 0.00 ppbv  
RT: 15.36 min Scan# 2013  
Delta R.T. -0.01 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

Tgt Ion: 104 Resp: 310  
Ion Ratio Lower Upper  
104 100  
78 0.0 39.8 59.6#  
103 0.0 38.2 57.4#





#62

Isopropylbenzene

Concen: 0.00 ppbv

RT: 16.59 min Scan# 2215

Delta R.T. -0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

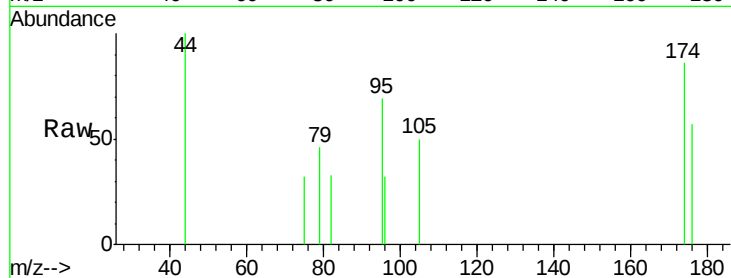
IAS-1DL

Tgt Ion: 105 Resp: 450

Ion Ratio Lower Upper

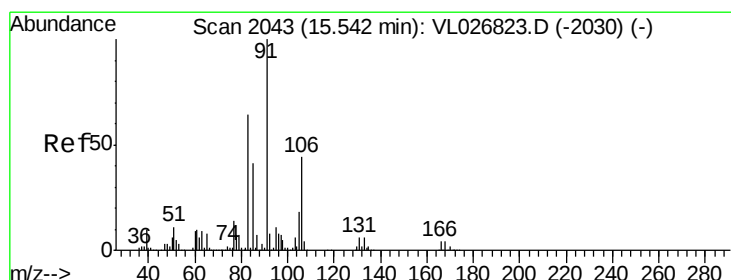
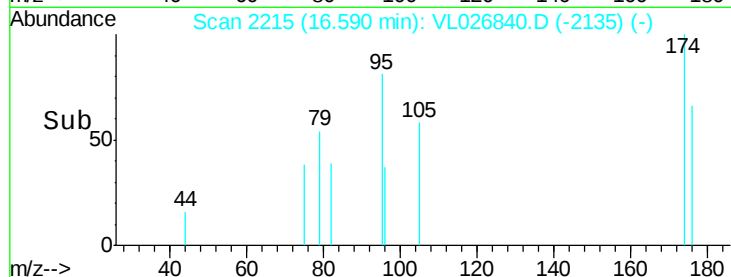
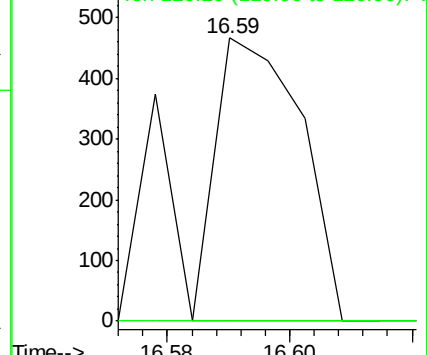
105 100

120 0.0 21.0 31.4#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#63

1,1,2,2-Tetrachloroethane

Concen: 0.00 ppbv

RT: 15.42 min Scan# 2023

Delta R.T. -0.12 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

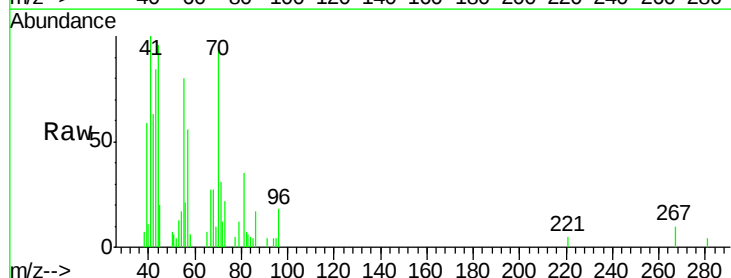
Tgt Ion: 83 Resp: 480

Ion Ratio Lower Upper

83 100

131 0.0 4.7 14.1#

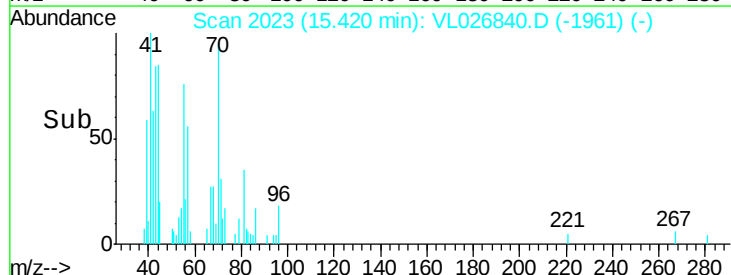
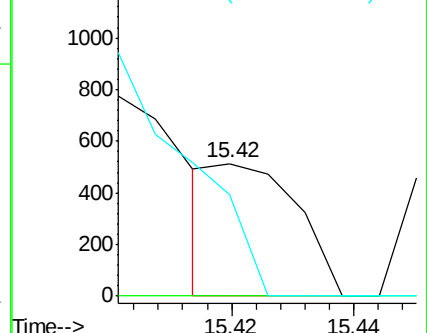
85 0.0 32.3 96.9#

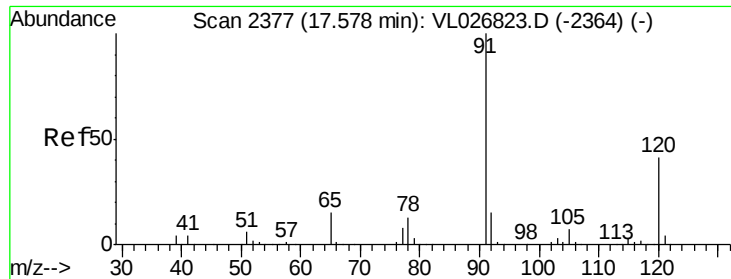


Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VL0

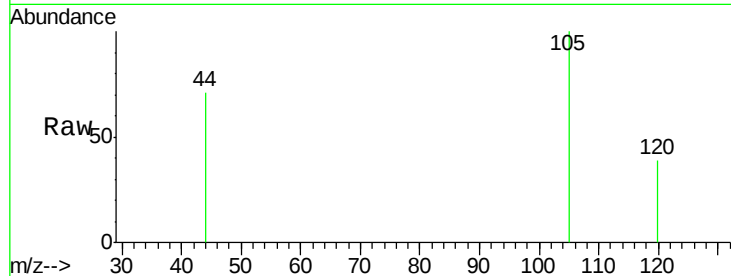




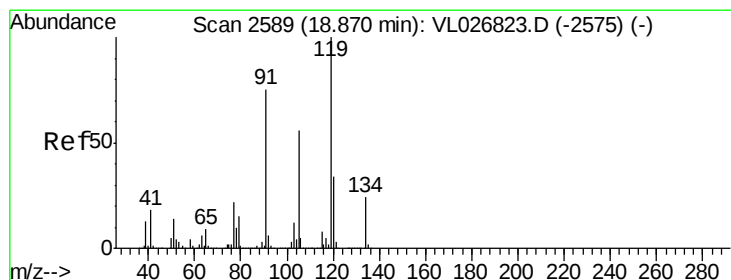
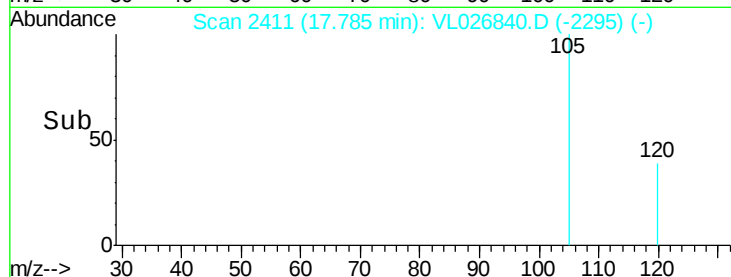
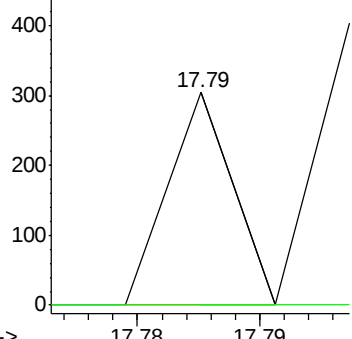
#64  
n-propylbenzene  
Concen: 0.00 ppbv  
RT: 17.79 min Scan# 2411  
Delta R.T. 0.21 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

Instrument :  
MSVOA\_L  
ClientSampleId :  
IAS-1DL

Tgt Ion:120 Resp: 111  
Ion Ratio Lower Upper  
120 100  
91 1106.3 363.0 544.6#

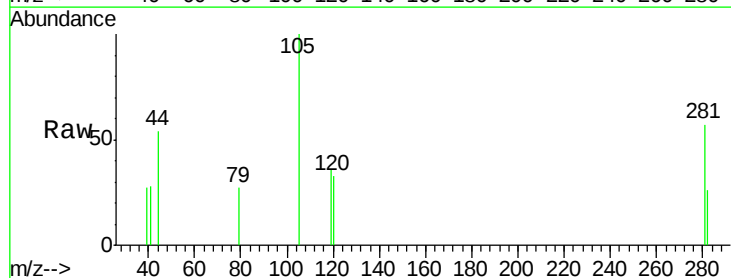


Abundance Ion 120.20 (119.90 to 120.90): V  
Ion 91.10 (90.80 to 91.80): VL0

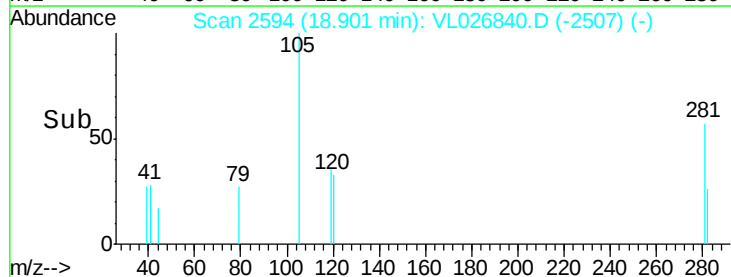
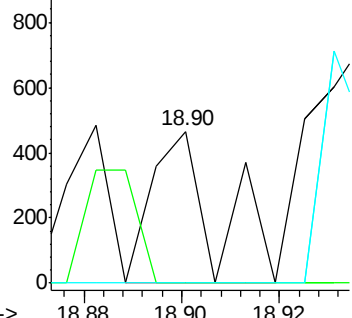


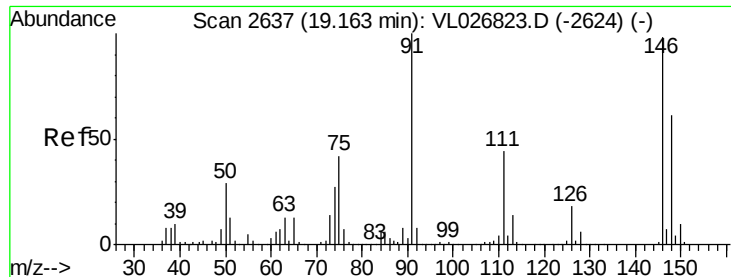
#65  
tert-Butylbenzene  
Concen: 0.00 ppbv  
RT: 18.90 min Scan# 2594  
Delta R.T. 0.03 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

Tgt Ion:119 Resp: 437  
Ion Ratio Lower Upper  
119 100  
91 0.0 61.5 92.3#  
134 0.0 17.9 26.9#



Abundance Ion 119.20 (118.90 to 119.90): V  
Ion 91.10 (90.80 to 91.80): VL0  
Ion 134.20 (133.90 to 134.90): V

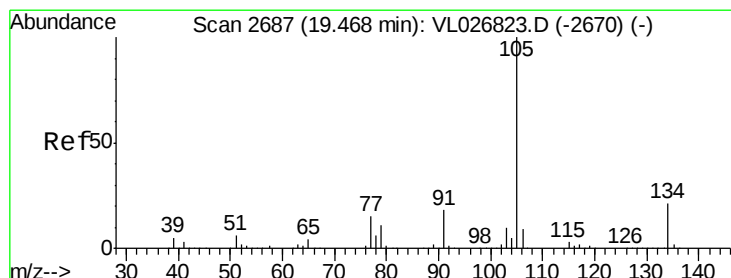
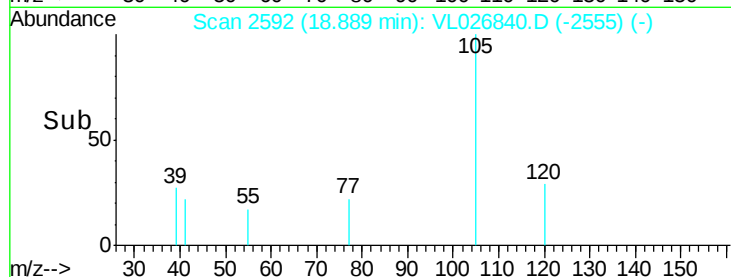
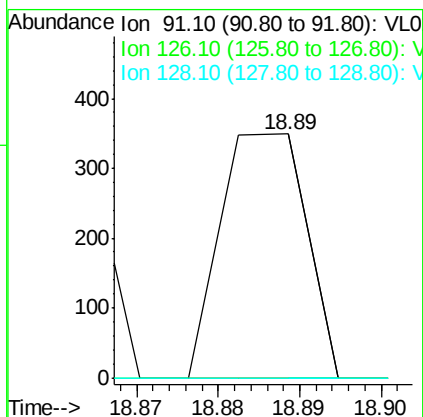
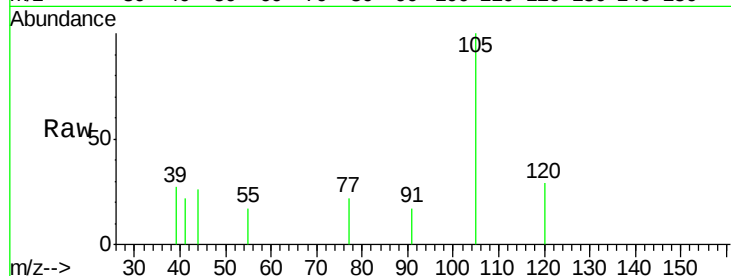




#66  
Benzyl Chloride  
Concen: 0.00 ppbv  
RT: 18.89 min Scan# 2592  
Delta R.T. -0.27 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

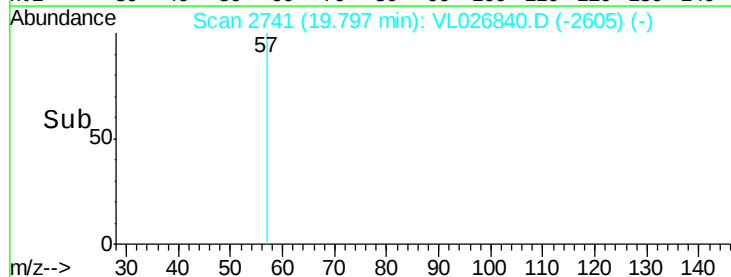
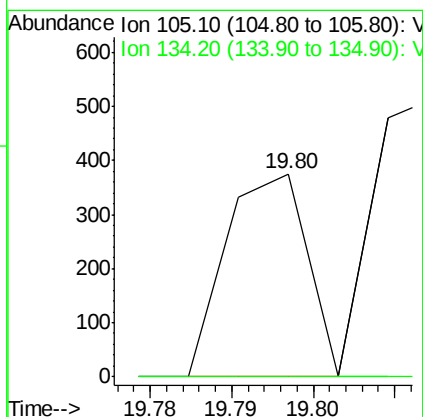
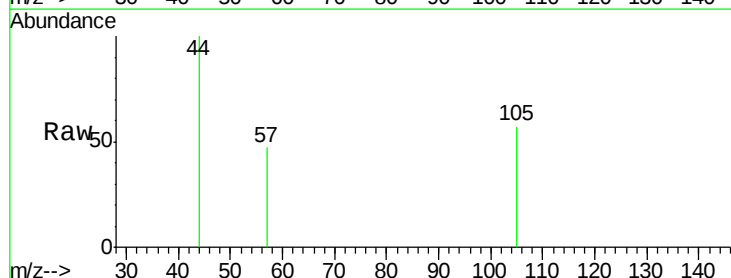
Instrument :  
MSVOA\_L  
ClientSampleId :  
IAS-1DL

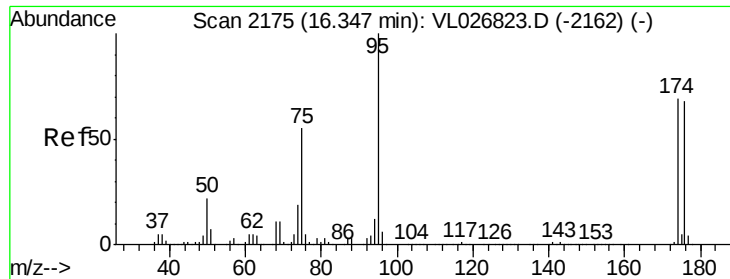
Tgt Ion: 91 Resp: 255  
Ion Ratio Lower Upper  
91 100  
126 512.5 14.6 21.8#  
128 0.0 4.6 6.8#



#67  
sec-Butylbenzene  
Concen: 0.00 ppbv  
RT: 19.80 min Scan# 2741  
Delta R.T. 0.33 min  
Lab File: VL026840.D  
Acq: 10 Feb 2016 4:52

Tgt Ion: 105 Resp: 258  
Ion Ratio Lower Upper  
105 100  
134 0.0 16.1 24.1#

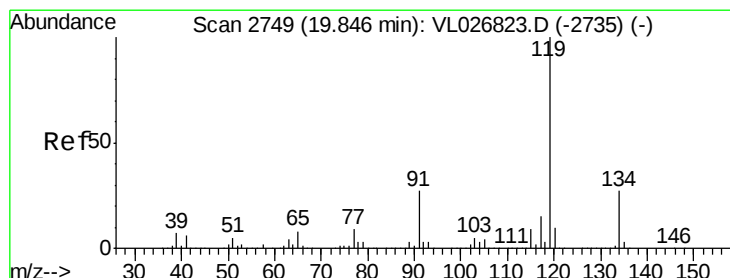
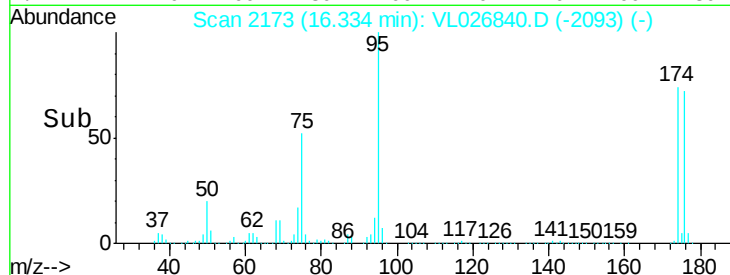
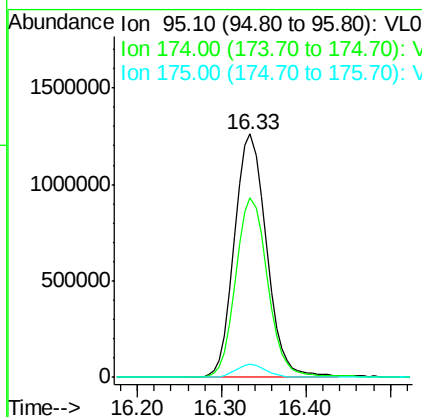
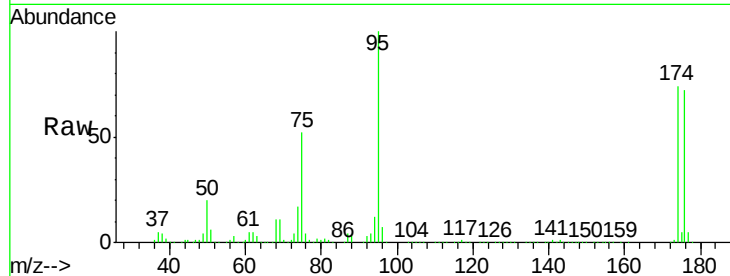




#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 9.85 ppbv  
 RT: 16.33 min Scan# 2173  
 Delta R.T. -0.01 min  
 Lab File: VL026840.D  
 Acq: 10 Feb 2016 4:52

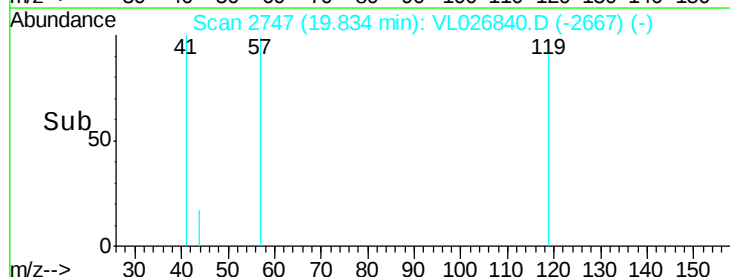
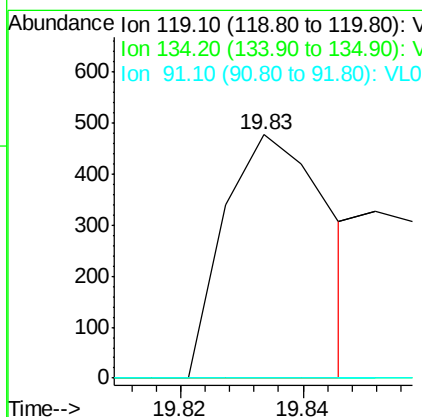
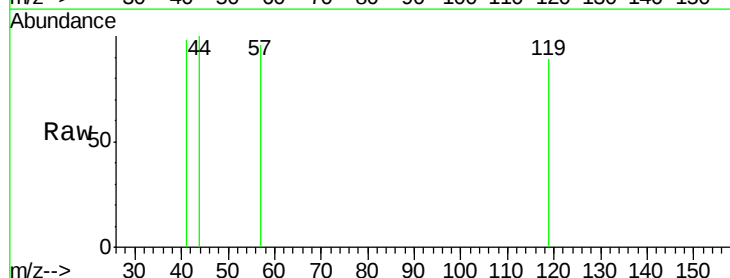
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IAS-1DL

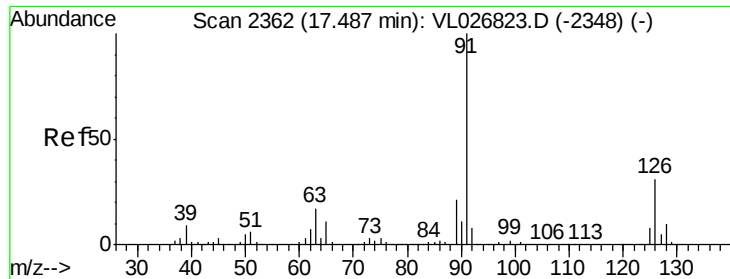
Tgt Ion: 95 Resp: 3262337  
 Ion Ratio Lower Upper  
 95 100  
 174 74.2 55.6 83.4  
 175 5.2 3.9 5.9



#69  
 p-Isopropyltoluene  
 Concen: 0.00 ppbv  
 RT: 19.83 min Scan# 2747  
 Delta R.T. -0.01 min  
 Lab File: VL026840.D  
 Acq: 10 Feb 2016 4:52

Tgt Ion: 119 Resp: 564  
 Ion Ratio Lower Upper  
 119 100  
 134 0.0 21.3 31.9#  
 91 0.0 21.5 32.3#





#71

2-Chlorotoluene

Concen: 0.00 ppbv

RT: 17.56 min Scan# 2374

Delta R.T. 0.07 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

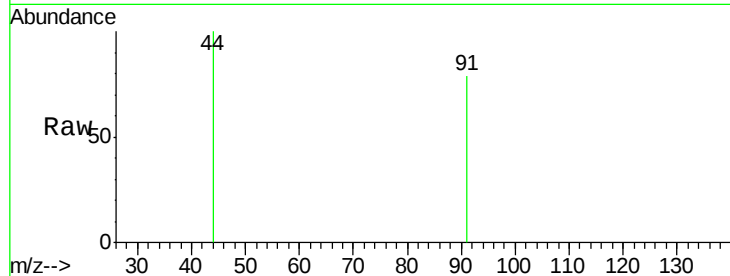
IAS-1DL

Tgt Ion: 91 Resp: 613

Ion Ratio Lower Upper

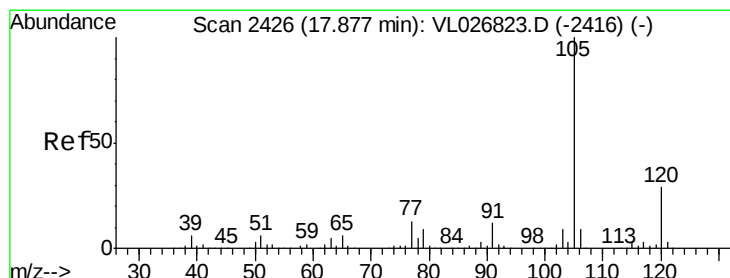
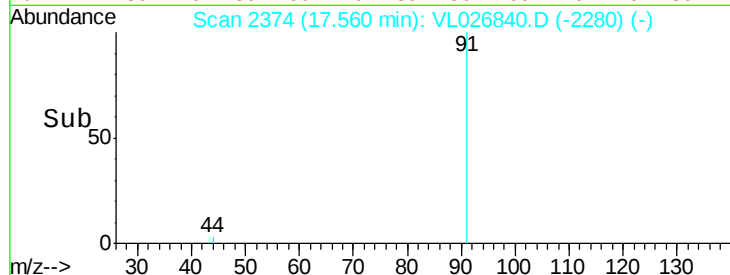
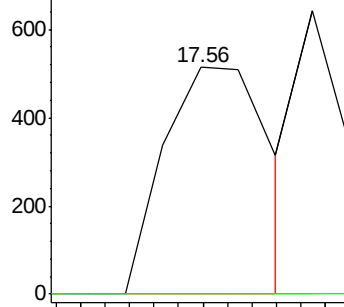
91 100

126 0.0 12.2 48.8#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 0.00 ppbv

RT: 17.86 min Scan# 2424

Delta R.T. -0.01 min

Lab File: VL026840.D

Acq: 10 Feb 2016 4:52

Tgt Ion: 105 Resp: 646

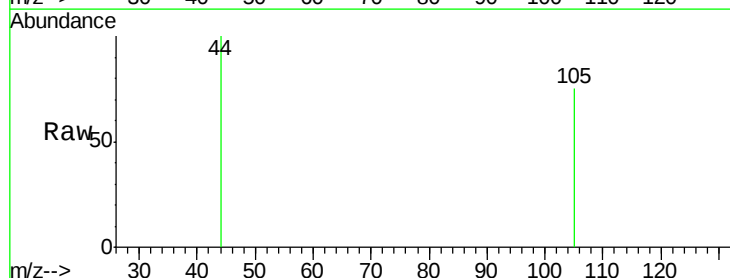
Ion Ratio Lower Upper

105 100

120 0.0 23.8 35.6#

91 0.0 10.2 15.4#

77 0.0 10.8 16.2#

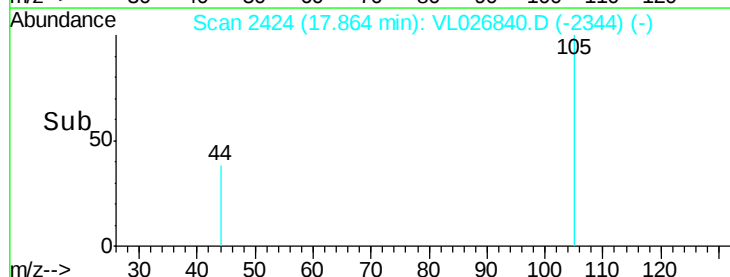
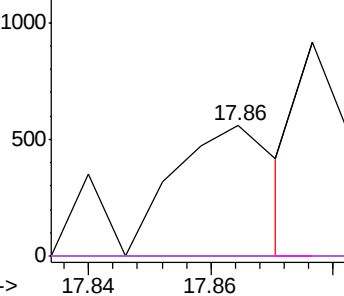


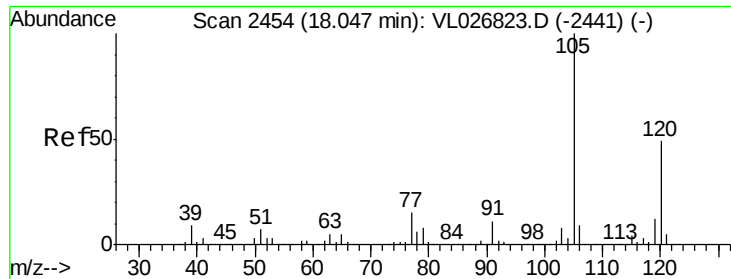
Abundance Ion 105.10 (104.80 to 105.80): V

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

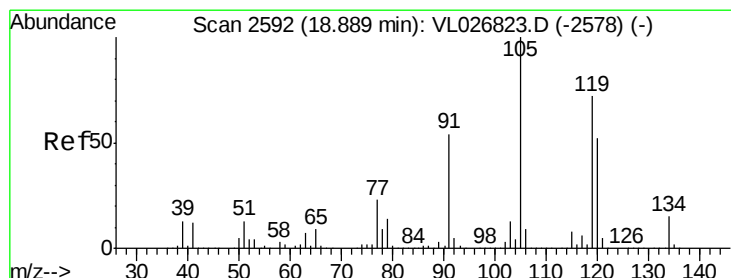
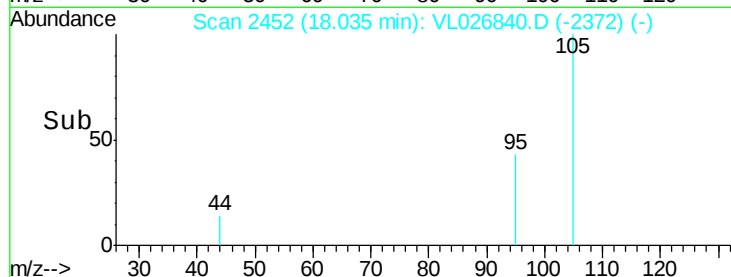
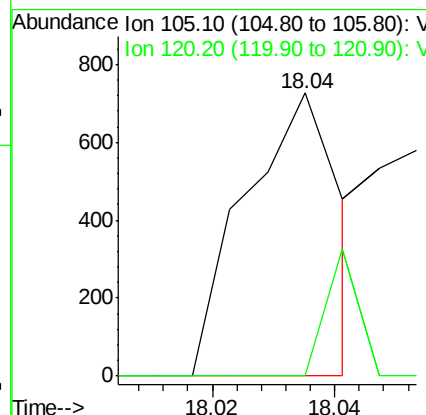
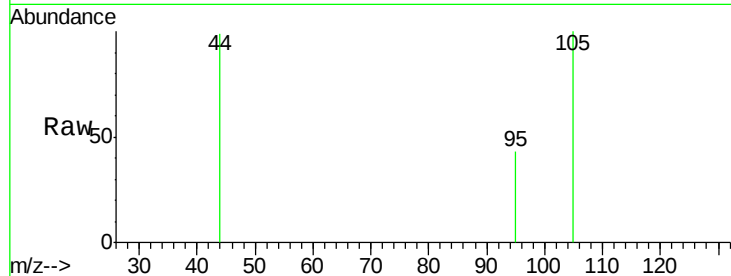




#73  
 1,3,5-Trimethylbenzene  
 Concen: 0.00 ppbv  
 RT: 18.04 min Scan# 2452  
 Delta R.T. -0.01 min  
 Lab File: VL026840.D  
 Acq: 10 Feb 2016 4:52

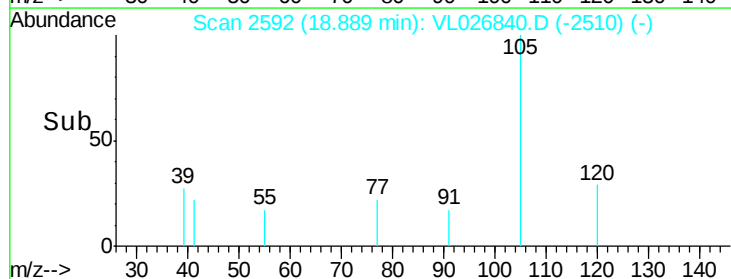
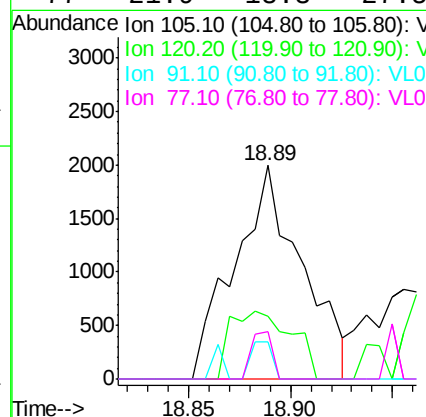
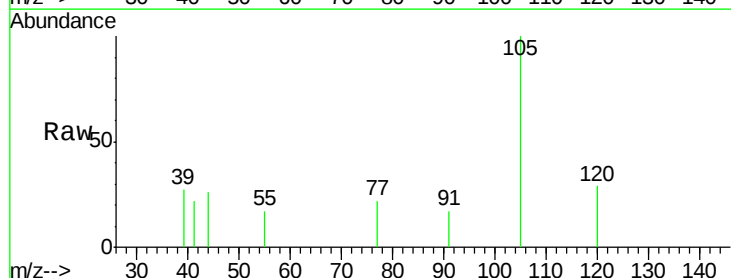
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IAS-1DL

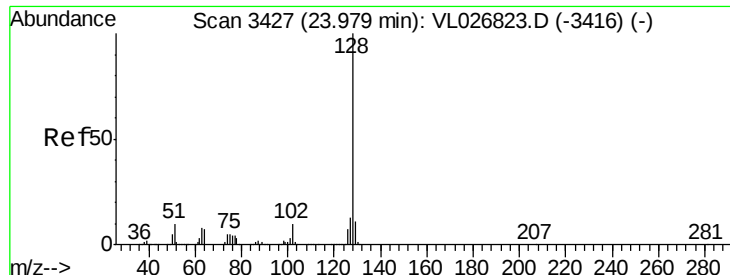
Tgt Ion:105 Resp: 781  
 Ion Ratio Lower Upper  
 105 100  
 120 0.0 39.4 59.0#



#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.01 ppbv  
 RT: 18.89 min Scan# 2592  
 Delta R.T. -0.00 min  
 Lab File: VL026840.D  
 Acq: 10 Feb 2016 4:52

Tgt Ion:105 Resp: 4577  
 Ion Ratio Lower Upper  
 105 100  
 120 29.3 41.3 61.9#  
 91 17.5 43.3 64.9#  
 77 21.9 18.3 27.5





#79

Naphthalene

Concen: 0.00 ppbv

RT: 23.99 min Scan# 3428

Delta R.T. 0.01 min

Lab File: VL026840.D

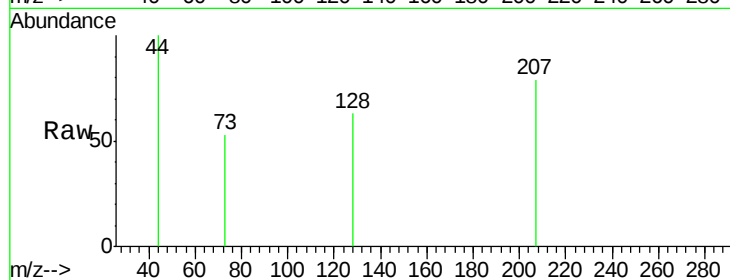
Acq: 10 Feb 2016 4:52

Instrument :

MSVOA\_L

ClientSampleId :

IAS-1DL



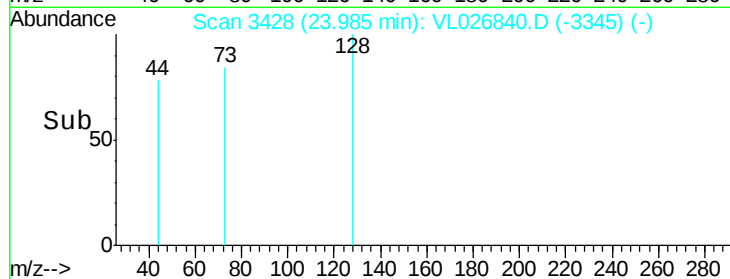
Tgt Ion:128 Resp: 154

Ion Ratio Lower Upper

128 100

127 0.0 10.0 15.0#

129 0.0 8.7 13.1#



Abundance Ion 128.10 (127.80 to 128.80): V

Ion 127.10 (126.80 to 127.80): V

Ion 129.10 (128.80 to 129.80): V

