

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121718\  
 Data File : VL033008.D  
 Acq On : 17 Dec 2018 23:11  
 Operator : SY/AP  
 Sample : J6382-05  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Quant Time: Dec 18 01:17:07 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Dec 07 09:35:17 2018  
 QLast Update : Fri Dec 07 09:35:17 2018  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.77  | 49   | 1106861  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.30  | 114  | 2769376  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.25 | 117  | 2982107  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.59  | 95    | 2126195  | 9.65     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 96.50% |

| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Ovalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.08  | 85   | 96508    | 0.653   | ppbv   | 100    |
| 3) Chlorodifluoromethane       | 2.99  | 51   | 306058   | 3.651   | ppbv # | 60     |
| 4) Chloromethane               | 3.17  | 50   | 67165    | 1.376   | ppbv   | 99     |
| 9) Propene                     | 3.24  | 41   | 1485511  | 44.817  | ppbv   | 92     |
| 10) Heptane                    | 8.26  | 43   | 489276   | 3.930   | ppbv   | 100    |
| 11) Trichlorofluoromethane     | 4.01  | 101  | 40986    | 0.294   | ppbv   | 98     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.56  | 101  | 4263     | 0.036   | ppbv # | 12     |
| 13) Ethanol                    | 3.67  | 45   | 2860037  | 250.606 | ppbv   | 96     |
| 15) Acetone                    | 3.91  | 43   | 1058310  | 11.140  | ppbv # | 56     |
| 16) 1,3-Butadiene              | 3.35  | 39   | 223455   | 5.928   | ppbv # | 20     |
| 19) Isopropyl Alcohol          | 4.05  | 45   | 263960   | 4.424   | ppbv # | 1      |
| 20) Methylene Chloride         | 4.42  | 84   | 62171    | 1.339   | ppbv # | 95     |
| 21) Allyl Chloride             | 4.44  | 41   | 310799   | 4.014   | ppbv # | 58     |
| 22) trans-1,2-Dichloroethene   | 4.97  | 96   | 151871   | 2.631   | ppbv   | 95     |
| 23) Vinyl Acetate              | 5.15  | 43   | 1012388  | 6.294   | ppbv # | 1      |
| 25) Ethyl Acetate              | 5.79  | 43   | 854915   | 3.809   | ppbv # | 79     |
| 26) Hexane                     | 5.79  | 57   | 1222686  | 11.800  | ppbv # | 44     |
| 30) Cyclohexane                | 7.26  | 84   | 210548   | 2.452   | ppbv   | 86     |
| 34) 2-Butanone                 | 5.34  | 43   | 162574   | 1.348   | ppbv   | 100    |
| 36) Benzene                    | 7.01  | 78   | 1453147  | 7.134   | ppbv   | 98     |
| 39) 1,2-Dichloropropane        | 7.30  | 63   | 647561   | 8.383   | ppbv # | 21     |
| 41) Tetrahydrofuran            | 6.22  | 42   | 15390    | 0.205   | ppbv # | 47     |
| 42) Bromodichloromethane       | 7.93  | 83   | 25042    | 0.130   | ppbv # | 29     |
| 44) 2,2,4-Trimethylpentane     | 8.00  | 57   | 3230656  | 9.344   | ppbv   | 96     |
| 50) 4-Methyl-2-Pentanone       | 8.89  | 43   | 31593    | 0.164   | ppbv # | 39     |
| 51) 2-Hexanone                 | 10.26 | 43   | 13491    | 0.103   | ppbv # | 52     |
| 52) Tetrachloroethene          | 11.38 | 164  | 79445    | 1.072   | ppbv   | 96     |
| 53) Toluene                    | 9.96  | 91   | 7218000  | 33.412  | ppbv   | 97     |
| 58) Ethyl Benzene              | 12.87 | 91   | 1574832  | 4.950   | ppbv   | 100    |
| 59) m/p-Xylene                 | 13.13 | 91   | 5119275  | 17.750  | ppbv # | 100    |
| 60) o-Xylene                   | 13.86 | 91   | 1612611  | 5.537   | ppbv   | 100    |
| 61) Styrene                    | 13.69 | 104  | 17365    | 0.090   | ppbv # | 27     |
| 62) Isopropylbenzene           | 14.84 | 105  | 51316    | 0.126   | ppbv   | 94     |
| 64) n-propylbenzene            | 15.73 | 120  | 73479    | 0.696   | ppbv   | 92     |
| 65) tert-Butylbenzene          | 16.93 | 119  | 163039   | 0.433   | ppbv # | 62     |
| 70) n-Butylbenzene             | 18.73 | 91   | 33473    | 0.081   | ppbv # | 69     |
| 71) 2-Chlorotoluene            | 15.73 | 91   | 359288   | 1.189   | ppbv # | 44     |
| 72) 4-Ethyltoluene             | 16.01 | 105  | 533664   | 1.641   | ppbv   | 99     |
| 73) 1,3,5-Trimethylbenzene     | 16.16 | 105  | 334138   | 1.053   | ppbv   | 98     |
| 74) 1,2,4-Trimethylbenzene     | 16.93 | 105  | 1494391  | 4.169   | ppbv # | 69     |
| 79) Naphthalene                | 22.43 | 128  | 43187    | 0.187   | ppbv # | 91     |

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Operator : SY/AP  
Sample : J6382-05  
Misc : 400ml/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

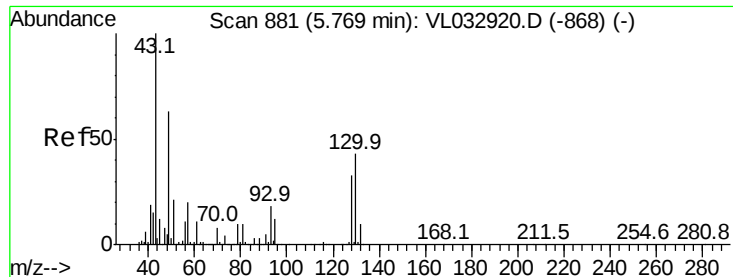
Instrument :  
MSVOA\_L  
ClientSampleId :

Quant Time: Dec 18 01:17:07 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Dec 07 09:35:17 2018  
QLast Update : Fri Dec 07 09:35:17 2018  
Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 80) Naphthalene,2-methyl- | 25.12 | 142  | 4097     | 0.083 | ppbv  | # 77     |

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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 882

Delta R.T. 0.00 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampled :

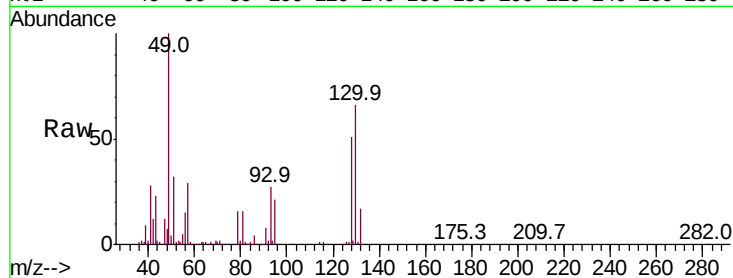
Tot Ion: 49 Resp: 1106861

Ion Ratio Lower Upper

49 100

128 52.6 26.3 78.8

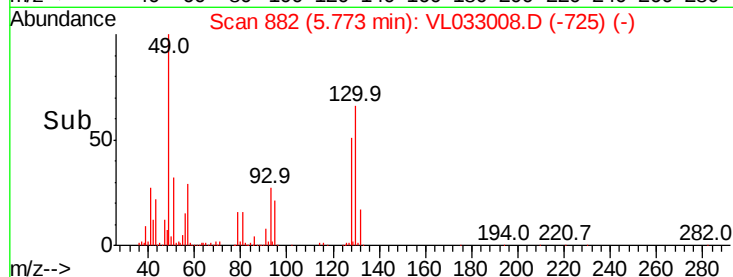
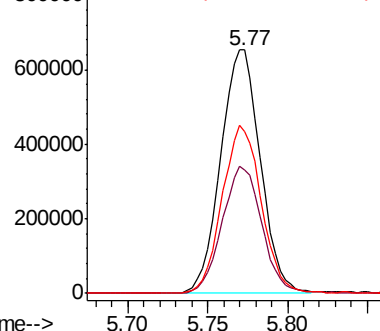
130 68.8 33.9 101.7



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.653 ppbv

RT: 3.08 min Scan# 44

Delta R.T. -0.00 min

Lab File: VL033008.D

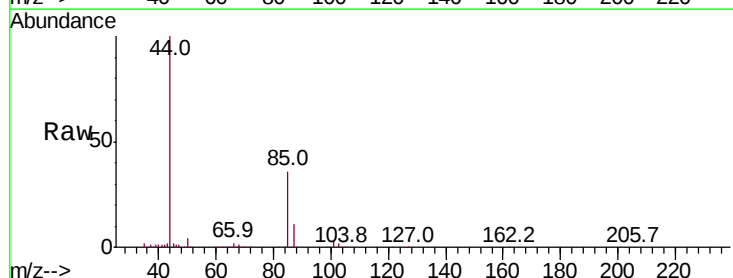
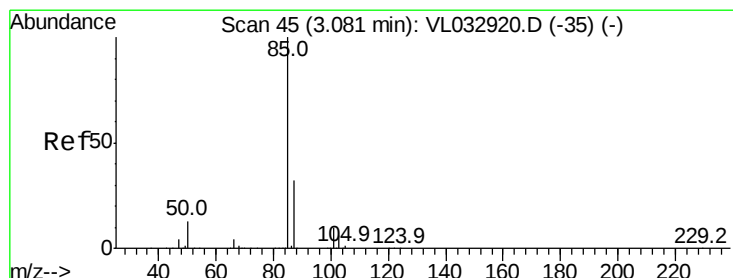
Acq: 17 Dec 2018 23:11

Tgt Ion: 85 Resp: 96508

Ion Ratio Lower Upper

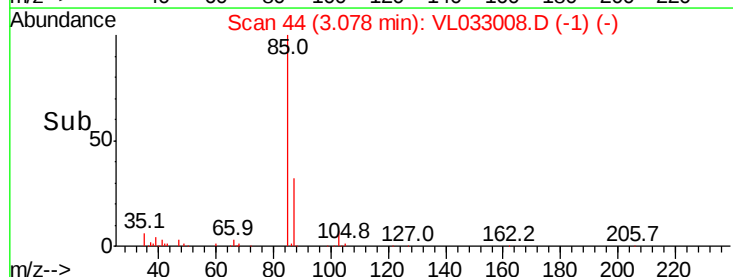
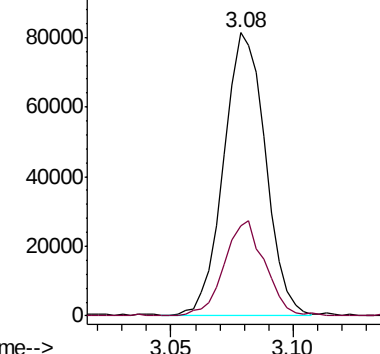
85 100

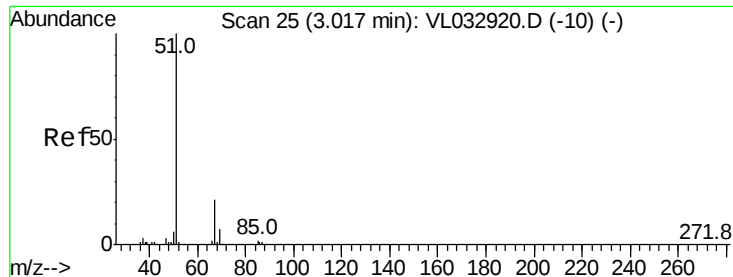
87 32.0 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 3.651 ppbv

RT: 2.99 min Scan# 17

Delta R.T. -0.03 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :

MSVOA\_L

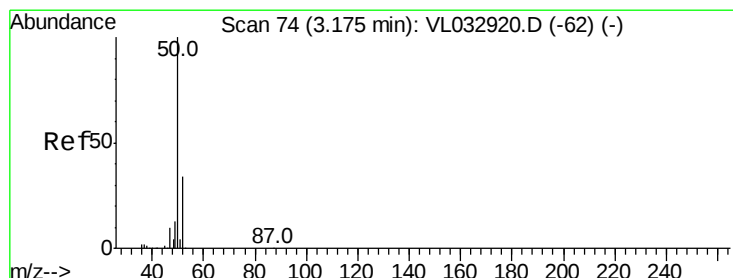
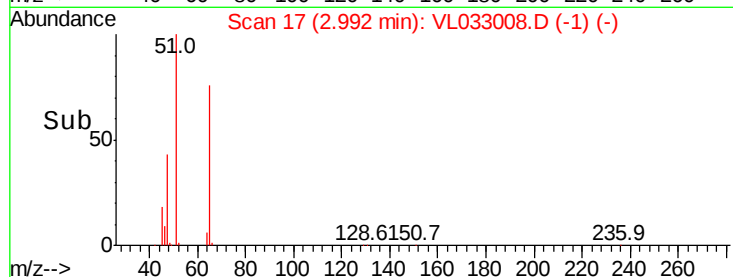
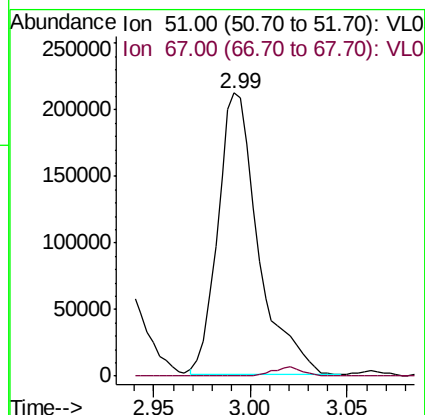
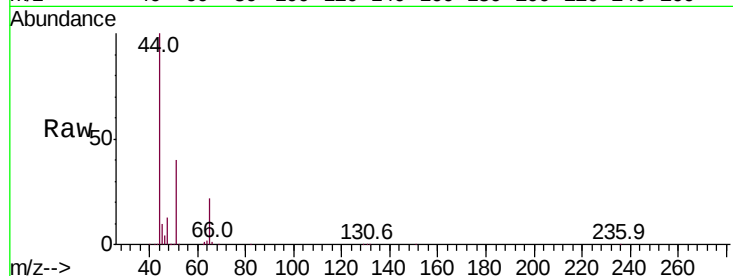
ClientSampleId :

Tot Ion: 51 Resp: 306058

Ion Ratio Lower Upper

51 100

67 2.4 16.8 25.2#



#4

Chloromethane

Concen: 1.376 ppbv

RT: 3.17 min Scan# 74

Delta R.T. 0.00 min

Lab File: VL033008.D

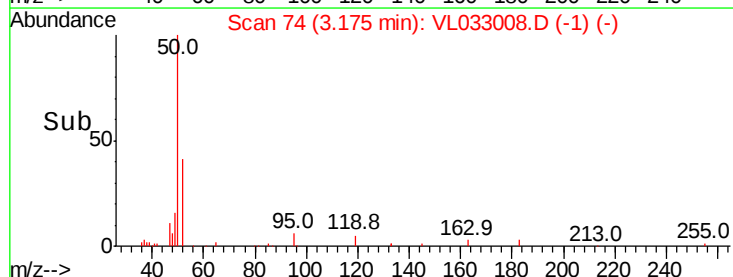
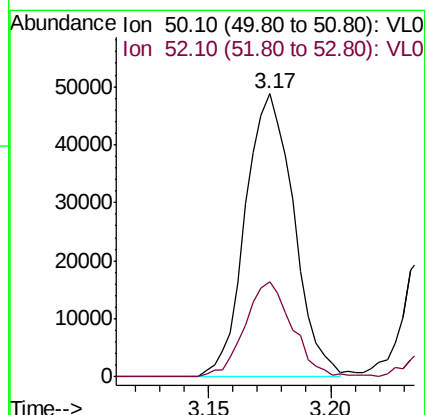
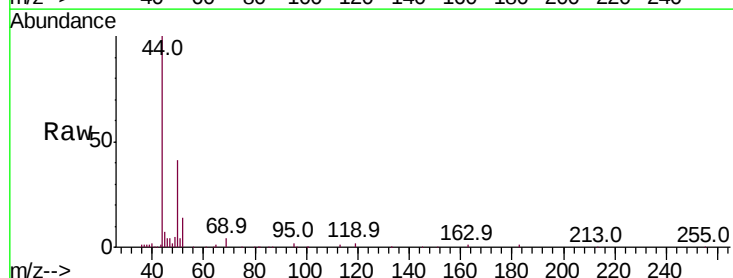
Acq: 17 Dec 2018 23:11

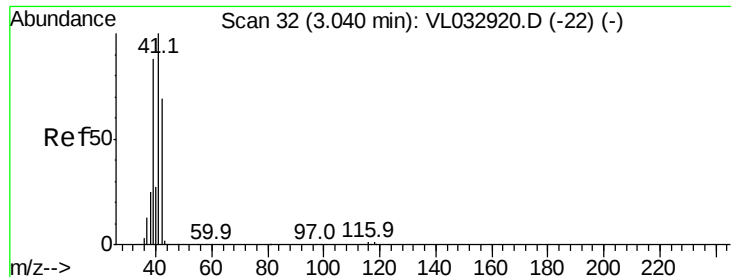
Tgt Ion: 50 Resp: 67165

Ion Ratio Lower Upper

50 100

52 33.5 27.3 40.9





#9

Propene

Concen: 44.817 ppbv

RT: 3.24 min Scan# 95

Delta R.T. 0.20 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :

MSVOA\_L

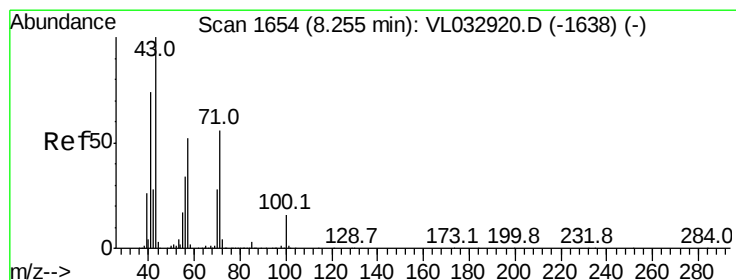
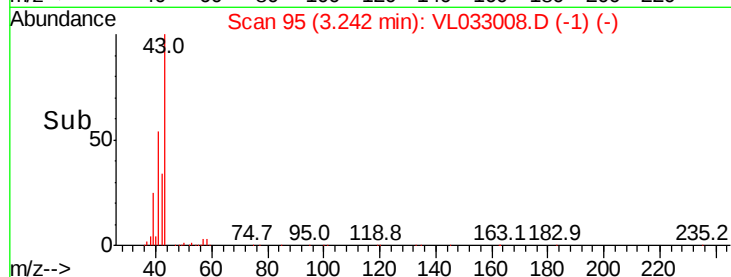
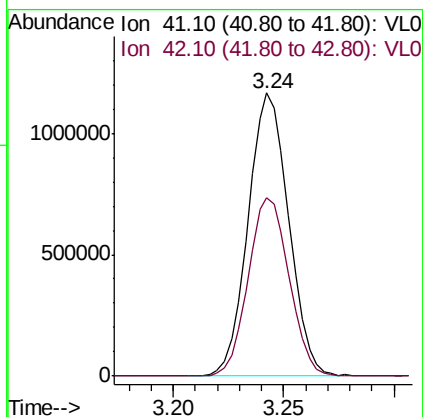
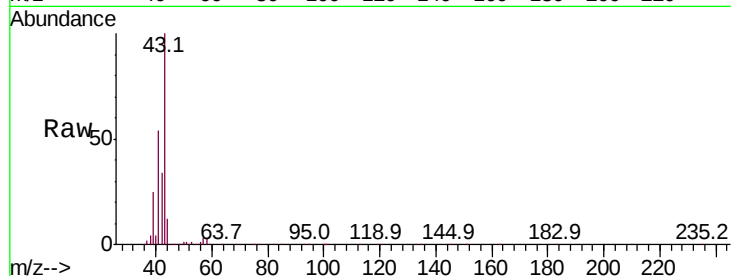
ClientSampleId :

Tot Ion: 41 Resp: 1485511

Ion Ratio Lower Upper

41 100

42 64.0 56.2 84.2



#10

Heptane

Concen: 3.930 ppbv

RT: 8.26 min Scan# 1654

Delta R.T. 0.00 min

Lab File: VL033008.D

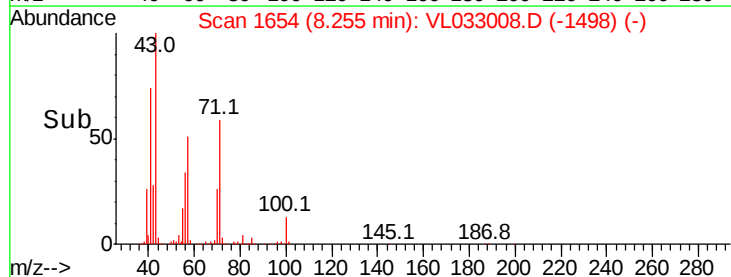
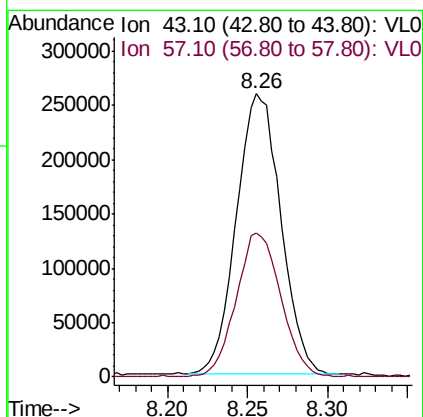
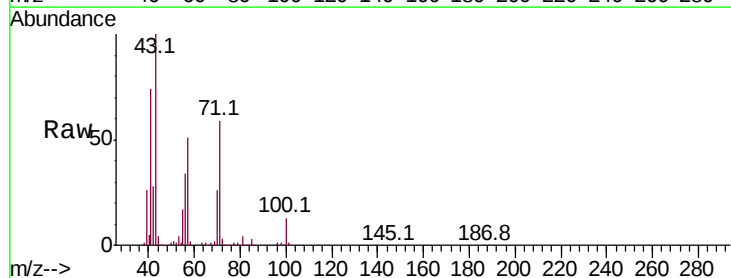
Acq: 17 Dec 2018 23:11

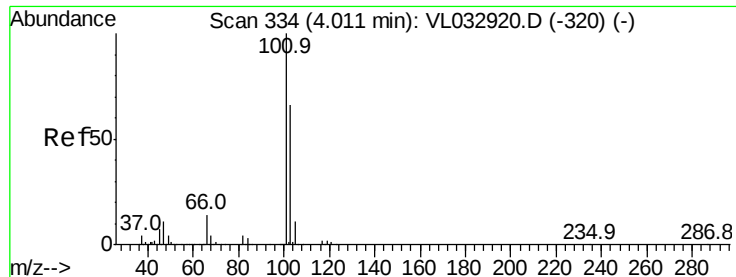
Tgt Ion: 43 Resp: 489276

Ion Ratio Lower Upper

43 100

57 52.0 41.8 62.6

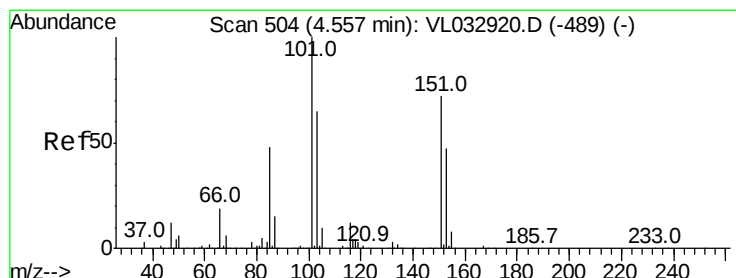
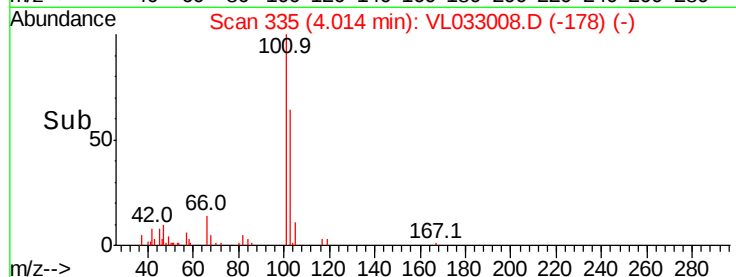
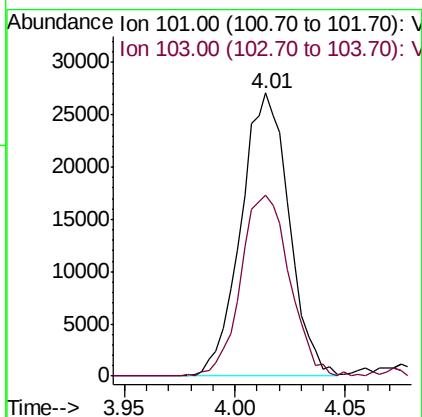
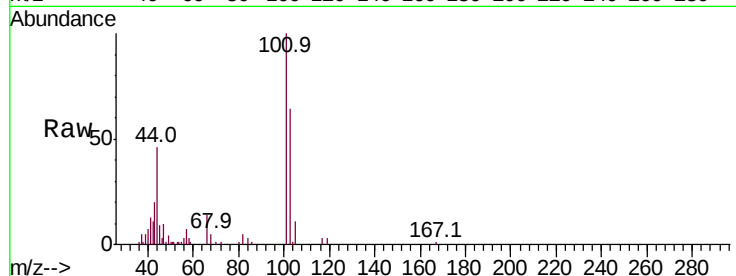




#11  
 Trichlorofluoromethane  
 Concen: 0.294 ppbv  
 RT: 4.01 min Scan# 335  
 Delta R.T. 0.00 min  
 Lab File: VL033008.D  
 Acq: 17 Dec 2018 23:11

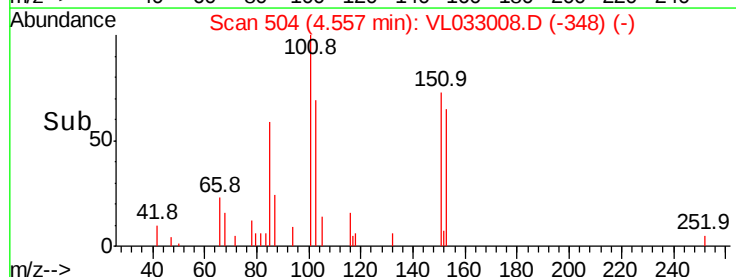
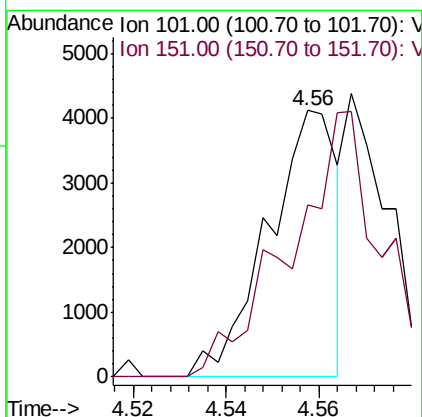
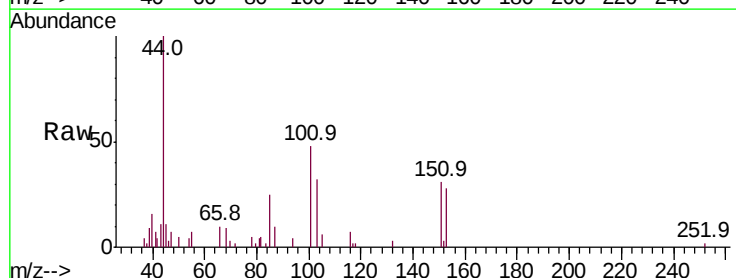
Instrument :  
 MSVOA\_L  
 ClientSampleId :

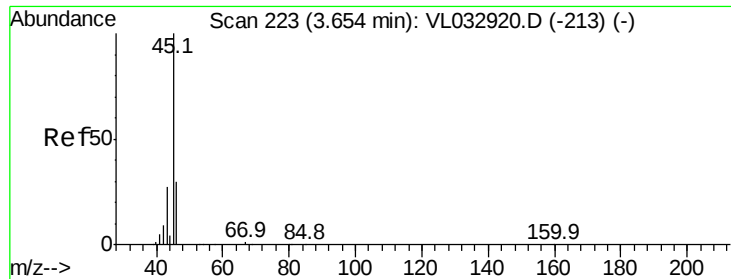
Tot Ion:101 Resp: 40986  
 Ion Ratio Lower Upper  
 101 100  
 103 63.9 52.7 79.1



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 0.036 ppbv  
 RT: 4.56 min Scan# 504  
 Delta R.T. 0.00 min  
 Lab File: VL033008.D  
 Acq: 17 Dec 2018 23:11

Tgt Ion:101 Resp: 4263  
 Ion Ratio Lower Upper  
 101 100  
 151 0.0 59.3 88.9#





#13

Ethanol

Concen: 250.606 ppbv

RT: 3.67 min Scan# 228

Delta R.T. 0.02 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :

MSVOA\_L

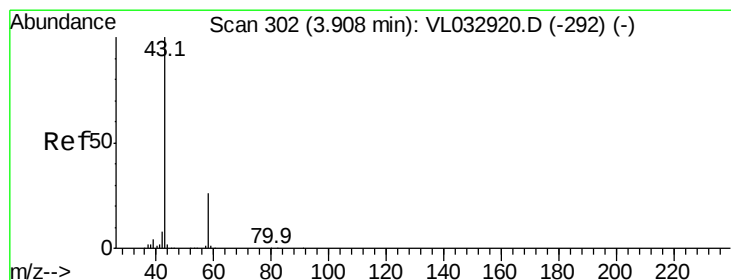
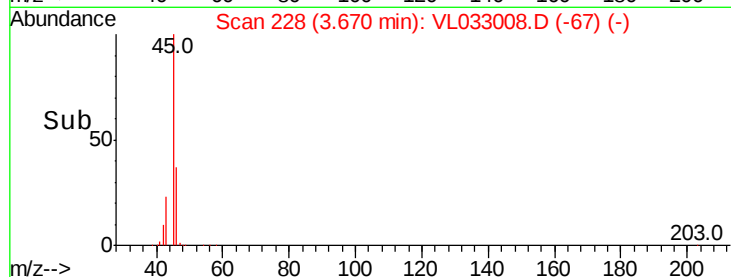
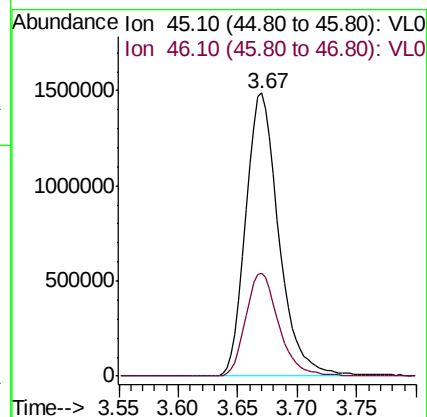
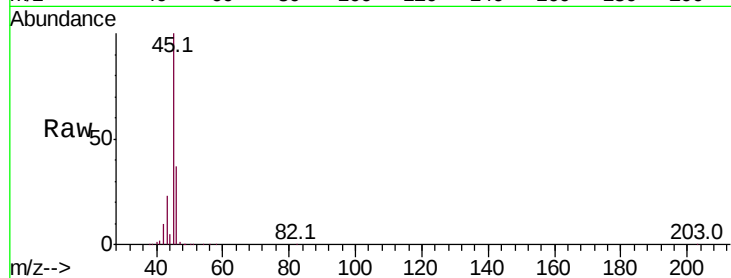
ClientSampleId :

Tot Ion: 45 Resp: 2860037

Ion Ratio Lower Upper

45 100

46 36.9 13.8 55.4



#15

Acetone

Concen: 11.140 ppbv

RT: 3.91 min Scan# 302

Delta R.T. 0.00 min

Lab File: VL033008.D

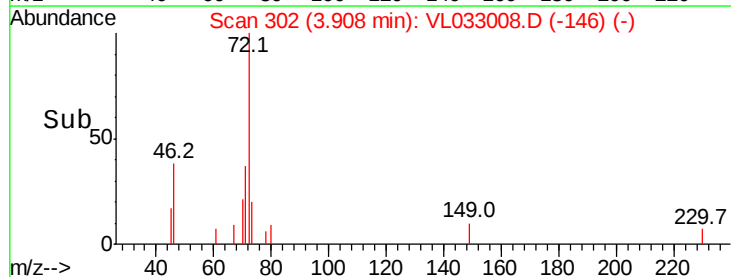
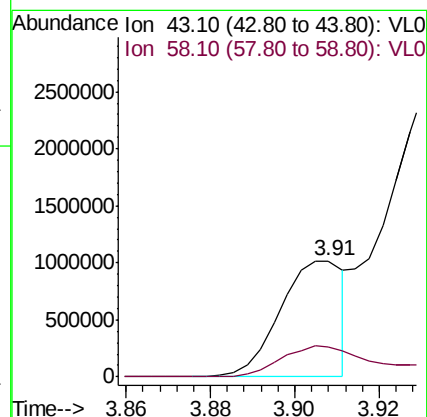
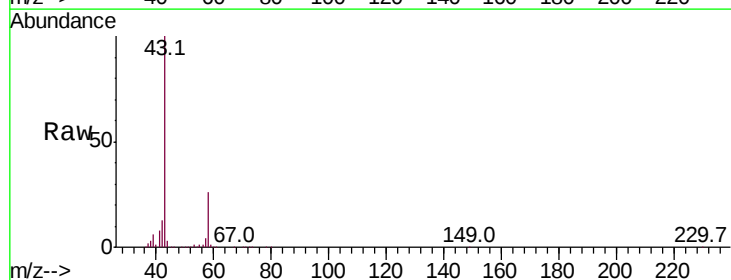
Acq: 17 Dec 2018 23:11

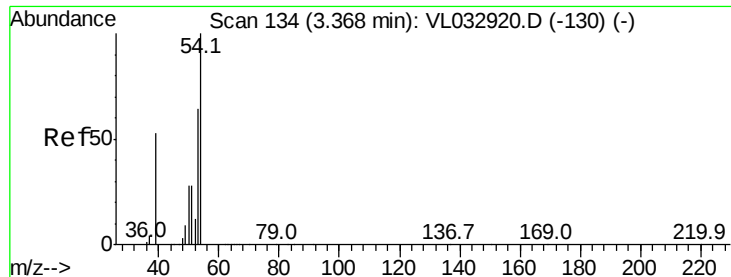
Tgt Ion: 43 Resp: 1058310

Ion Ratio Lower Upper

43 100

58 48.0 20.6 30.8#

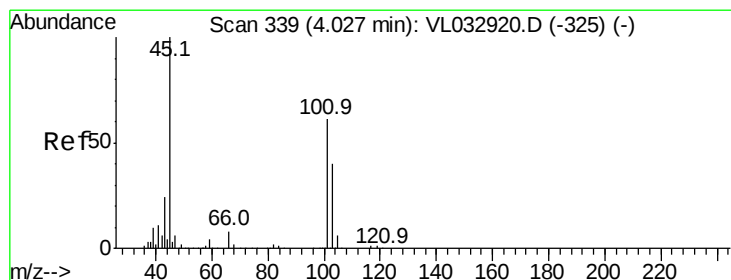
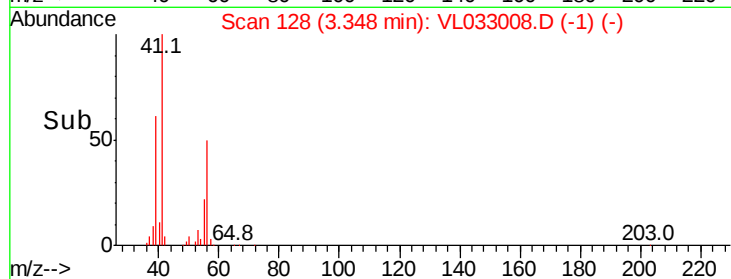
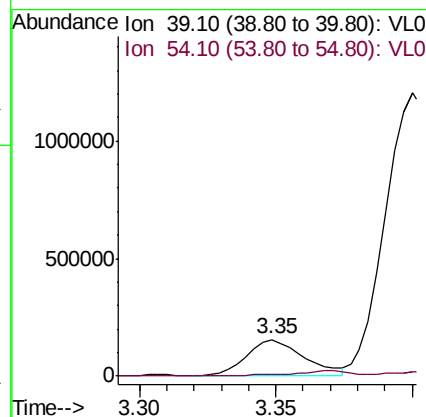
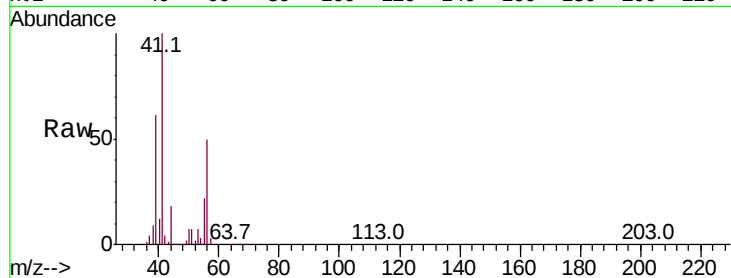




#16  
 1,3-Butadiene  
 Concen: 5.928 ppbv  
 RT: 3.35 min Scan# 128  
 Delta R.T. -0.02 min  
 Lab File: VL033008.D  
 Acq: 17 Dec 2018 23:11

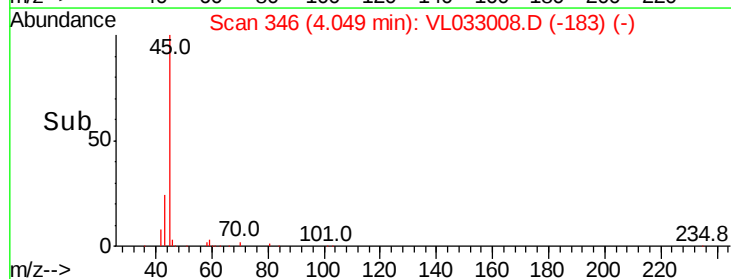
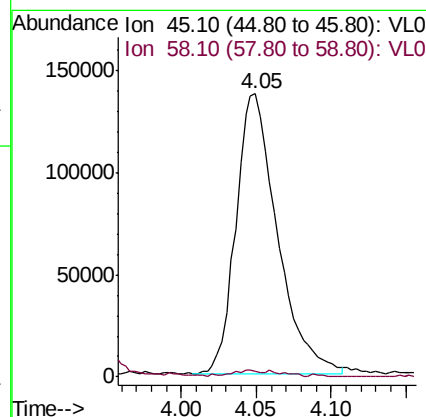
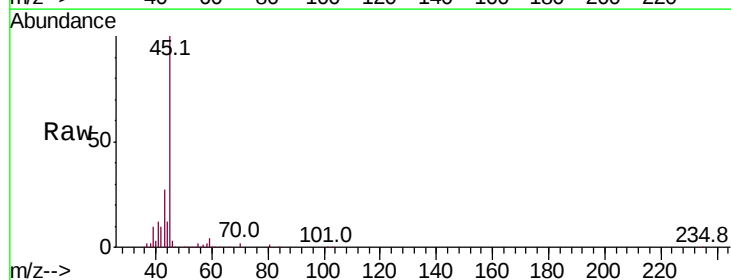
Instrument :  
 MSVOA\_L  
 ClientSampleId :

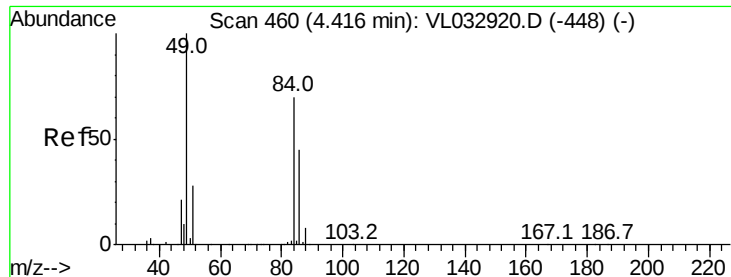
Tot Ion: 39 Resp: 223455  
 Ion Ratio Lower Upper  
 39 100  
 54 15.5 72.7 109.1#



#19  
 Isopropyl Alcohol  
 Concen: 4.424 ppbv  
 RT: 4.05 min Scan# 346  
 Delta R.T. 0.02 min  
 Lab File: VL033008.D  
 Acq: 17 Dec 2018 23:11

Tgt Ion: 45 Resp: 263960  
 Ion Ratio Lower Upper  
 45 100  
 58 192.5 1.4 2.2#





#20

Methylene Chloride

Concen: 1.339 ppbv

RT: 4.42 min Scan# 461

Delta R.T. 0.00 min

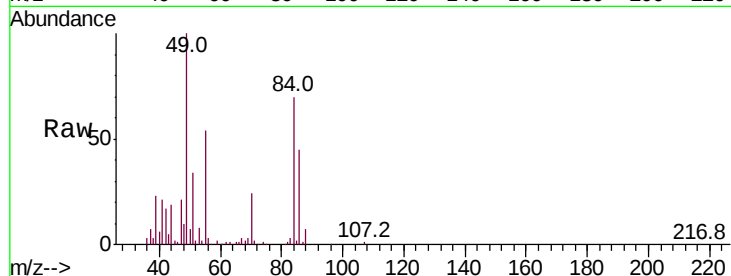
Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion: 84 Resp: 62171

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 84  | 100   |       |       |
| 49  | 138.7 | 113.8 | 170.8 |
| 51  | 27.8  | 31.8  | 47.8# |
| 86  | 63.8  | 50.8  | 76.2  |

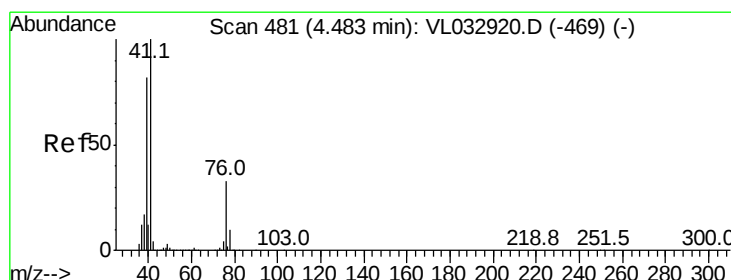
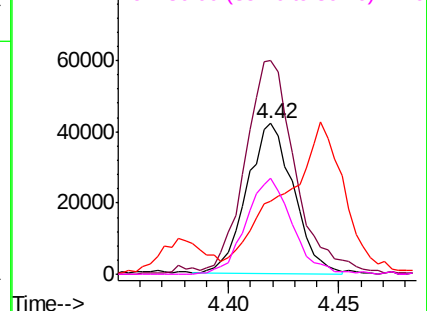
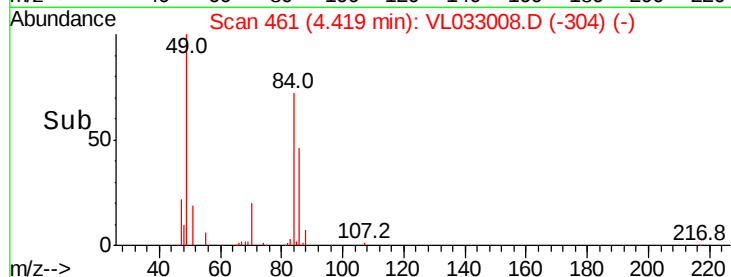


Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#21

Allyl Chloride

Concen: 4.014 ppbv

RT: 4.44 min Scan# 468

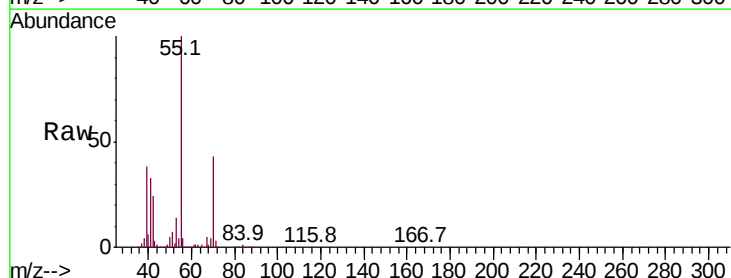
Delta R.T. -0.04 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Tgt Ion: 41 Resp: 310799

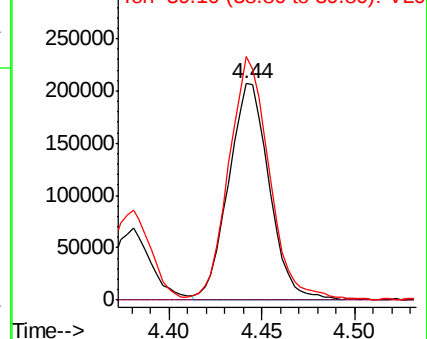
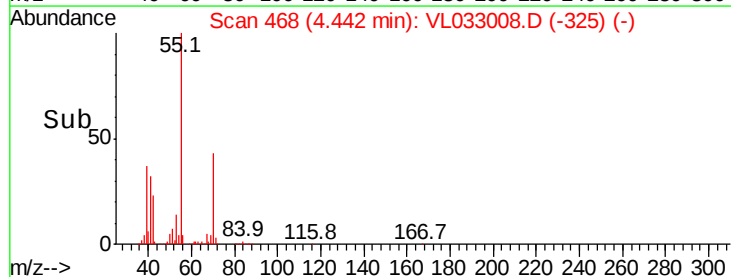
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 41  | 100   |       |       |
| 76  | 0.0   | 25.2  | 37.8# |
| 39  | 114.4 | 65.2  | 97.8# |

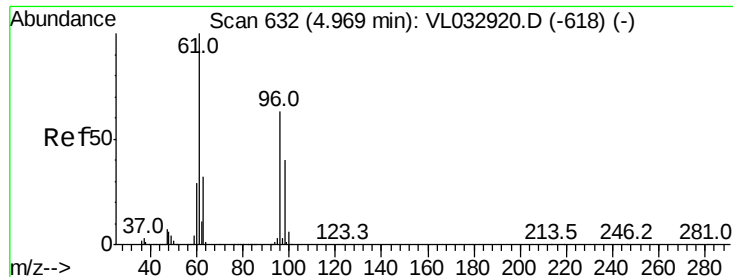


Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

Ion 39.10 (38.80 to 39.80): VL0





#22

trans-1,2-Dichloroethene

Concen: 2.631 ppbv

RT: 4.97 min Scan# 633

Delta R.T. 0.00 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :

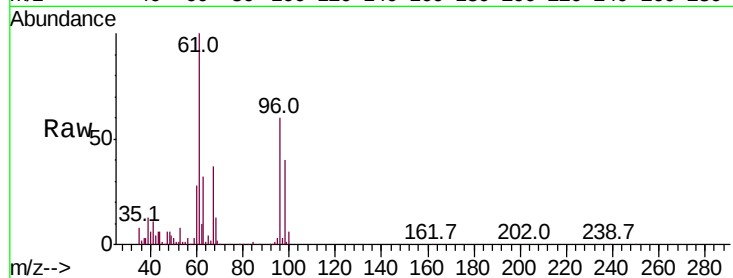
Tot Ion: 96 Resp: 151871

Ion Ratio Lower Upper

96 100

61 165.5 127.1 190.7

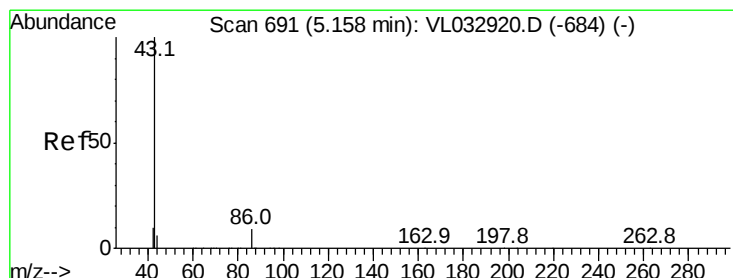
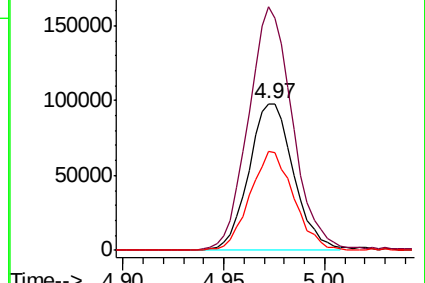
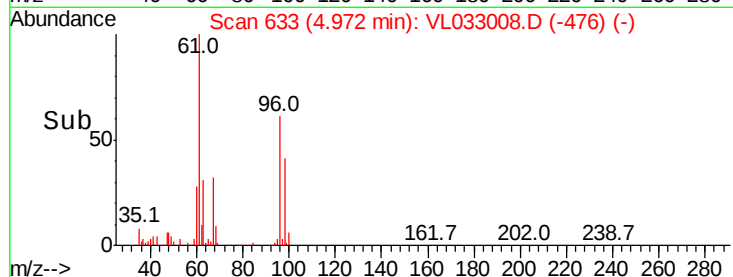
98 67.1 51.3 76.9



Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0



#23

Vinyl Acetate

Concen: 6.294 ppbv

RT: 5.15 min Scan# 687

Delta R.T. -0.01 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Tgt Ion: 43 Resp: 1012388

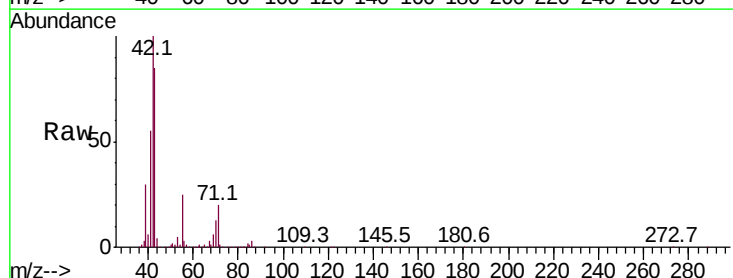
Ion Ratio Lower Upper

43 100

86 3.6 6.6 9.8#

42 117.4 8.3 12.5#

44 2.9 4.2 6.4#

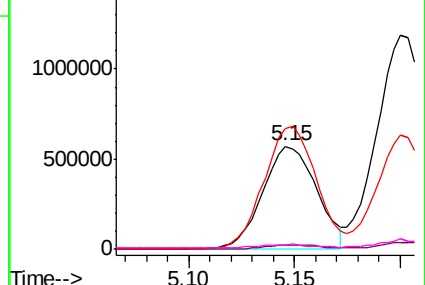
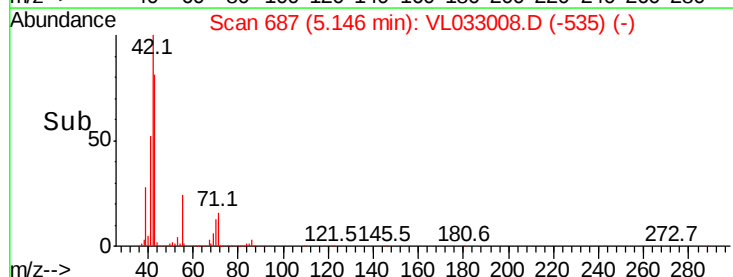


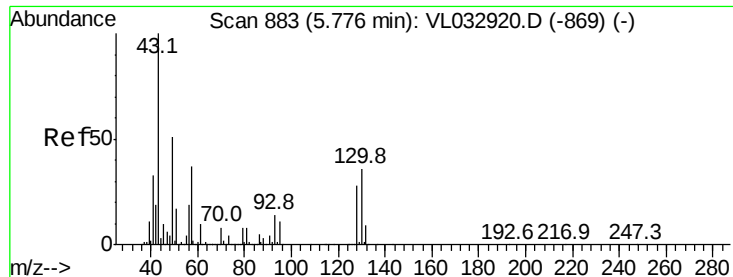
Abundance Ion 43.10 (42.80 to 43.80): VL0

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





#25

Ethyl Acetate

Concen: 3.809 ppbv

RT: 5.79 min Scan# 888

Delta R.T. 0.02 min

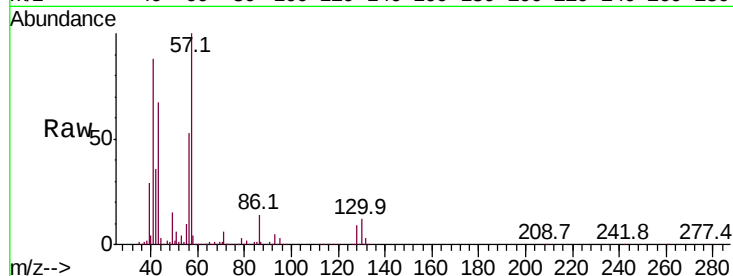
Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion: 43 Resp: 854915

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 45  | 1.1   | 7.8   | 11.6# |
| 61  | 0.7   | 7.4   | 11.2# |
| 70  | 2.1   | 5.7   | 8.5#  |



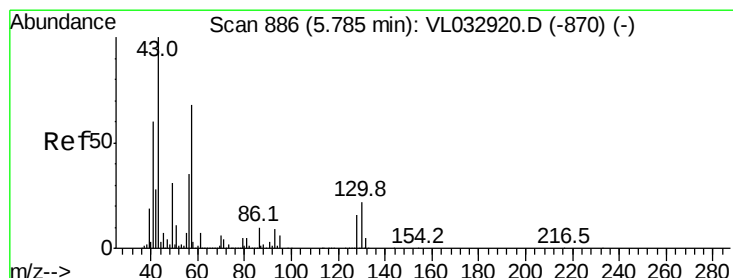
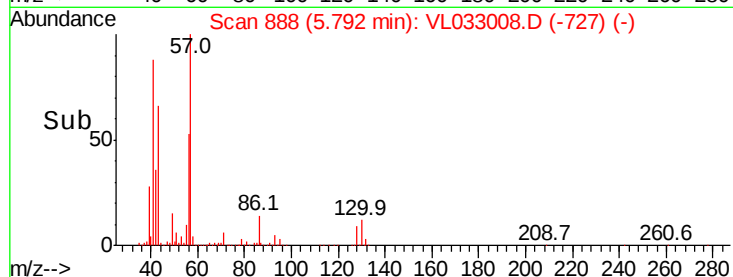
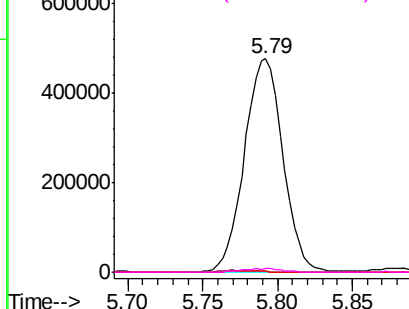
Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 11.800 ppbv

RT: 5.79 min Scan# 888

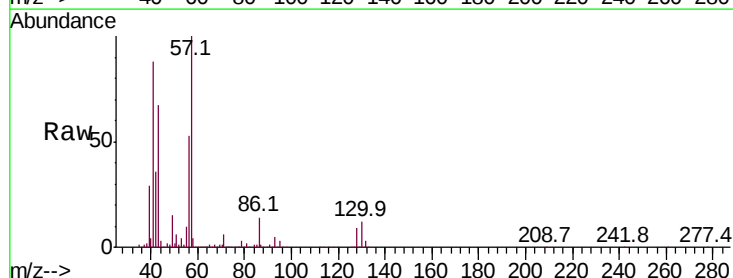
Delta R.T. 0.01 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Tgt Ion: 57 Resp: 1222686

| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 57  | 100   |       |        |
| 41  | 92.6  | 72.2  | 108.2  |
| 43  | 69.8  | 171.9 | 257.9# |
| 56  | 54.5  | 42.2  | 63.2   |



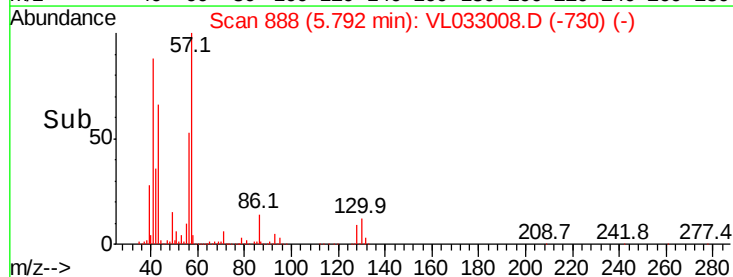
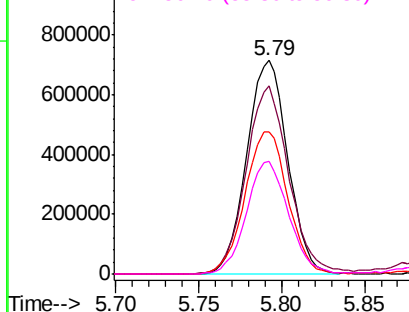
Abundance

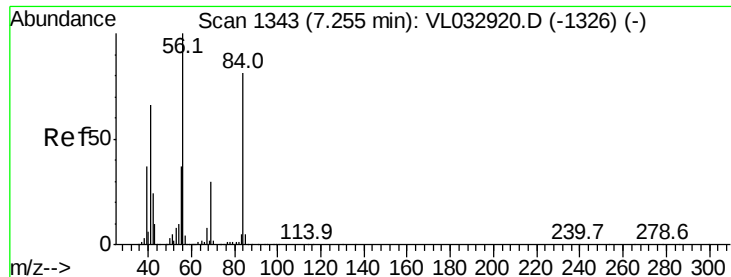
Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0

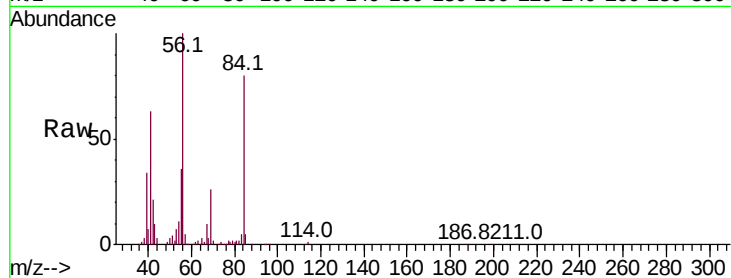




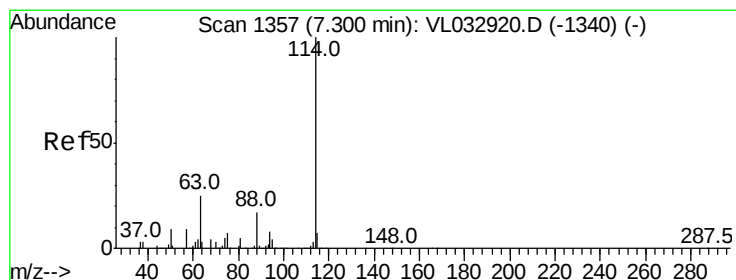
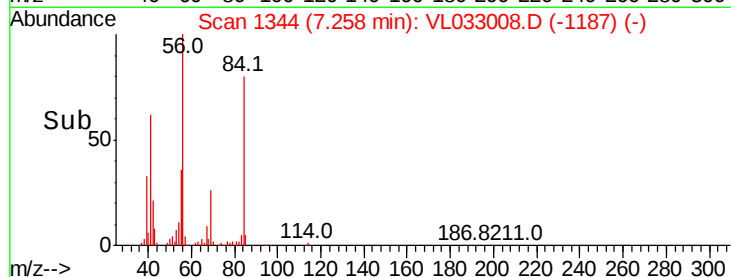
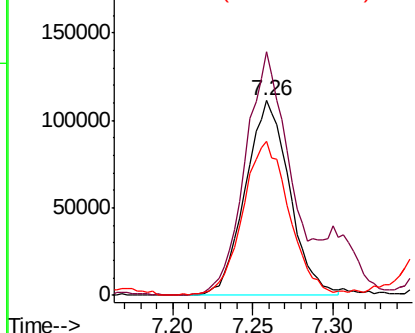
#30  
Cvclohexane  
Concen: 2.452 ppbv  
RT: 7.26 min Scan# 1344  
Delta R.T. 0.00 min  
Lab File: VL033008.D  
Acq: 17 Dec 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion: 84 Resp: 210548  
Ion Ratio Lower Upper  
84 100  
56 152.7 102.5 153.7  
41 82.9 64.1 96.1

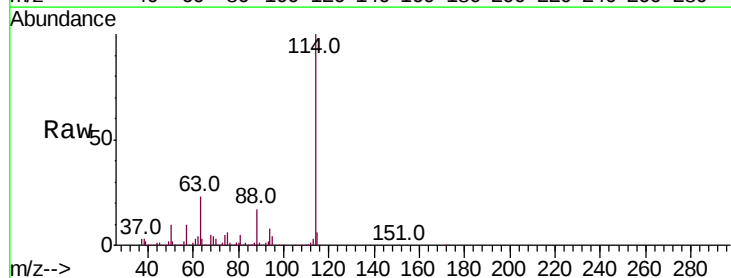


Abundance Ion 84.20 (83.90 to 84.90): VL0  
Ion 56.10 (55.80 to 56.80): VL0  
Ion 41.10 (40.80 to 41.80): VL0

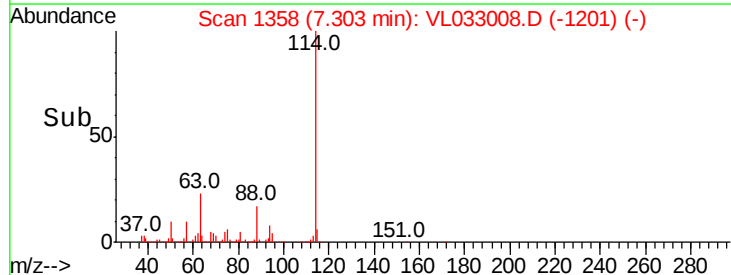
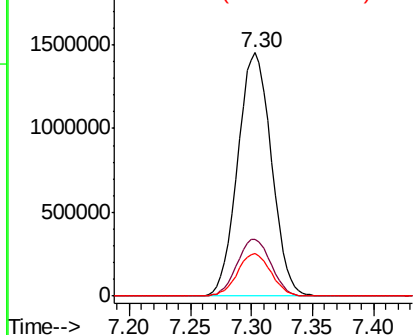


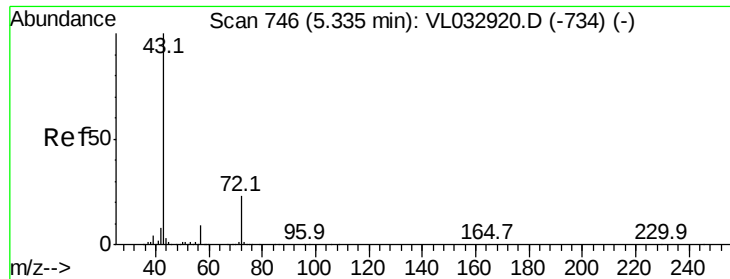
#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 7.30 min Scan# 1358  
Delta R.T. 0.00 min  
Lab File: VL033008.D  
Acq: 17 Dec 2018 23:11

Tgt Ion: 114 Resp: 2769376  
Ion Ratio Lower Upper  
114 100  
63 23.9 20.1 30.1  
88 17.3 14.2 21.4



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

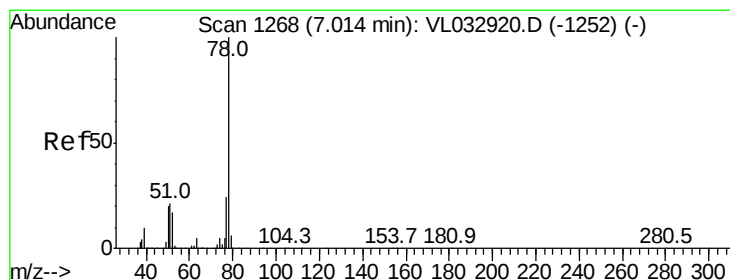
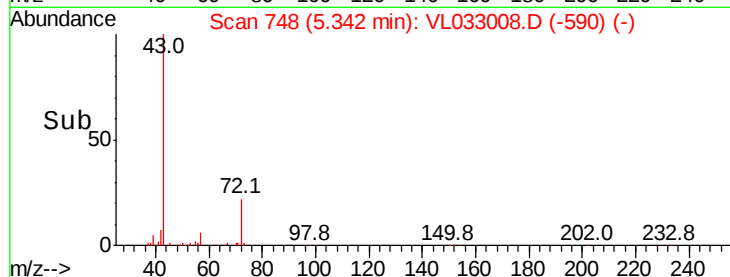
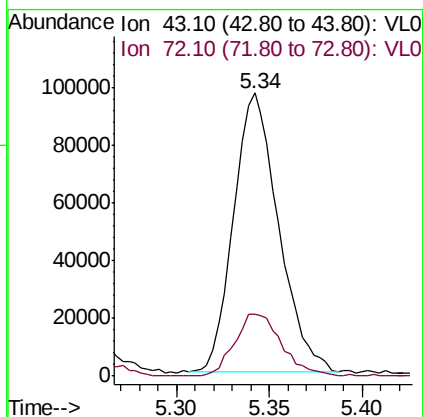
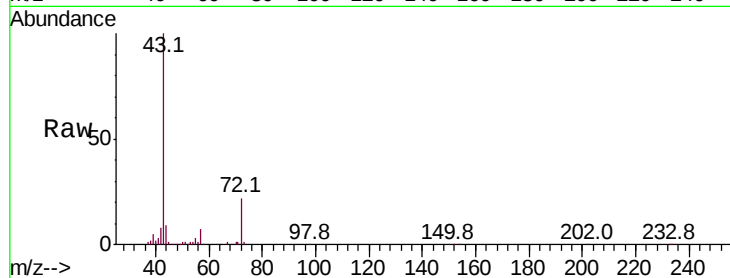




#34  
2-Butanone  
Concen: 1.348 ppbv  
RT: 5.34 min Scan# 748  
Delta R.T. 0.01 min  
Lab File: VL033008.D  
Acq: 17 Dec 2018 23:11

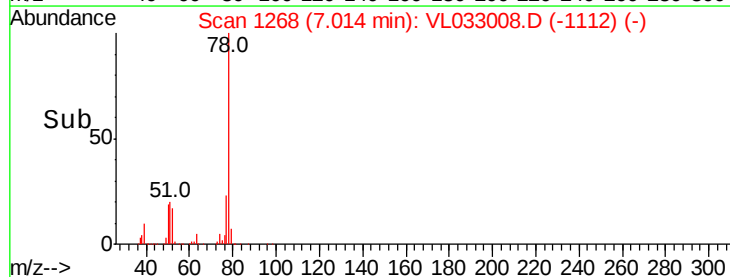
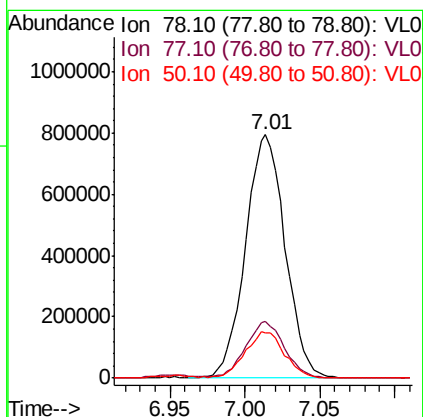
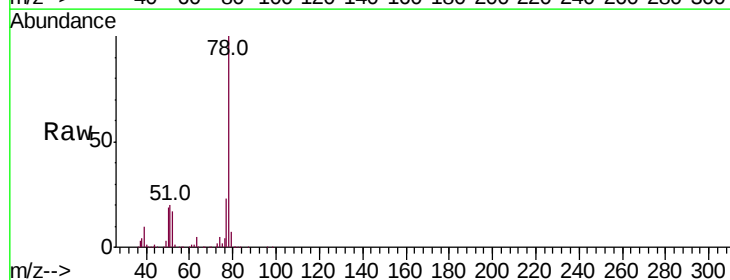
Instrument :  
MSVOA\_L  
ClientSampled :

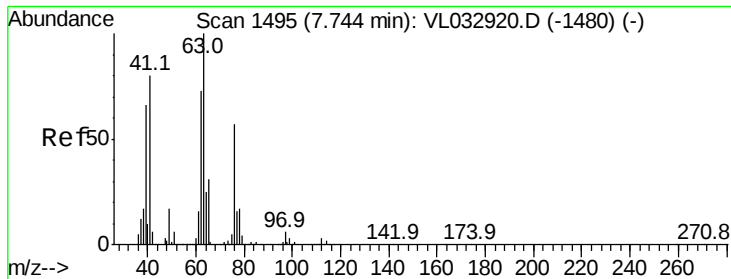
Tot Ion: 43 Resp: 162574  
Ion Ratio Lower Upper  
43 100  
72 23.4 18.8 28.2



#36  
Benzene  
Concen: 7.134 ppbv  
RT: 7.01 min Scan# 1268  
Delta R.T. 0.00 min  
Lab File: VL033008.D  
Acq: 17 Dec 2018 23:11

Tgt Ion: 78 Resp: 1453147  
Ion Ratio Lower Upper  
78 100  
77 23.0 18.9 28.3  
50 18.7 16.1 24.1





#39

1,2-Dichloropropane

Concen: 8.383 ppbv

RT: 7.30 min Scan# 1357

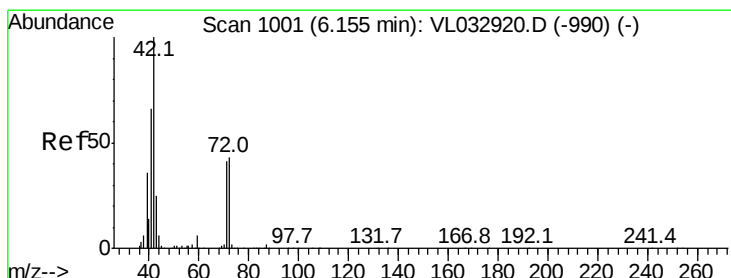
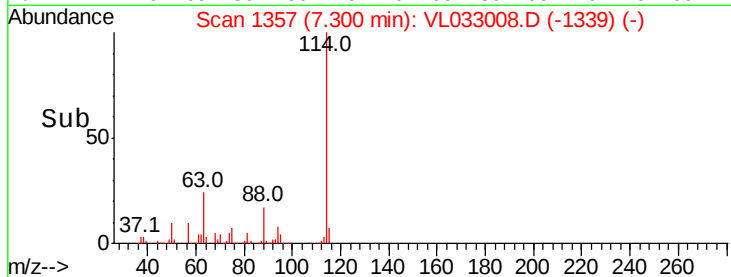
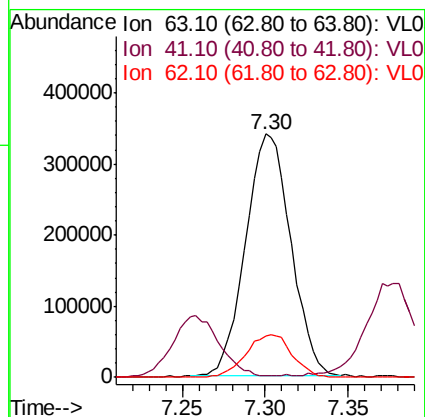
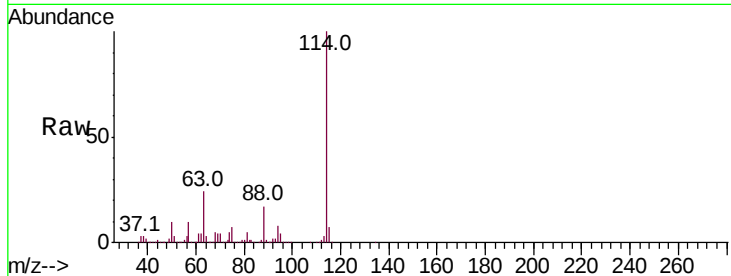
Delta R.T. -0.44 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 63    | Resp: | 647561 |
| Ion      | Ratio | Lower | Upper  |
| 63       | 100   |       |        |
| 41       | 0.0   | 63.9  | 95.9#  |
| 62       | 17.1  | 58.8  | 88.2#  |



#41

Tetrahydrofuran

Concen: 0.205 ppbv

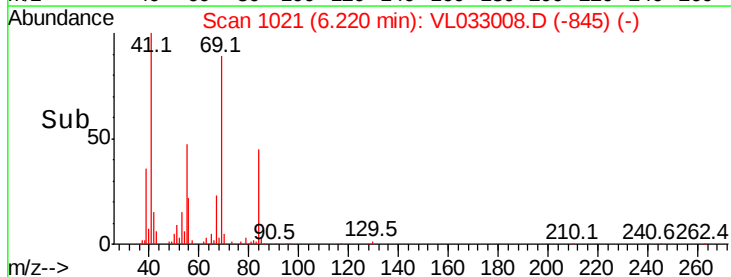
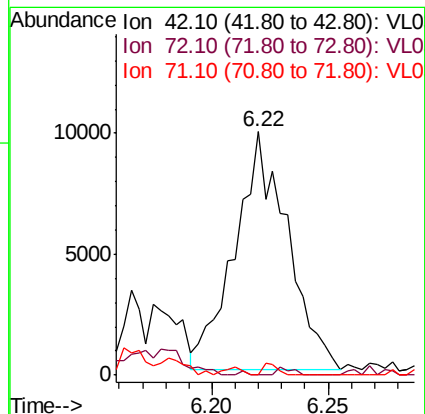
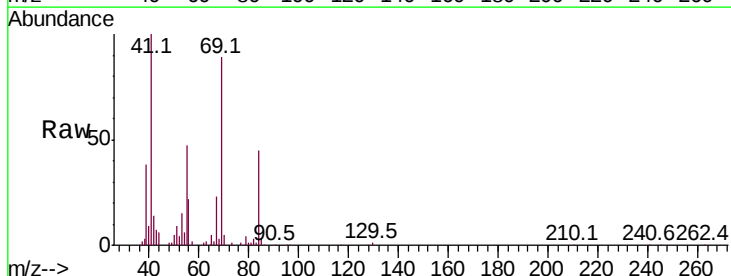
RT: 6.22 min Scan# 1021

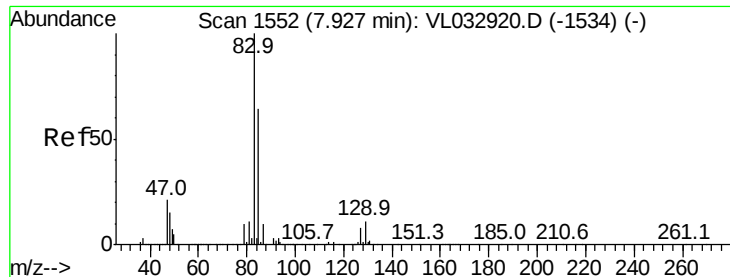
Delta R.T. 0.06 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 15390 |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 14.8  | 32.9  | 49.3# |
| 71       | 0.0   | 32.0  | 48.0# |





#42

Bromodichloromethane

Concen: 0.130 ppbv

RT: 7.93 min Scan# 1553

Delta R.T. 0.00 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :

MSVOA\_L

ClientSampleId :

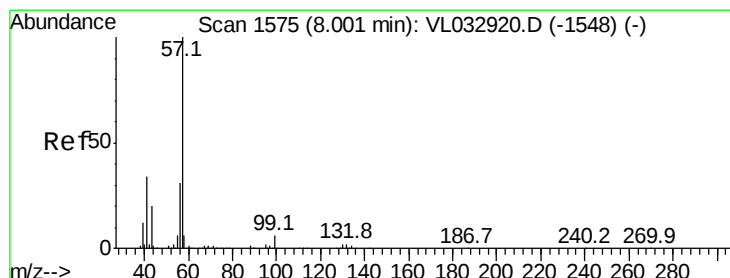
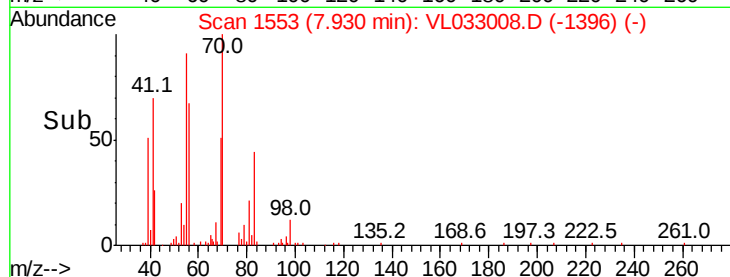
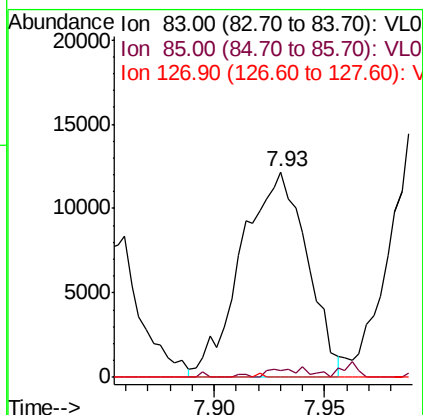
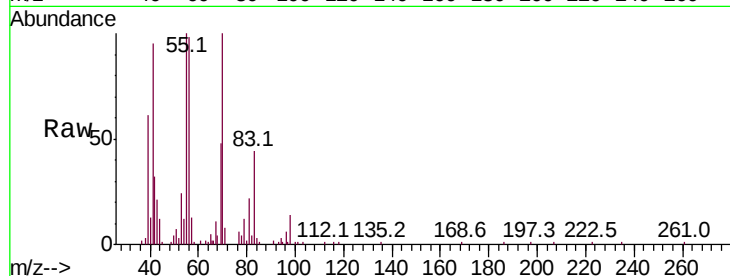
Tot Ion: 83 Resp: 25042

Ion Ratio Lower Upper

83 100

85 3.5 50.9 76.3#

127 0.0 6.7 10.1#



#44

2,2,4-Trimethylpentane

Concen: 9.344 ppbv

RT: 8.00 min Scan# 1575

Delta R.T. 0.00 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

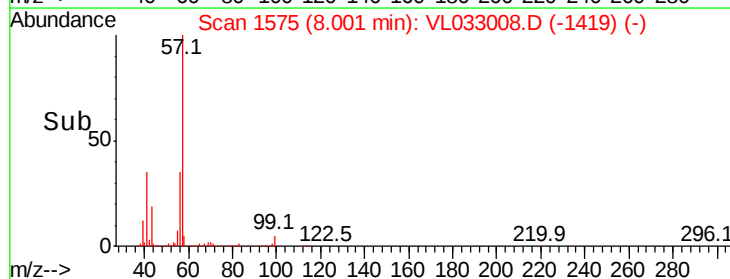
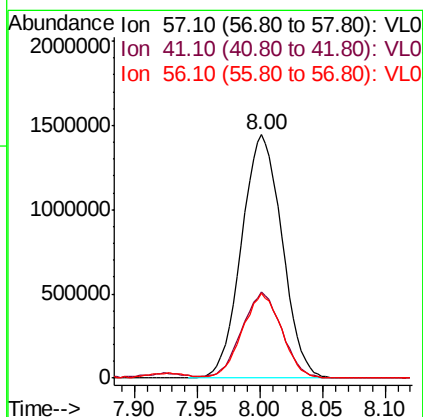
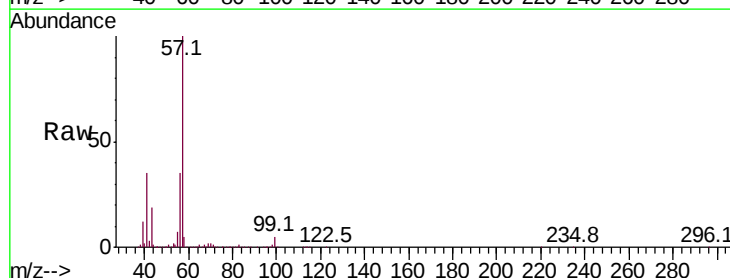
Tgt Ion: 57 Resp: 3230656

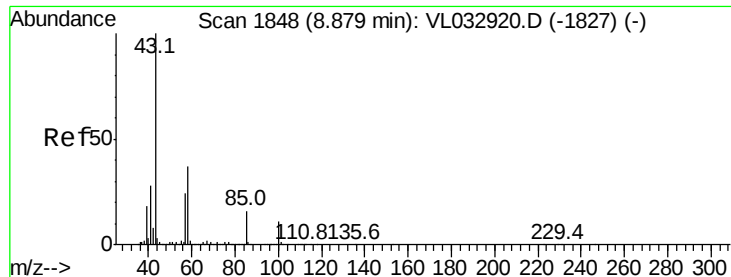
Ion Ratio Lower Upper

57 100

41 35.2 27.0 40.4

56 34.1 24.6 37.0

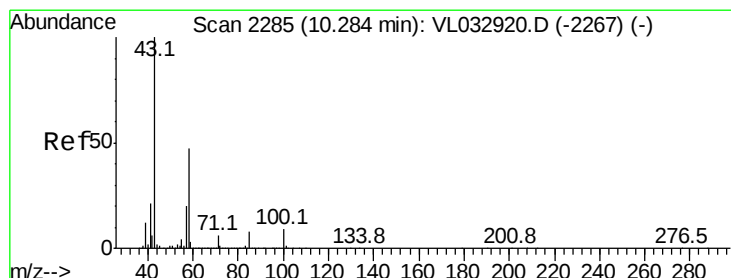
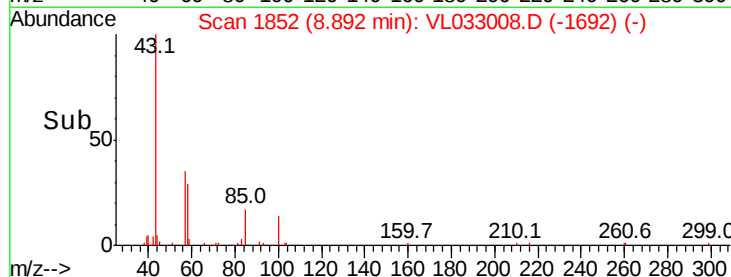
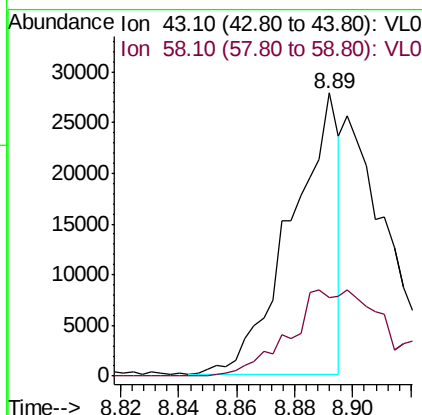
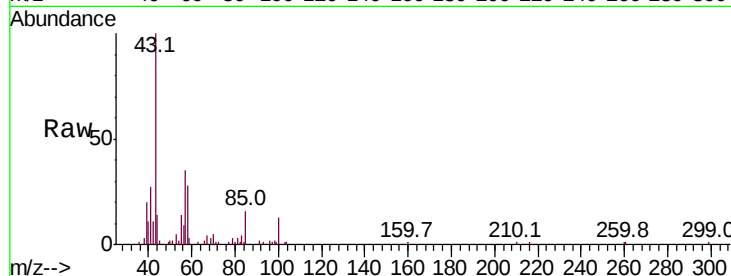




#50  
4-Methyl-2-Pentanone  
Concen: 0.164 ppbv  
RT: 8.89 min Scan# 1852  
Delta R.T. 0.01 min  
Lab File: VL033008.D  
Acq: 17 Dec 2018 23:11

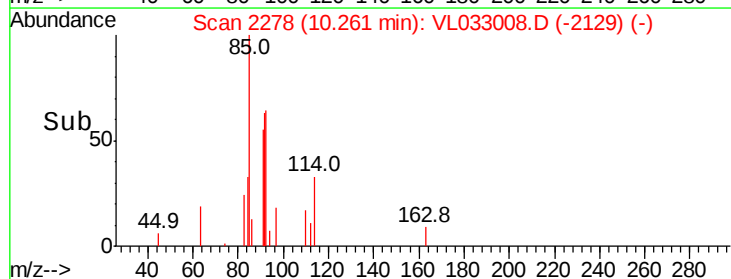
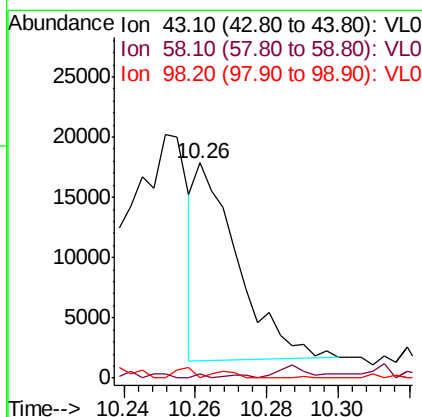
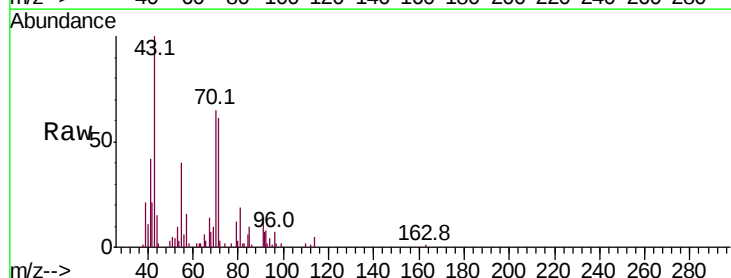
Instrument :  
MSVOA\_L  
ClientSampleId :

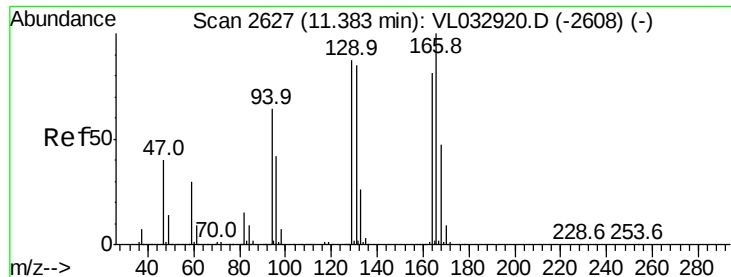
Tot Ion: 43 Resp: 31593  
Ion Ratio Lower Upper  
43 100  
58 0.0 29.0 43.4#



#51  
2-Hexanone  
Concen: 0.103 ppbv  
RT: 10.26 min Scan# 2278  
Delta R.T. -0.02 min  
Lab File: VL033008.D  
Acq: 17 Dec 2018 23:11

Tgt Ion: 43 Resp: 13491  
Ion Ratio Lower Upper  
43 100  
58 15.1 38.1 57.1#  
98 2.1 0.4 0.6#





#52

Tetrachloroethene

Concen: 1.072 ppbv

RT: 11.38 min Scan# 2627

Delta R.T. 0.00 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :

MSVOA\_L

ClientSampled :

Tot Ion:164 Resp: 79445

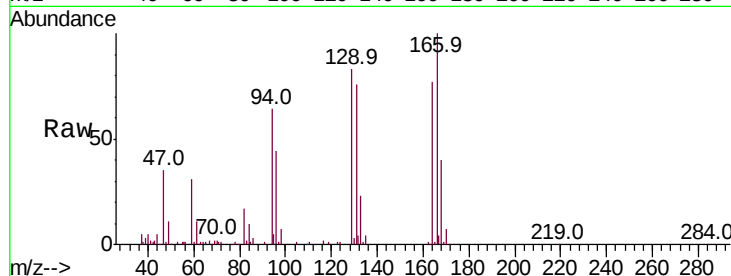
Ion Ratio Lower Upper

164 100

166 128.6 98.8 148.2

129 106.2 85.5 128.3

131 98.1 84.4 126.6

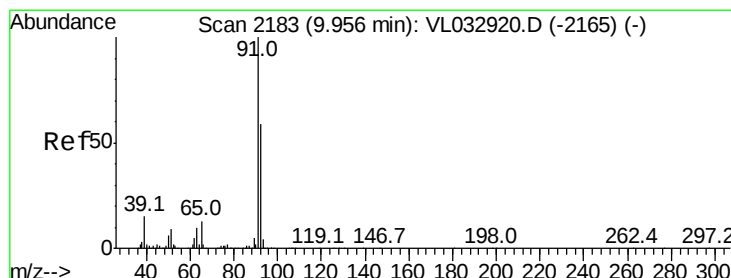
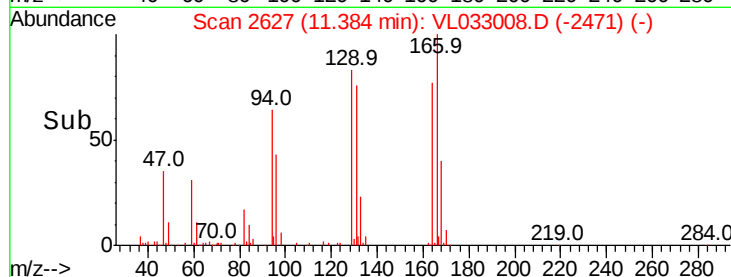
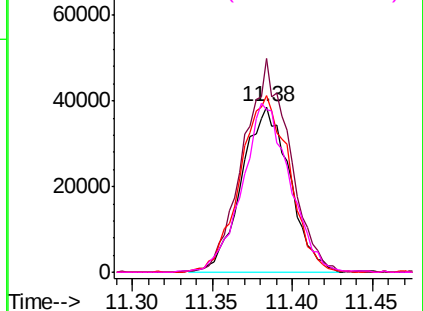


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 33.412 ppbv

RT: 9.96 min Scan# 2184

Delta R.T. 0.00 min

Lab File: VL033008.D

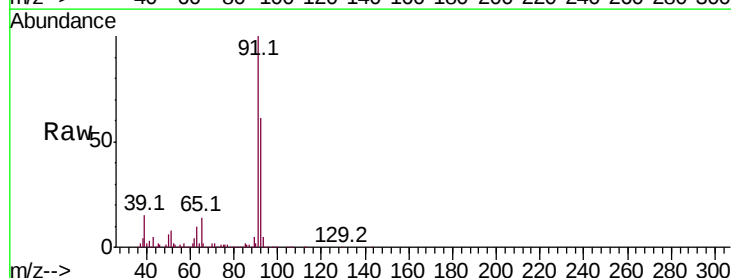
Acq: 17 Dec 2018 23:11

Tgt Ion: 91 Resp: 7218000

Ion Ratio Lower Upper

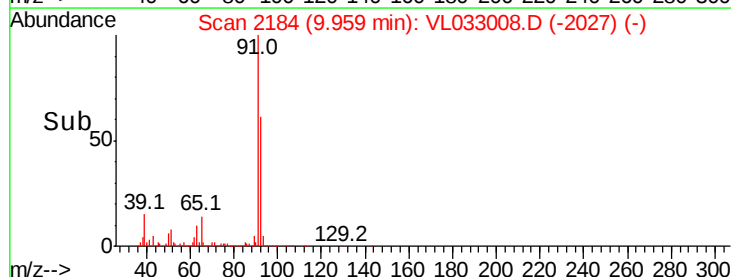
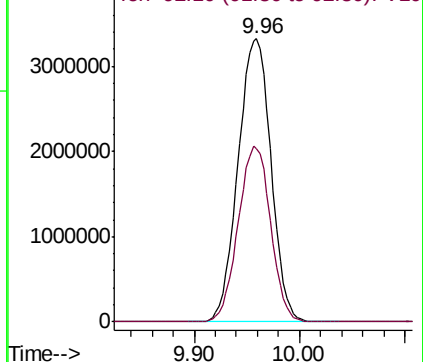
91 100

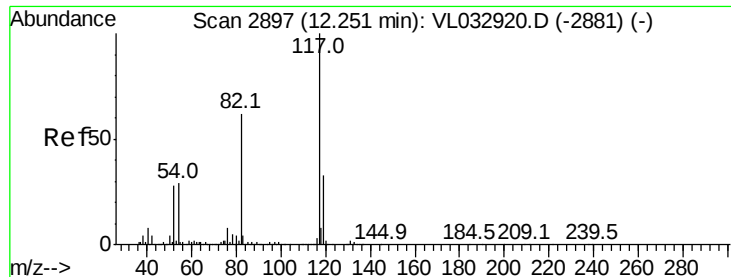
92 61.3 47.4 71.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

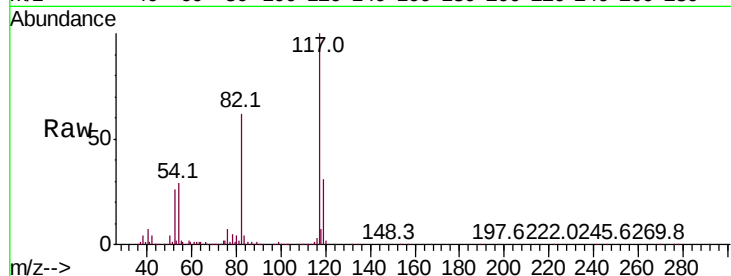




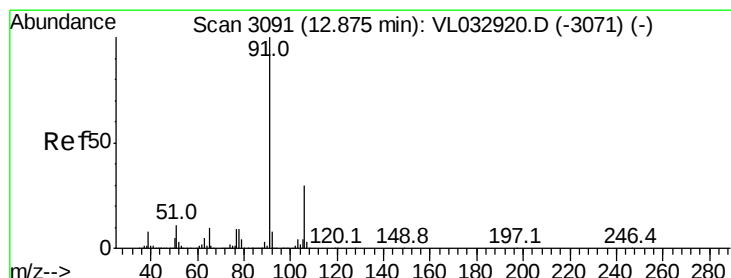
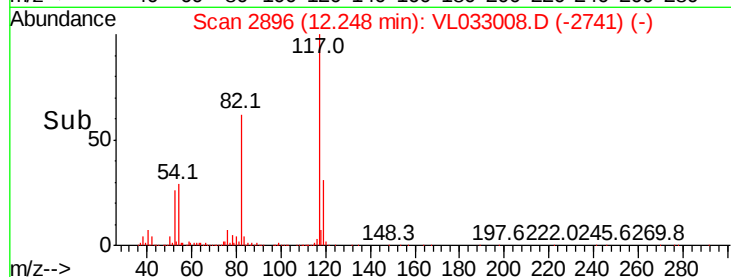
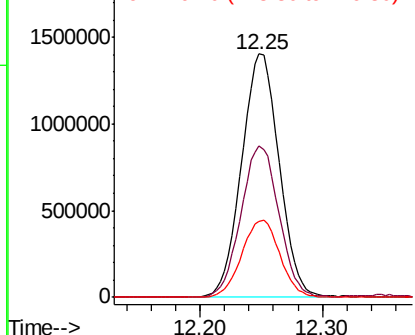
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.25 min Scan# 2896  
Delta R.T. -0.00 min  
Lab File: VL033008.D  
Acq: 17 Dec 2018 23:11

Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion:117 Resp: 2982107  
Ion Ratio Lower Upper  
117 100  
82 63.0 47.8 71.8  
119 32.4 43.1 64.7#

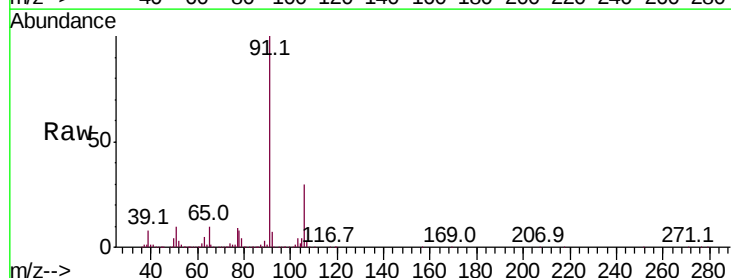


Abundance Ion 117.10 (116.80 to 117.80): V  
Ion 82.10 (81.80 to 82.80): VL0  
Ion 119.10 (118.80 to 119.80): V

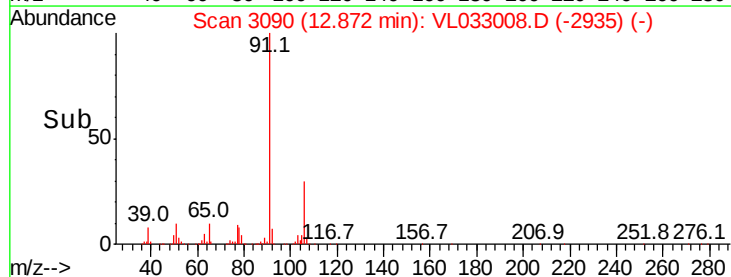
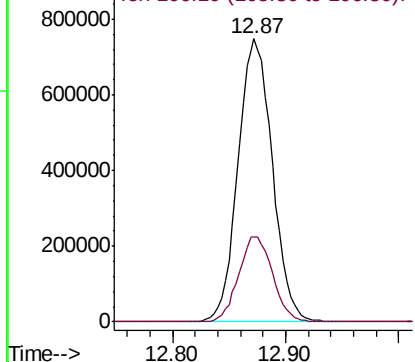


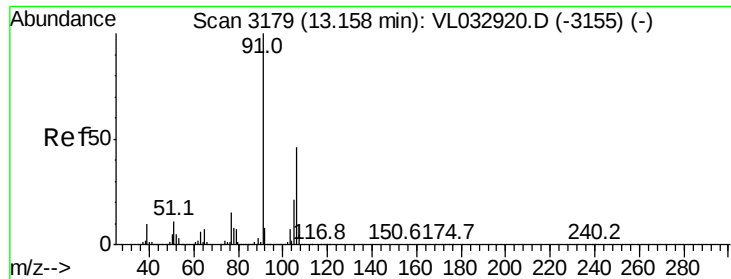
#58  
Ethyl Benzene  
Concen: 4.950 ppbv  
RT: 12.87 min Scan# 3090  
Delta R.T. -0.00 min  
Lab File: VL033008.D  
Acq: 17 Dec 2018 23:11

Tgt Ion: 91 Resp: 1574832  
Ion Ratio Lower Upper  
91 100  
106 30.0 23.9 35.9



Abundance Ion 91.10 (90.80 to 91.80): VL0  
Ion 106.10 (105.80 to 106.80): V

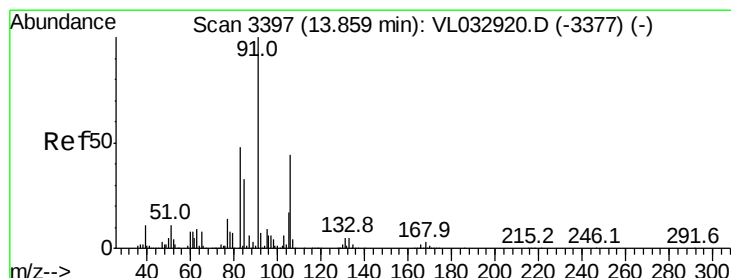
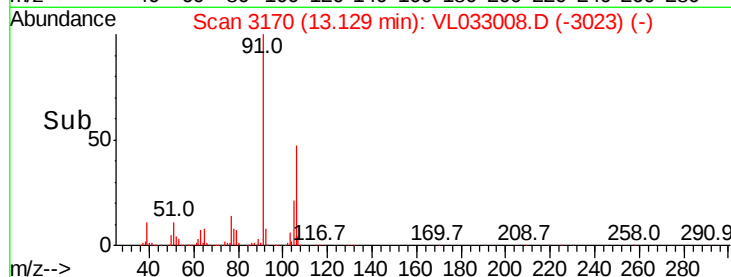
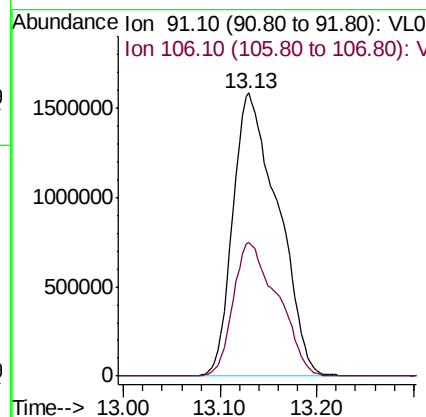
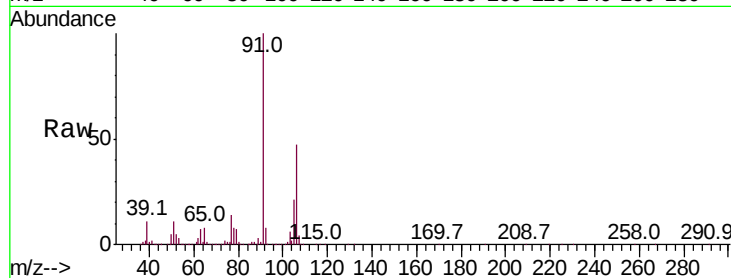




#59  
m/p-Xylene  
Concen: 17.750 ppbv  
RT: 13.13 min Scan# 3179  
Delta R.T. -0.03 min  
Lab File: VL033008.D  
Acq: 17 Dec 2018 23:11

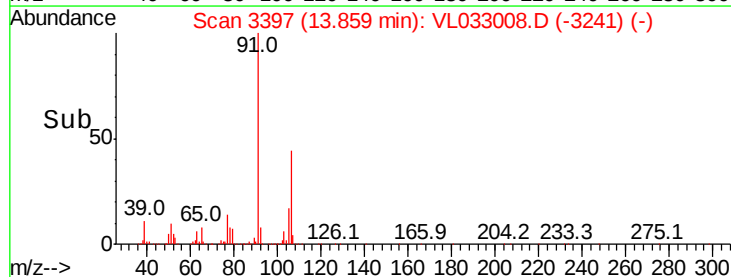
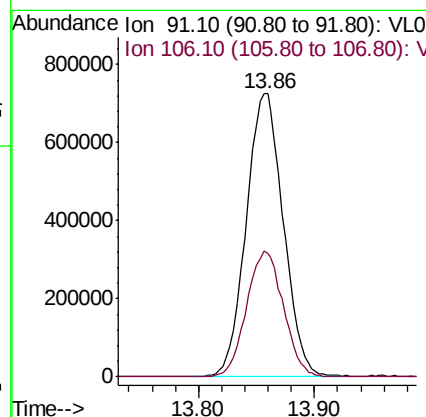
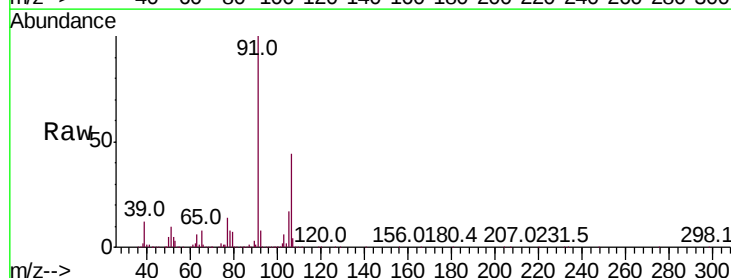
Instrument :  
MSVOA\_L  
ClientSampleId :

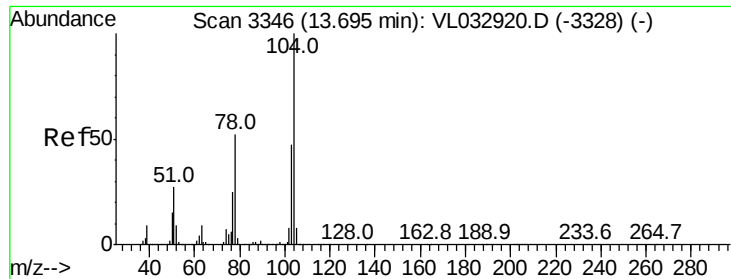
Tot Ion: 91 Resp: 5119275  
Ion Ratio Lower Upper  
91 100  
106 46.9 0.0 0.0#



#60  
o-Xylene  
Concen: 5.537 ppbv  
RT: 13.86 min Scan# 3397  
Delta R.T. 0.00 min  
Lab File: VL033008.D  
Acq: 17 Dec 2018 23:11

Tgt Ion: 91 Resp: 1612611  
Ion Ratio Lower Upper  
91 100  
106 44.1 21.9 65.8

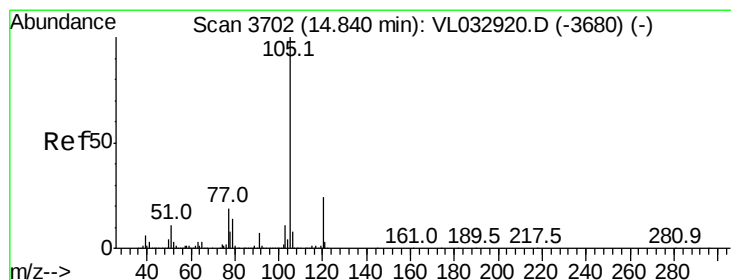
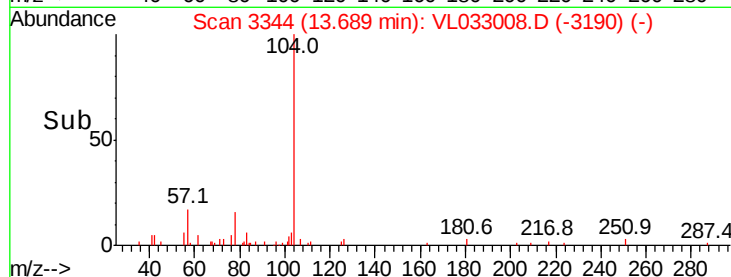
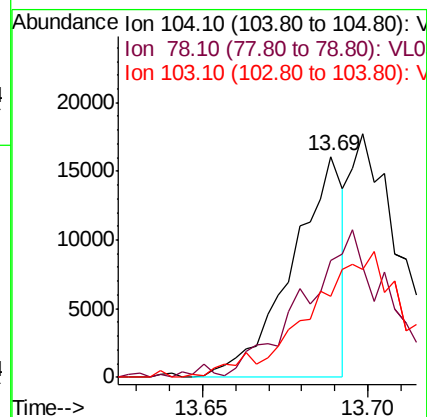
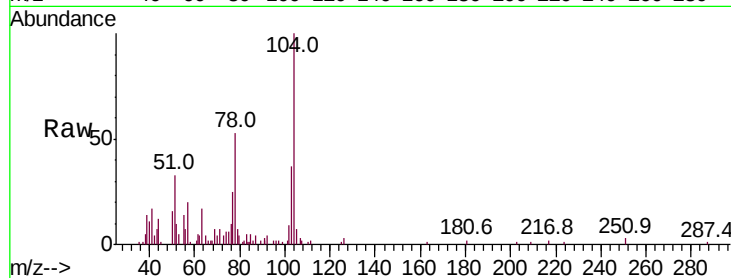




#61  
Stvrene  
Concen: 0.090 ppbv  
RT: 13.69 min Scan# 3344  
Delta R.T. -0.01 min  
Lab File: VL033008.D  
Acq: 17 Dec 2018 23:11

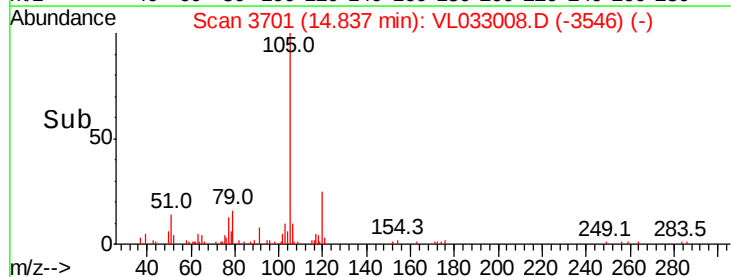
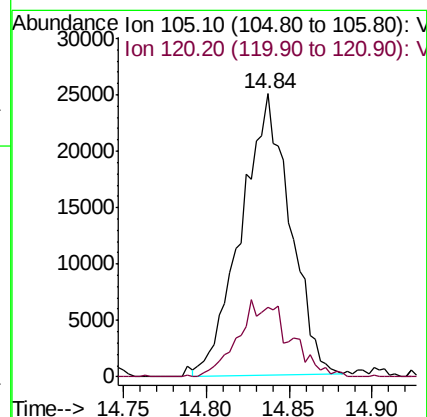
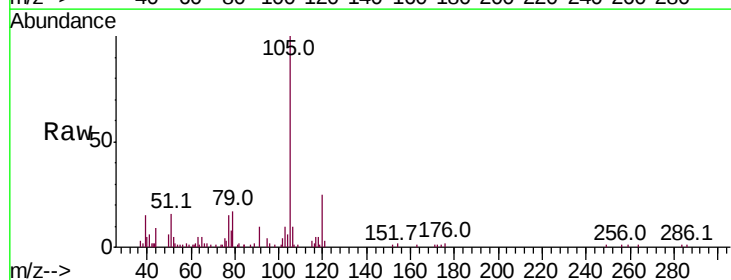
Instrument :  
MSVOA\_L  
ClientSampleId :

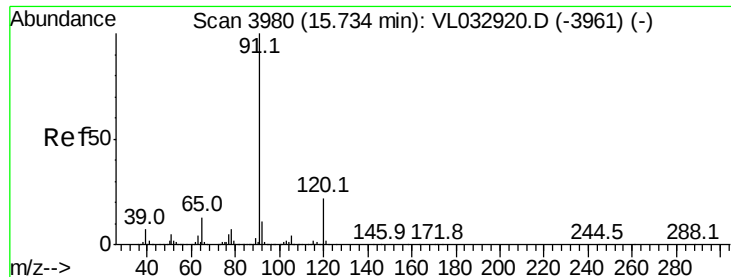
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 104     | 100   |       |       |
| 78      | 0.0   | 42.0  | 63.0# |
| 103     | 0.0   | 38.3  | 57.5# |



#62  
Isopropylbenzene  
Concen: 0.126 ppbv  
RT: 14.84 min Scan# 3701  
Delta R.T. -0.00 min  
Lab File: VL033008.D  
Acq: 17 Dec 2018 23:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 28.5  | 20.3  | 30.5  |





#64

n-propylbenzene

Concen: 0.696 ppbv

RT: 15.73 min Scan# 3979

Delta R.T. -0.00 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :

MSVOA\_L

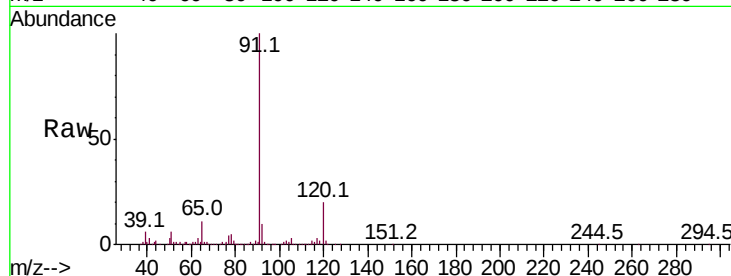
ClientSampleId :

Tot Ion:120 Resp: 73479

Ion Ratio Lower Upper

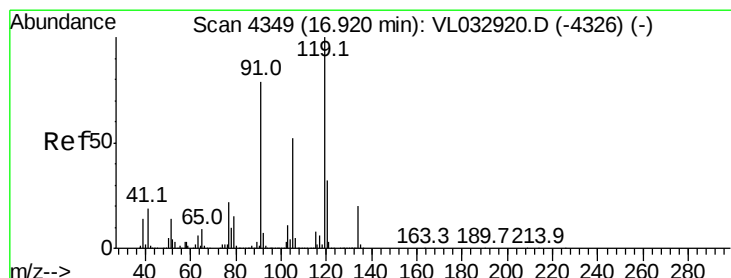
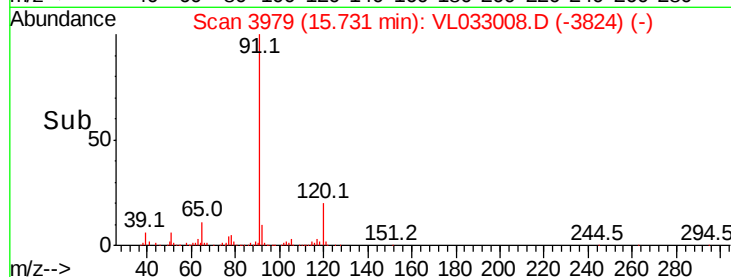
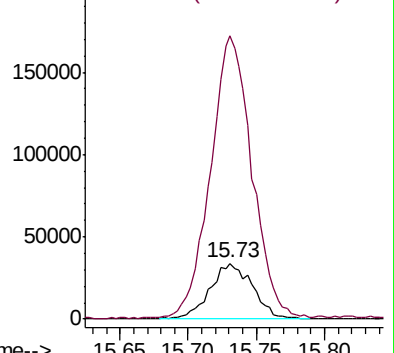
120 100

91 496.2 380.4 570.6



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0



#65

tert-Butylbenzene

Concen: 0.433 ppbv

RT: 16.93 min Scan# 4352

Delta R.T. 0.01 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

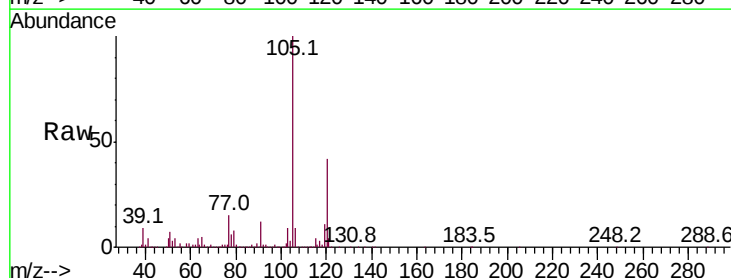
Tgt Ion:119 Resp: 163039

Ion Ratio Lower Upper

119 100

91 113.9 64.5 96.7#

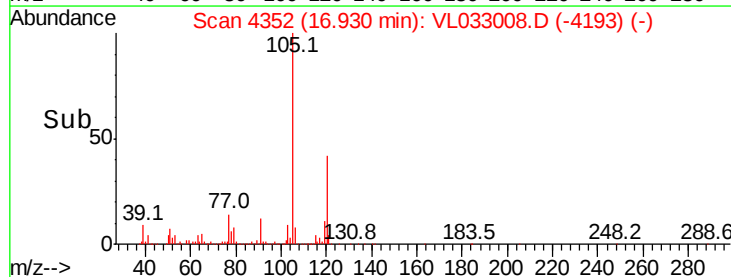
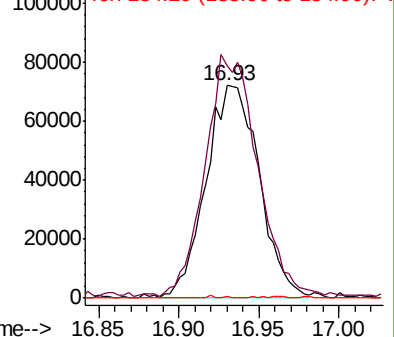
134 1.0 15.7 23.5#

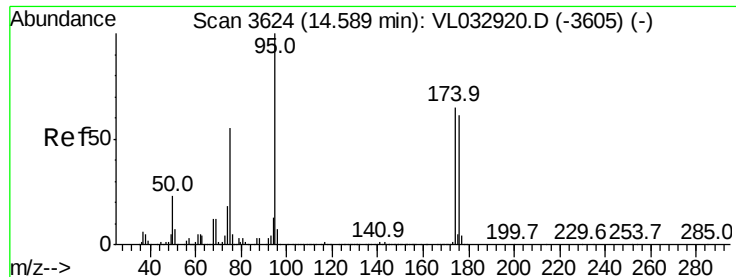


Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V

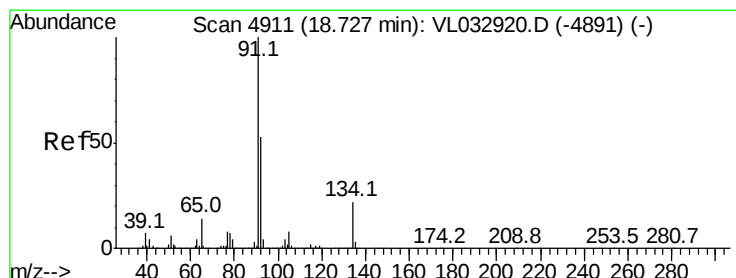
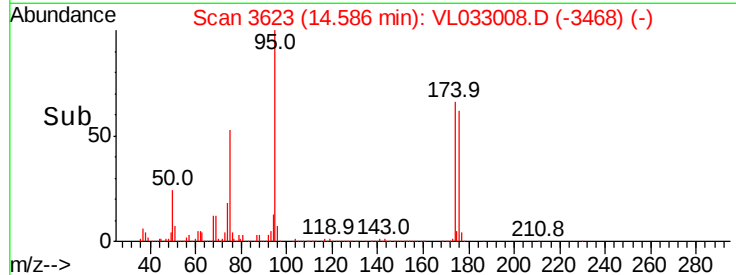
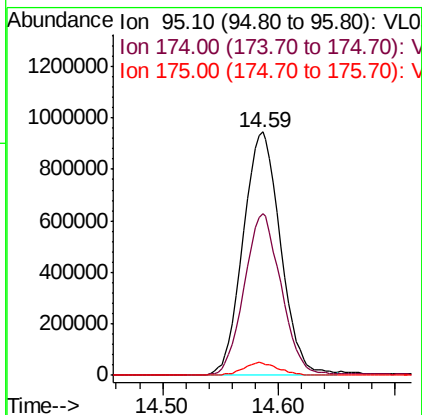
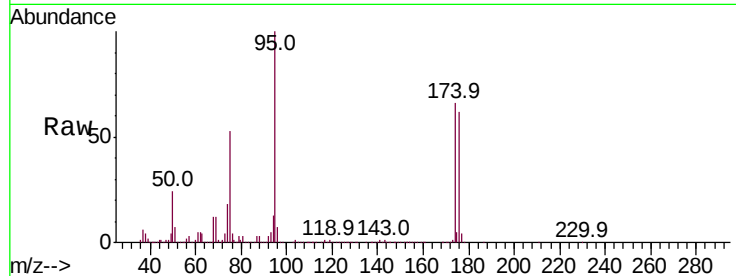




#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 9.651 ppbv  
 RT: 14.59 min Scan# 3623  
 Delta R.T. -0.00 min  
 Lab File: VL033008.D  
 Acq: 17 Dec 2018 23:11

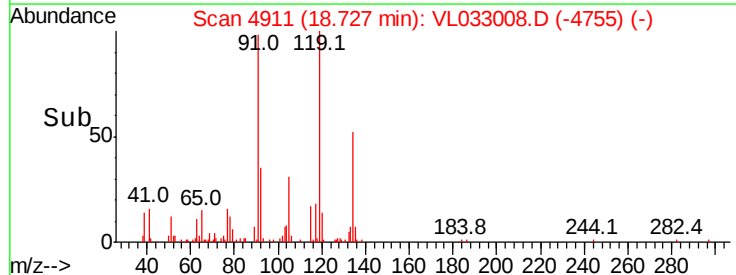
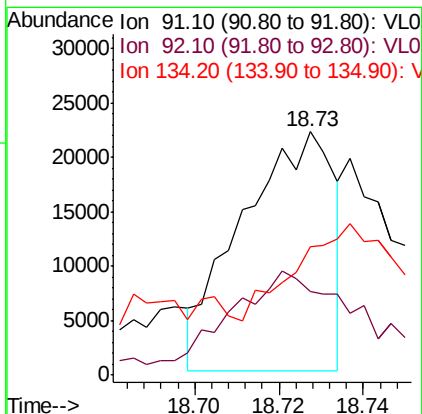
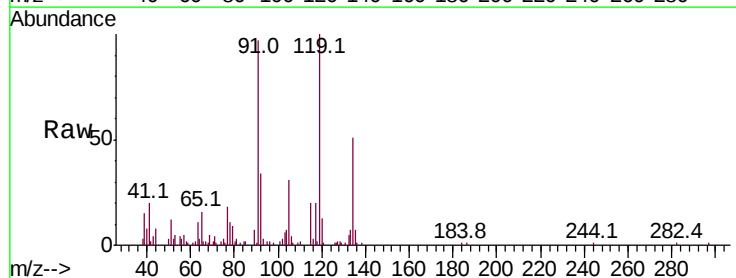
Instrument :  
 MSVOA\_L  
 ClientSampled :

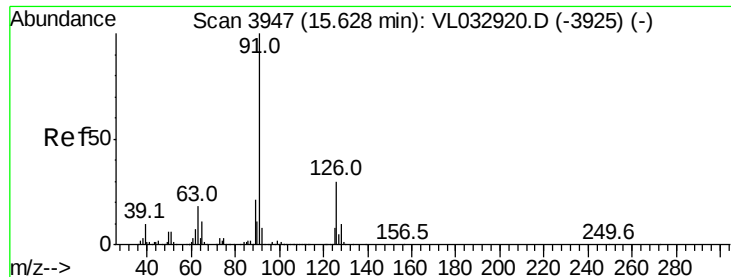
Tot Ion: 95 Resp: 2126195  
 Ion Ratio Lower Upper  
 95 100  
 174 66.8 51.4 77.0  
 175 5.0 3.8 5.6



#70  
 n-Butylbenzene  
 Concen: 0.081 ppbv  
 RT: 18.73 min Scan# 4911  
 Delta R.T. 0.00 min  
 Lab File: VL033008.D  
 Acq: 17 Dec 2018 23:11

Tgt Ion: 91 Resp: 33473  
 Ion Ratio Lower Upper  
 91 100  
 92 70.8 42.7 64.1#  
 134 0.0 18.0 27.0#





#71

2-Chlorotoluene

Concen: 1.189 ppbv

RT: 15.73 min Scan# 3979

Delta R.T. 0.10 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :

MSVOA\_L

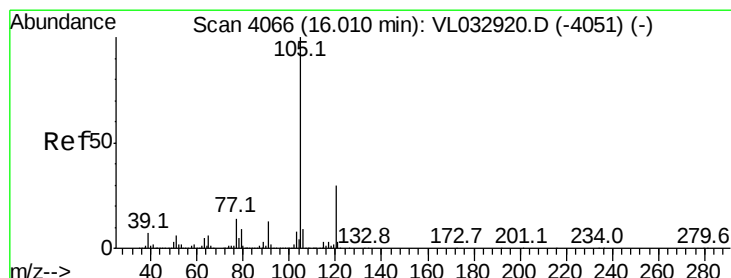
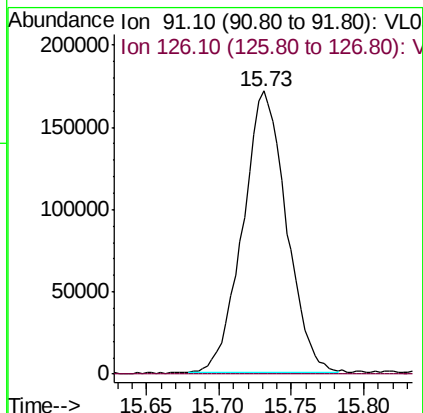
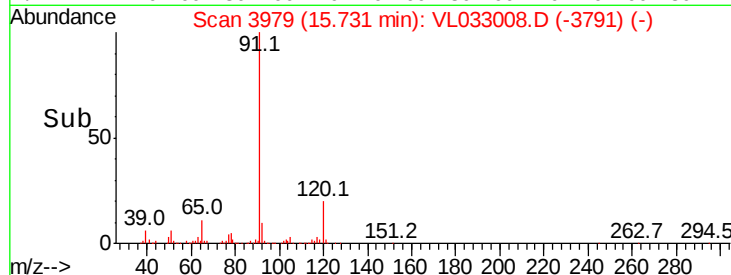
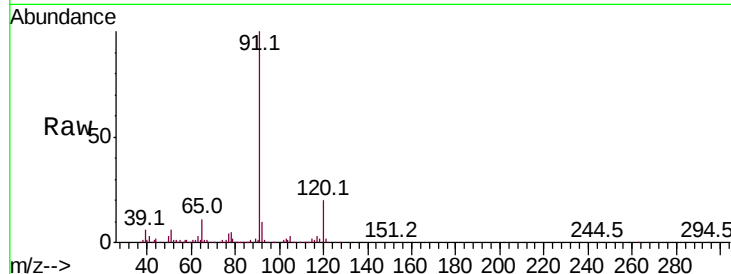
ClientSampleId :

Tot Ion: 91 Resp: 359288

Ion Ratio Lower Upper

91 100

126 0.1 12.3 49.3#



#72

4-Ethyltoluene

Concen: 1.641 ppbv

RT: 16.01 min Scan# 4065

Delta R.T. -0.00 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Tgt Ion: 105 Resp: 533664

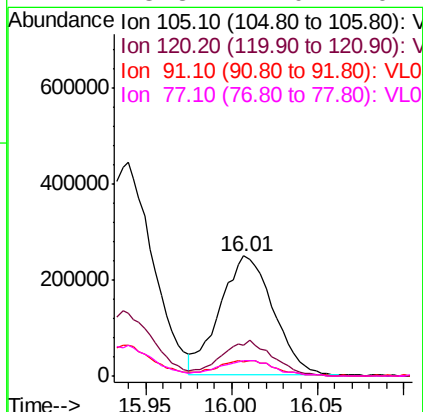
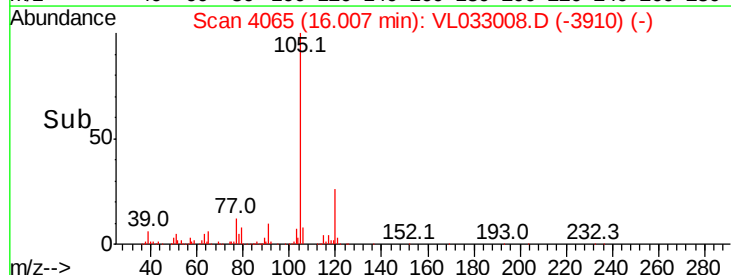
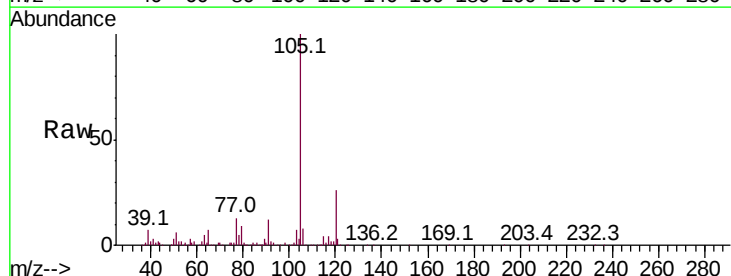
Ion Ratio Lower Upper

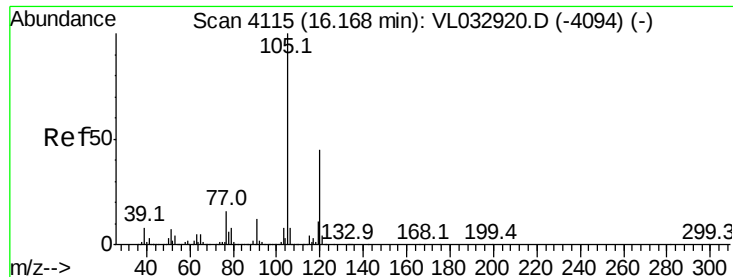
105 100

120 29.0 23.0 34.4

91 13.9 10.4 15.6

77 13.3 11.0 16.4





#73

1,3,5-Trimethylbenzene

Concen: 1.053 ppbv

RT: 16.16 min Scan# 4114

Delta R.T. -0.00 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :

MSVOA\_L

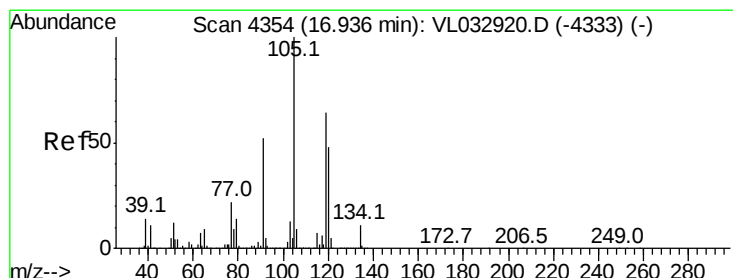
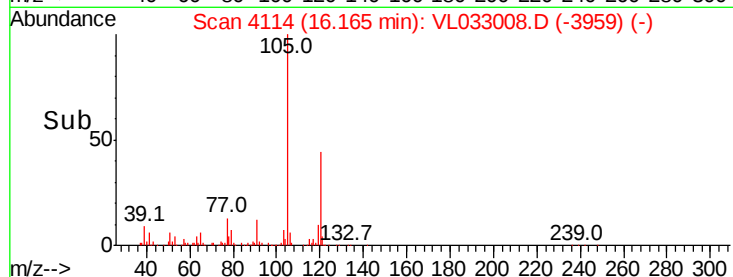
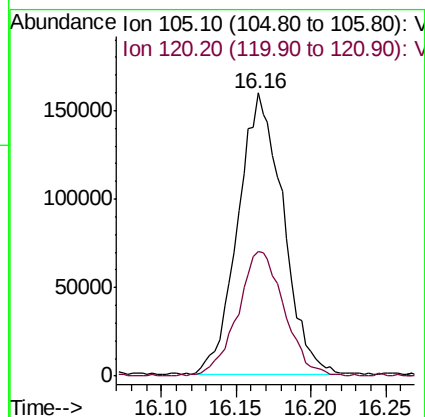
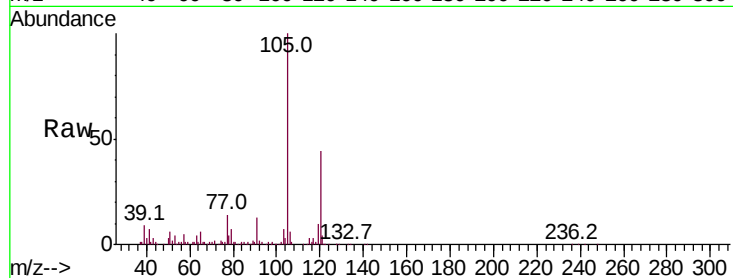
ClientSampleId :

Tot Ion:105 Resp: 334138

Ion Ratio Lower Upper

105 100

120 43.8 36.0 54.0



#74

1,2,4-Trimethylbenzene

Concen: 4.169 ppbv

RT: 16.93 min Scan# 4353

Delta R.T. -0.00 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Tgt Ion:105 Resp: 1494391

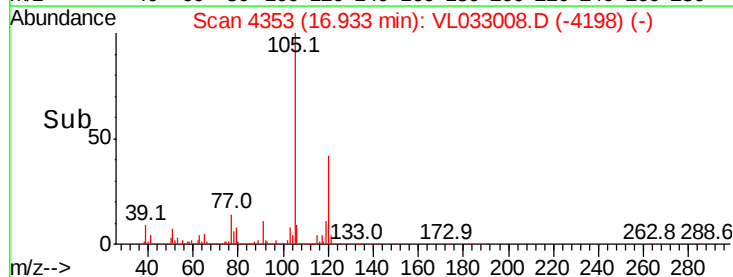
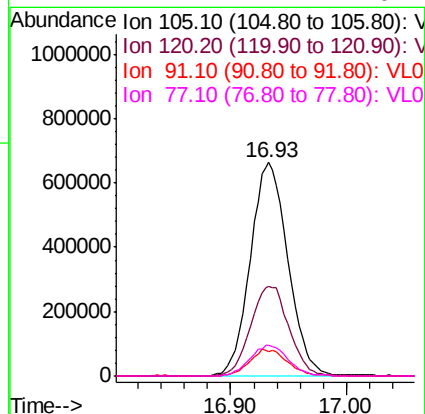
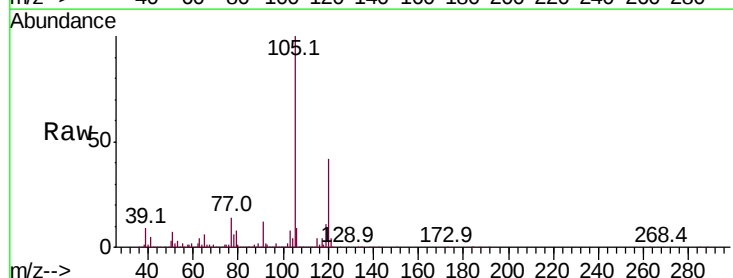
Ion Ratio Lower Upper

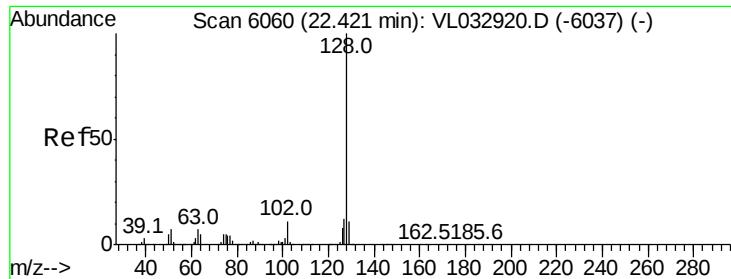
105 100

120 41.9 38.6 58.0

91 11.4 41.7 62.5#

77 14.2 17.4 26.2#





#79

Naphthalene

Concen: 0.187 ppbv

RT: 22.43 min Scan# 6063

Delta R.T. 0.01 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Instrument :

MSVOA\_L

ClientSampled :

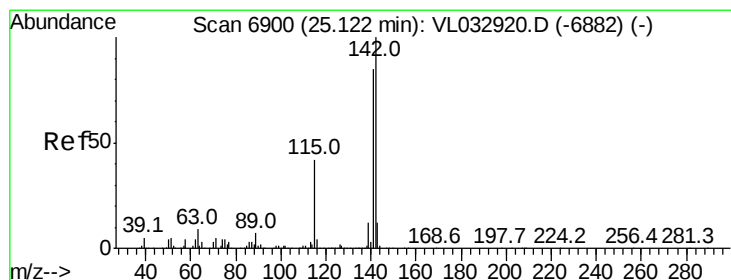
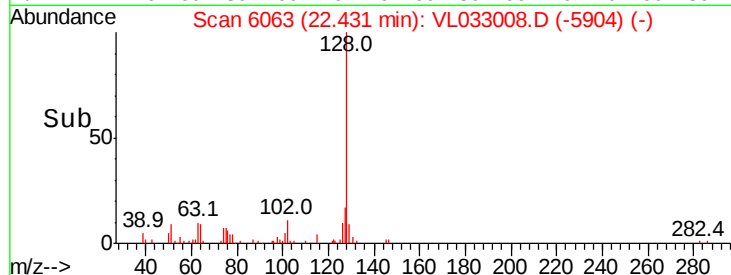
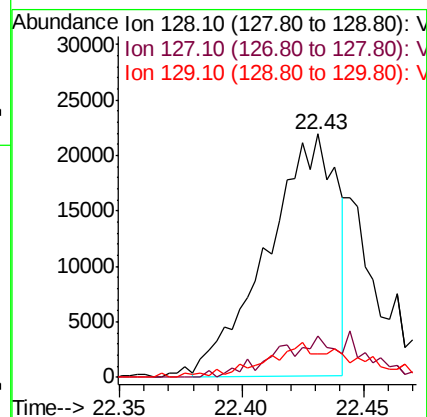
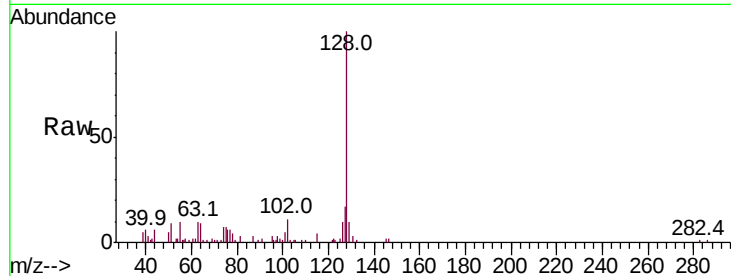
Tot Ion:128 Resp: 43187

Ion Ratio Lower Upper

128 100

127 17.5 9.9 14.9#

129 8.9 8.6 13.0



#80

Naphthalene, 2-methyl-

Concen: 0.083 ppbv

RT: 25.12 min Scan# 6898

Delta R.T. -0.01 min

Lab File: VL033008.D

Acq: 17 Dec 2018 23:11

Tgt Ion:142 Resp: 4097

Ion Ratio Lower Upper

142 100

141 81.4 68.2 102.2

115 83.0 35.1 52.7#

