

Data File : VL034515.D  
Acq On : 30 Dec 2019 14:16  
Operator : SY/AP  
Sample : VSTDIC015  
Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Quant Time: Dec 30 14:56:26 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL123019AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Dec 30 14:19:57 2019  
QLast Update : Mon Dec 30 14:19:57 2019  
Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.68  | 49   | 1082148  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.20  | 114  | 2195997  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.14 | 117  | 2239926  | 10.00 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.47  | 95    | 1912091  | 10.15    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 101.50% |

#### Target Compounds

|                                |      |     |         |        |        | Qvalue |
|--------------------------------|------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.02 | 85  | 1750488 | 8.942  | ppbv   | 99     |
| 3) Chlorodifluoromethane       | 2.96 | 51  | 1644002 | 12.176 | ppbv   | 100    |
| 4) Chloromethane               | 3.11 | 50  | 1024563 | 12.865 | ppbv   | 97     |
| 5) Vinyl Chloride              | 3.23 | 62  | 956107  | 12.814 | ppbv   | 97     |
| 6) Bromomethane                | 3.45 | 94  | 505942  | 13.476 | ppbv   | 97     |
| 7) Chloroethane                | 3.54 | 64  | 355347  | 13.121 | ppbv   | 96     |
| 8) Dichlorotetrafluoroethane   | 3.16 | 85  | 2110776 | 12.006 | ppbv   | 100    |
| 9) Propene                     | 2.98 | 41  | 708069  | 11.812 | ppbv   | 99     |
| 10) Heptane                    | 8.15 | 43  | 1956942 | 12.650 | ppbv   | 98     |
| 11) Trichlorofluoromethane     | 3.93 | 101 | 2469228 | 12.674 | ppbv   | 98     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.48 | 101 | 1661604 | 12.842 | ppbv   | 100    |
| 13) Ethanol                    | 3.58 | 45  | 132131  | 7.913  | ppbv   | 99     |
| 14) Bromoethene                | 3.72 | 108 | 698450  | 13.276 | ppbv   | 99     |
| 15) Acetone                    | 3.83 | 43  | 1842309 | 11.889 | ppbv   | 99     |
| 16) 1,3-Butadiene              | 3.30 | 39  | 879628  | 13.031 | ppbv   | 100    |
| 17) tert-Butyl alcohol         | 4.28 | 59  | 1328644 | 10.200 | ppbv   | 100    |
| 18) 1,1-Dichloroethene         | 4.28 | 96  | 753427  | 13.312 | ppbv   | 95     |
| 19) Isopropyl Alcohol          | 3.96 | 45  | 1037272 | 10.443 | ppbv   | 99     |
| 20) Methylene Chloride         | 4.33 | 84  | 672236  | 12.234 | ppbv   | 96     |
| 21) Allyl Chloride             | 4.40 | 41  | 1285704 | 13.846 | ppbv   | 98     |
| 22) trans-1,2-Dichloroethene   | 4.89 | 96  | 778670  | 13.648 | ppbv   | 97     |
| 23) Vinyl Acetate              | 5.08 | 43  | 2611918 | 12.903 | ppbv   | 99     |
| 24) 1,1-Dichloroethane         | 5.01 | 63  | 1944951 | 12.508 | ppbv   | 100    |
| 25) Ethyl Acetate              | 5.69 | 43  | 3371084 | 12.191 | ppbv   | 99     |
| 26) Hexane                     | 5.70 | 57  | 1459975 | 12.287 | ppbv   | 98     |
| 27) Carbon Disulfide           | 4.54 | 76  | 1992885 | 15.399 | ppbv   | 99     |
| 28) Methyl tert-Butyl Ether    | 5.03 | 73  | 2457519 | 12.473 | ppbv   | 99     |
| 29) Chloroform                 | 5.77 | 83  | 2400055 | 12.473 | ppbv   | 97     |
| 30) Cyclohexane                | 7.15 | 84  | 1166272 | 12.984 | ppbv   | 99     |
| 31) cis-1,2-Dichloroethene     | 5.56 | 61  | 1589662 | 12.947 | ppbv   | 98     |
| 32) 1,1,1-Trichloroethane      | 6.53 | 97  | 2451456 | 13.589 | ppbv   | 99     |
| 34) 2-Butanone                 | 5.25 | 43  | 2212645 | 12.241 | ppbv   | 99     |
| 35) Carbon Tetrachloride       | 7.04 | 117 | 2619089 | 13.872 | ppbv   | 96     |
| 36) Benzene                    | 6.92 | 78  | 2744924 | 12.504 | ppbv   | 99     |
| 37) 1,2-Dichloroethane         | 6.33 | 62  | 2111941 | 12.950 | ppbv   | 100    |
| 38) Trichloroethene            | 7.87 | 130 | 1128381 | 12.526 | ppbv   | 99     |
| 39) 1,2-Dichloropropane        | 7.64 | 63  | 1152833 | 13.631 | ppbv   | 98     |
| 40) 1,4-Dioxane                | 7.86 | 88  | 374287  | 10.131 | ppbv # | 90     |
| 41) Tetrahydrofuran            | 6.06 | 42  | 1256615 | 12.394 | ppbv   | 99     |
| 42) Bromodichloromethane       | 7.83 | 83  | 2675994 | 13.120 | ppbv   | 97     |
| 43) Methyl Methacrylate        | 8.05 | 69  | 1216685 | 13.363 | ppbv   | 100    |

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Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

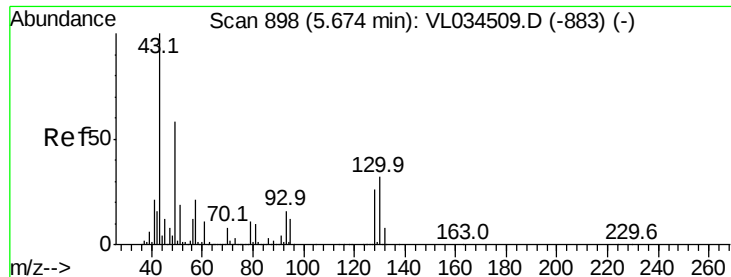
Quant Time: Dec 30 14:56:26 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL123019AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Dec 30 14:19:57 2019  
QLast Update : Mon Dec 30 14:19:57 2019  
Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.90  | 57   | 4810018  | 11.990 | ppbv   | 98       |
| 45) t-1,3-Dichloropropene     | 9.32  | 75   | 1718664  | 14.719 | ppbv   | 96       |
| 46) cis-1,3-Dichloropropene   | 8.74  | 75   | 1873236  | 14.282 | ppbv   | 98       |
| 47) 1,1,2-Trichloroethane     | 9.52  | 97   | 1201271  | 12.769 | ppbv   | 96       |
| 48) Dibromochloromethane      | 10.36 | 129  | 2269660  | 14.051 | ppbv   | 100      |
| 49) Bromoform                 | 13.10 | 173  | 2062362  | 14.303 | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.77  | 43   | 3316265  | 12.680 | ppbv   | 98       |
| 51) 2-Hexanone                | 10.18 | 43   | 2829190  | 12.915 | ppbv   | 99       |
| 52) Tetrachloroethene         | 11.27 | 164  | 1072034  | 11.287 | ppbv   | 98       |
| 53) Toluene                   | 9.85  | 91   | 3216799  | 12.901 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.66 | 107  | 1831985  | 12.702 | ppbv   | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 12.18 | 131  | 1487668  | 13.578 | ppbv   | 99       |
| 57) Chlorobenzene             | 12.20 | 112  | 2523318  | 12.462 | ppbv   | 97       |
| 58) Ethyl Benzene             | 12.76 | 91   | 4391763  | 12.634 | ppbv   | 96       |
| 59) m/p-Xylene                | 13.05 | 91   | 3821210  | 12.717 | ppbv # | 34       |
| 60) o-Xylene                  | 13.75 | 91   | 3750844  | 12.625 | ppbv   | 99       |
| 61) Styrene                   | 13.59 | 104  | 2809760  | 13.115 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.73 | 105  | 4799428  | 12.215 | ppbv   | 98       |
| 63) 1,1,2,2-Tetrachloroethane | 13.74 | 83   | 2622486  | 11.744 | ppbv   | 99       |
| 64) n-propylbenzene           | 15.62 | 120  | 1301797  | 12.758 | ppbv   | 92       |
| 65) tert-Butylbenzene         | 16.81 | 119  | 4324546  | 12.253 | ppbv   | 99       |
| 66) Benzyl Chloride           | 17.06 | 91   | 2309556  | 17.010 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 17.36 | 105  | 5828177  | 11.805 | ppbv   | 98       |
| 69) p-Isopropyltoluene        | 17.72 | 119  | 4906237  | 11.974 | ppbv   | 98       |
| 70) n-Butylbenzene            | 18.62 | 91   | 5170128  | 11.727 | ppbv   | 98       |
| 71) 2-Chlorotoluene           | 15.52 | 91   | 3788245  | 12.092 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.90 | 105  | 4288912  | 12.494 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.06 | 105  | 4105116  | 12.217 | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 16.83 | 105  | 4193900  | 11.750 | ppbv   | 93       |
| 75) 1,3-Dichlorobenzene       | 17.07 | 146  | 2424526  | 11.818 | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.21 | 146  | 2435871  | 12.227 | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 17.89 | 146  | 2339476  | 11.806 | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.45 | 225  | 2238638  | 13.149 | ppbv   | 100      |
| 79) Naphthalene               | 22.29 | 128  | 4003183  | 12.938 | ppbv   | 98       |
| 80) Naphthalene,2-methyl-     | 25.03 | 142  | 2188617  | 15.665 | ppbv # | 94       |
| 81) 1,2,4-Trichlorobenzene    | 22.02 | 180  | 2369296  | 12.464 | ppbv   | 100      |

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

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Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 899

Delta R.T. 0.00 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

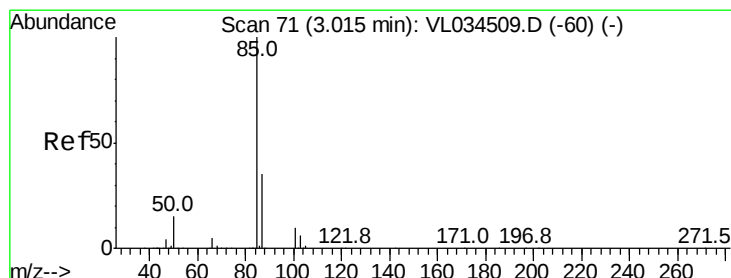
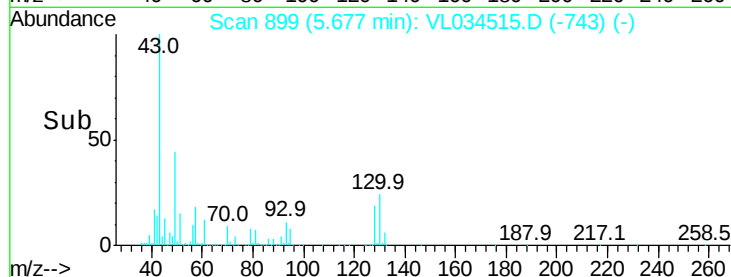
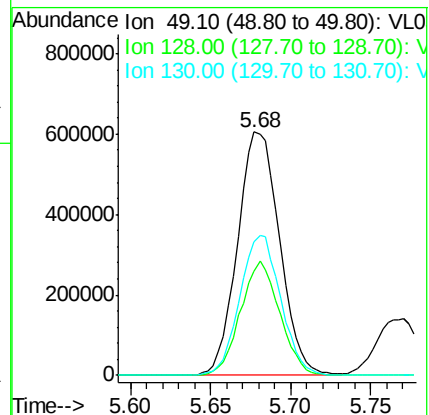
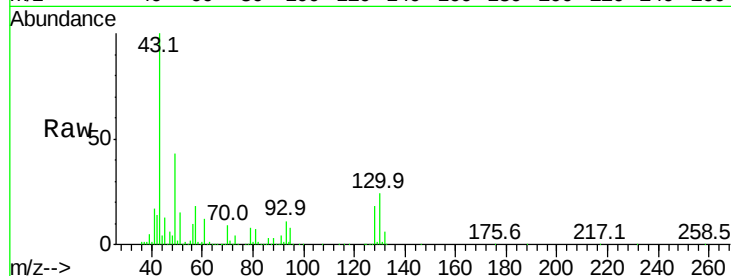
Tgt Ion: 49 Resp: 1082148

Ion Ratio Lower Upper

49 100

128 43.9 22.4 67.2

130 56.1 28.3 85.0



#2

Dichlorodifluoromethane

Concen: 8.942 ppbv

RT: 3.02 min Scan# 72

Delta R.T. 0.00 min

Lab File: VL034515.D

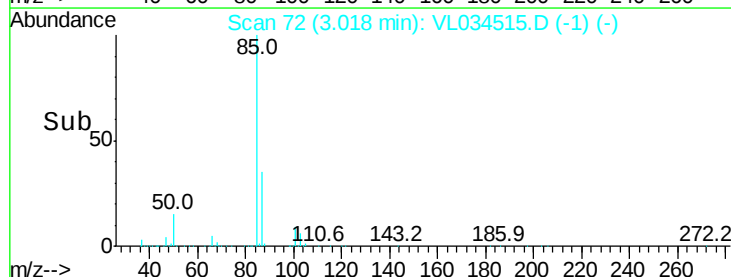
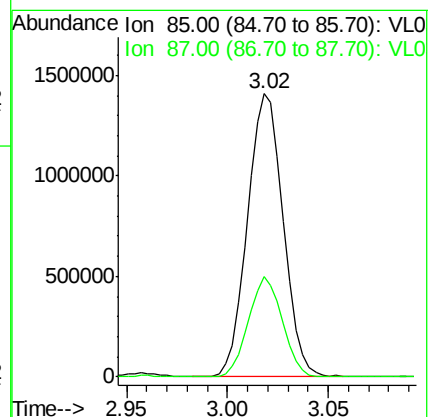
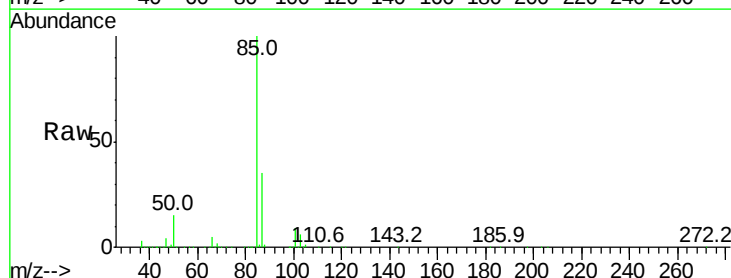
Acq: 30 Dec 2019 14:16

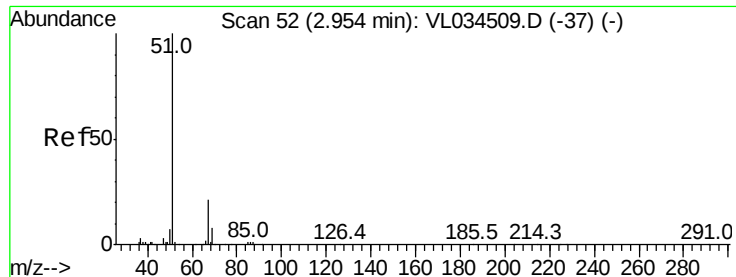
Tgt Ion: 85 Resp: 1750488

Ion Ratio Lower Upper

85 100

87 35.5 27.9 41.9





#3

Chlorodifluoromethane

Concen: 12.176 ppbv

RT: 2.96 min Scan# 53

Delta R.T. 0.00 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

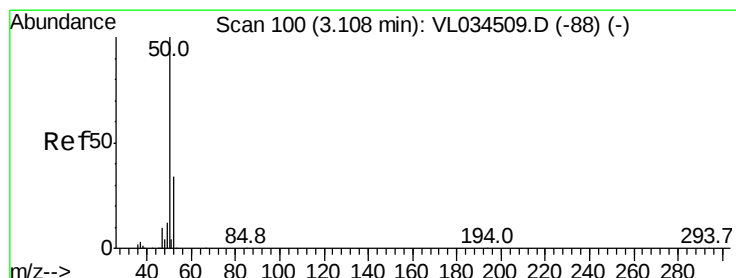
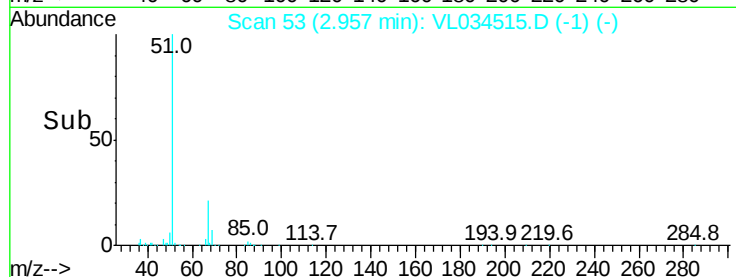
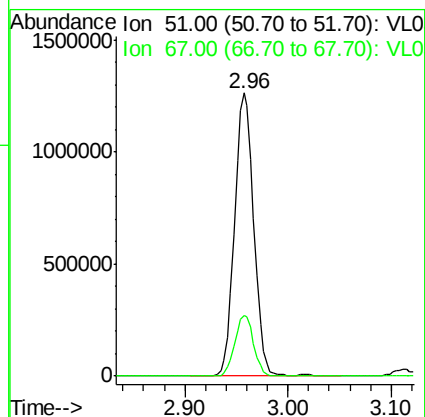
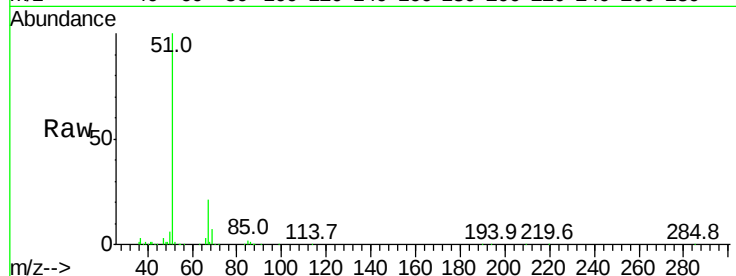
VSTDIC015

Tgt Ion: 51 Resp: 1644002

Ion Ratio Lower Upper

51 100

67 21.1 16.8 25.2



#4

Chloromethane

Concen: 12.865 ppbv

RT: 3.11 min Scan# 101

Delta R.T. 0.00 min

Lab File: VL034515.D

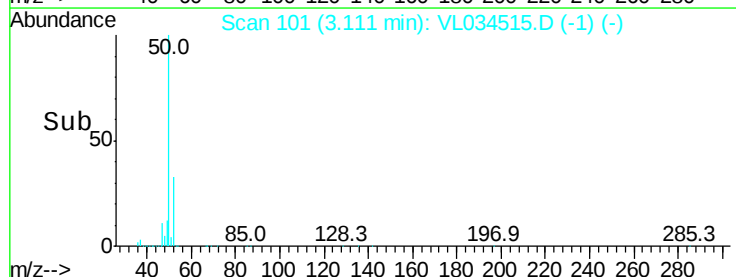
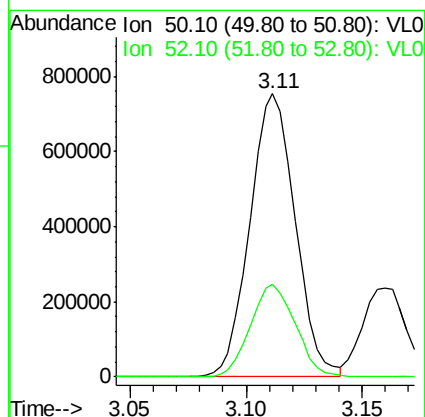
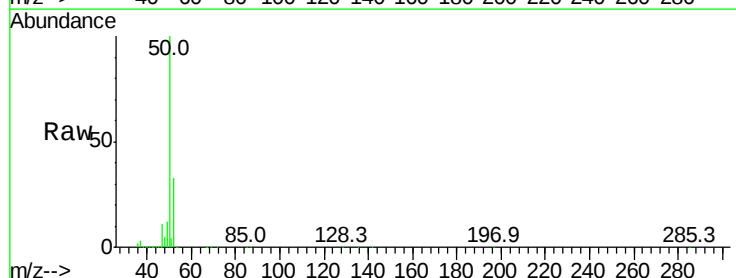
Acq: 30 Dec 2019 14:16

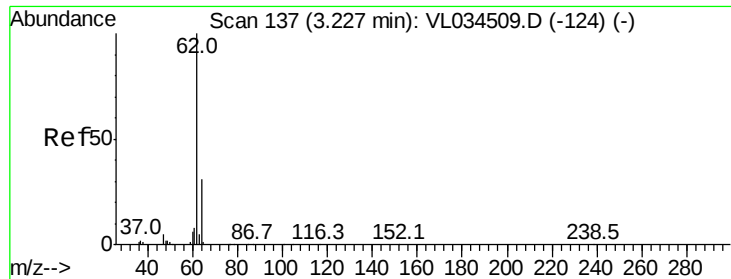
Tgt Ion: 50 Resp: 1024563

Ion Ratio Lower Upper

50 100

52 32.9 27.6 41.4





#5

Vinyl Chloride

Concen: 12.814 ppbv

RT: 3.23 min Scan# 138

Delta R.T. 0.00 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

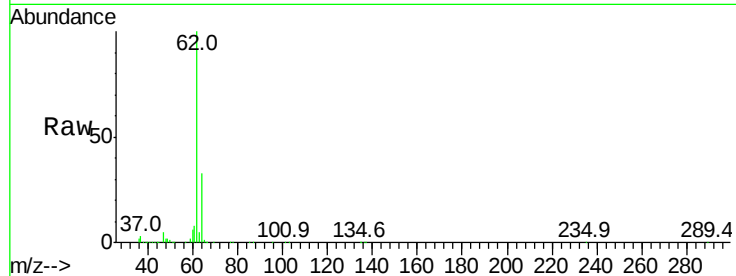
VSTDIC015

Tgt Ion: 62 Resp: 956107

Ion Ratio Lower Upper

62 100

64 32.7 24.9 37.3



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0

3.23

800000

600000

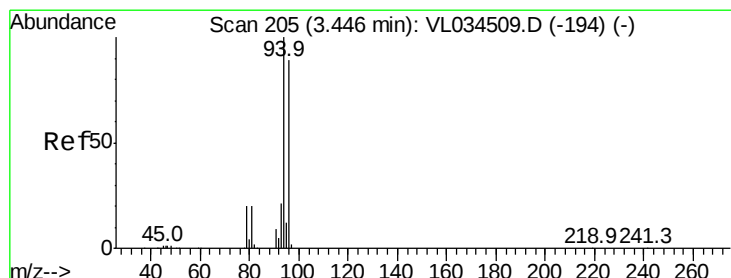
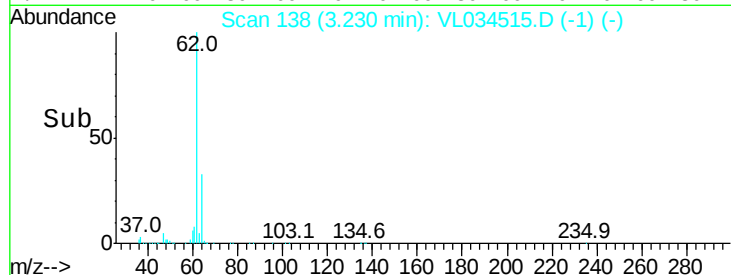
400000

200000

0

Time-->

3.20 3.25 3.30



#6

Bromomethane

Concen: 13.476 ppbv

RT: 3.45 min Scan# 206

Delta R.T. 0.00 min

Lab File: VL034515.D

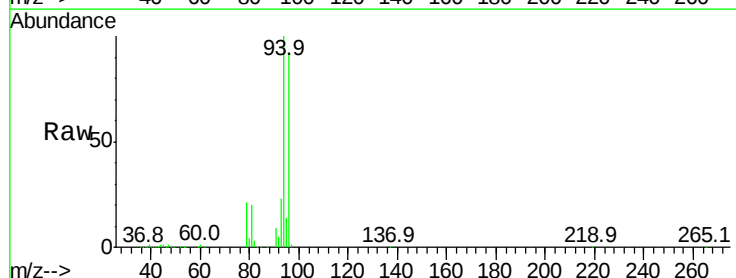
Acq: 30 Dec 2019 14:16

Tgt Ion: 94 Resp: 505942

Ion Ratio Lower Upper

94 100

96 92.0 71.2 106.8



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0

3.45

400000

300000

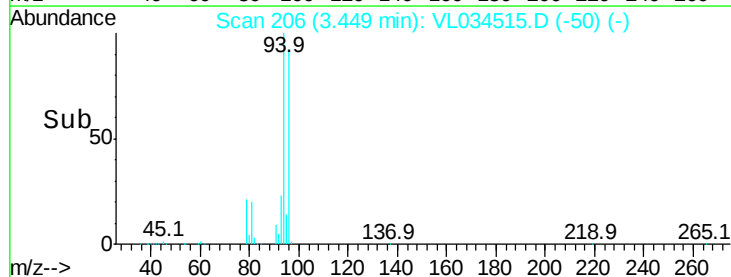
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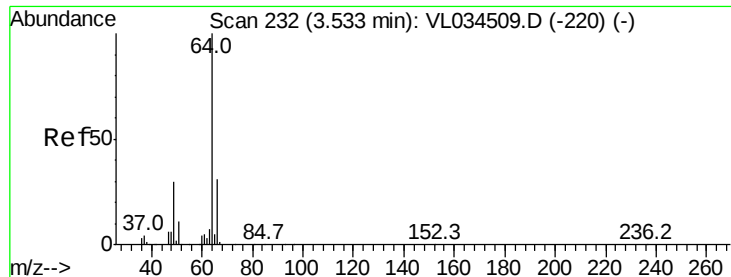
100000

0

Time-->

3.40 3.45 3.50





#7

Chloroethane

Concen: 13.121 ppbv

RT: 3.54 min Scan# 233

Delta R.T. 0.00 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

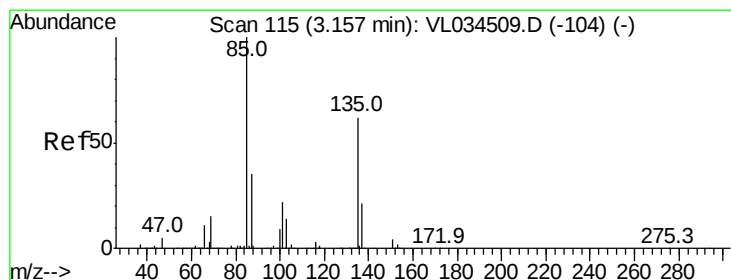
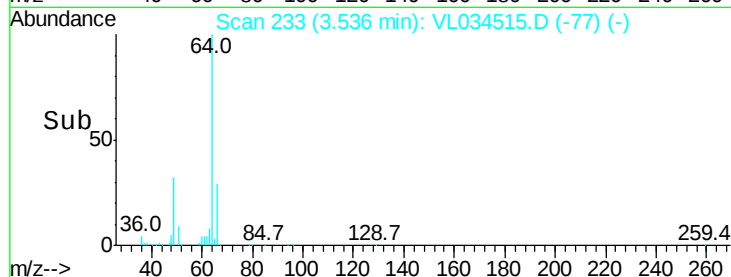
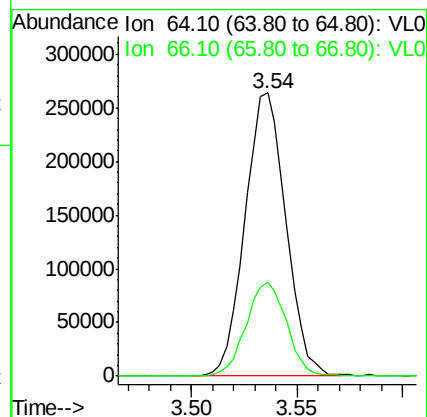
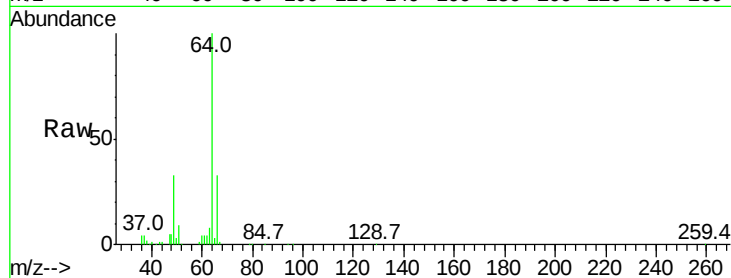
VSTDIC015

Tgt Ion: 64 Resp: 355347

Ion Ratio Lower Upper

64 100

66 33.2 25.0 37.4



#8

Dichlorotetrafluoroethane

Concen: 12.006 ppbv

RT: 3.16 min Scan# 116

Delta R.T. 0.00 min

Lab File: VL034515.D

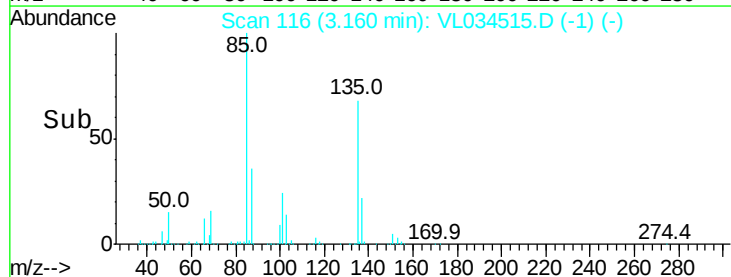
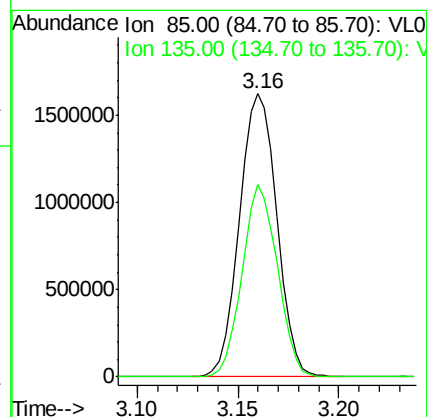
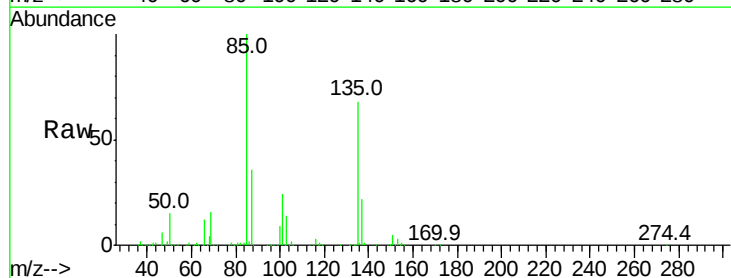
Acq: 30 Dec 2019 14:16

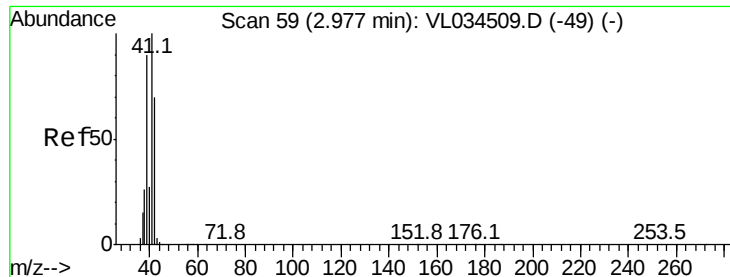
Tgt Ion: 85 Resp: 2110776

Ion Ratio Lower Upper

85 100

135 64.7 51.8 77.8





#9

Propene

Concen: 11.812 ppbv

RT: 2.98 min Scan# 60

Delta R.T. 0.00 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

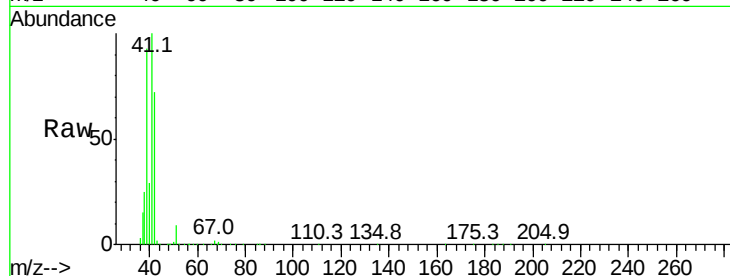
VSTDIC015

Tgt Ion: 41 Resp: 708069

Ion Ratio Lower Upper

41 100

42 70.7 55.8 83.6



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

2.98

600000

500000

400000

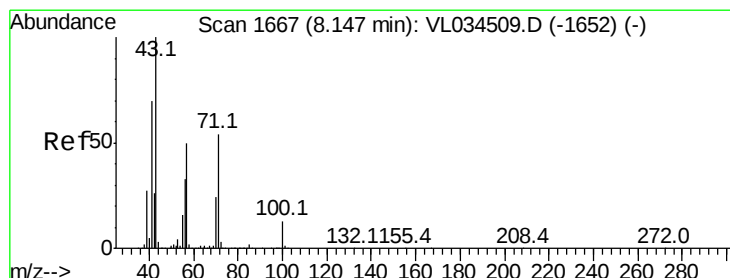
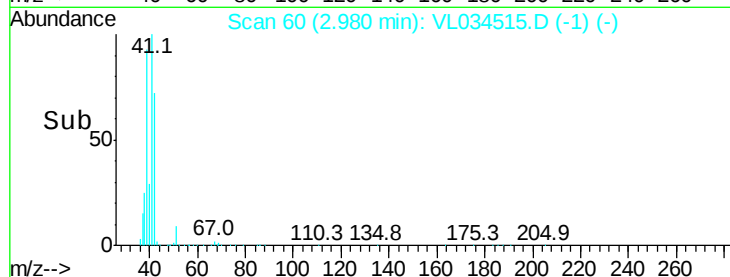
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200000

100000

0

Time-->



#10

Heptane

Concen: 12.650 ppbv

RT: 8.15 min Scan# 1669

Delta R.T. 0.01 min

Lab File: VL034515.D

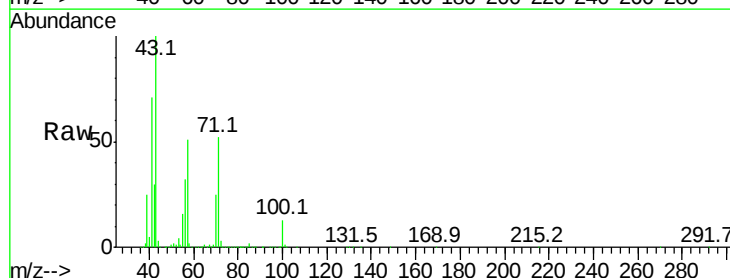
Acq: 30 Dec 2019 14:16

Tgt Ion: 43 Resp: 1956942

Ion Ratio Lower Upper

43 100

57 50.0 41.0 61.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

8.15

1000000

800000

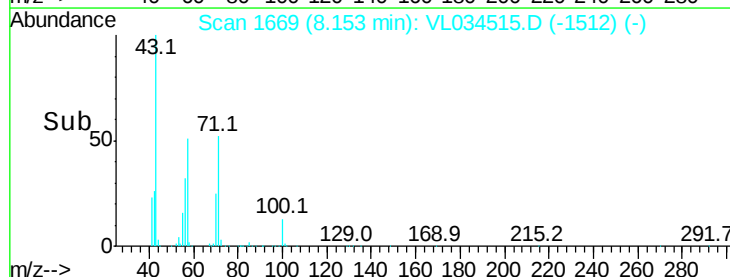
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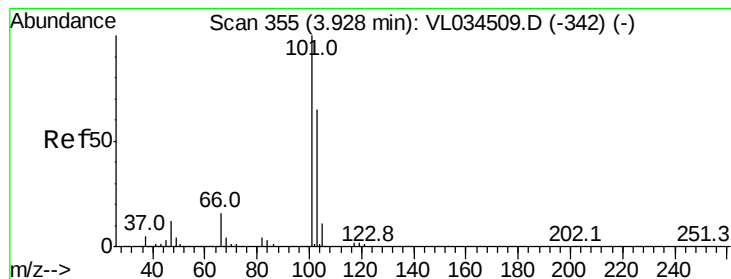
400000

200000

0

Time-->





#11

Trichlorofluoromethane

Concen: 12.674 ppbv

RT: 3.93 min Scan# 357

Delta R.T. 0.01 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

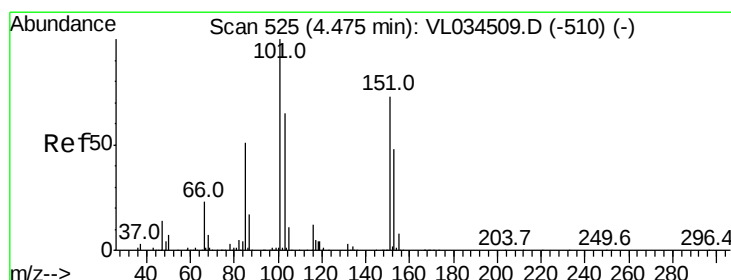
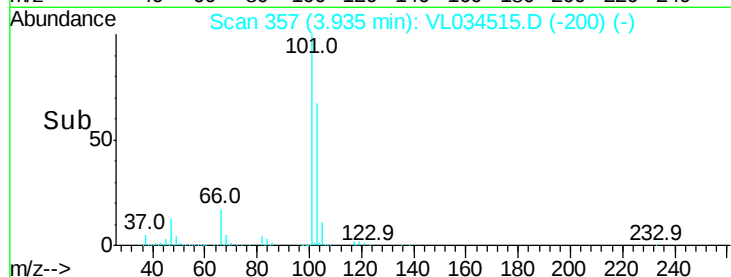
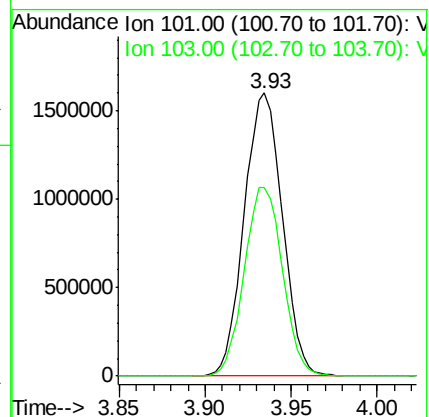
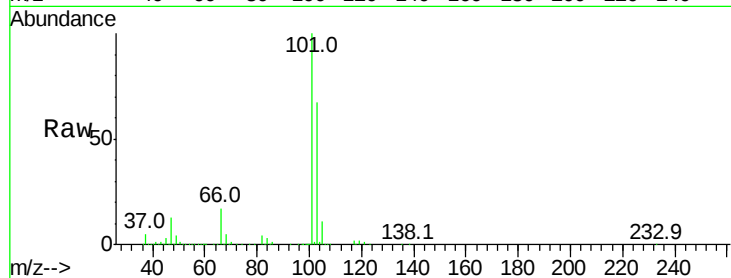
VSTDIC015

Tgt Ion:101 Resp: 2469228

Ion Ratio Lower Upper

101 100

103 66.6 52.1 78.1



#12

1,1,2-Trichlorotrifluoroethane

Concen: 12.842 ppbv

RT: 4.48 min Scan# 526

Delta R.T. 0.00 min

Lab File: VL034515.D

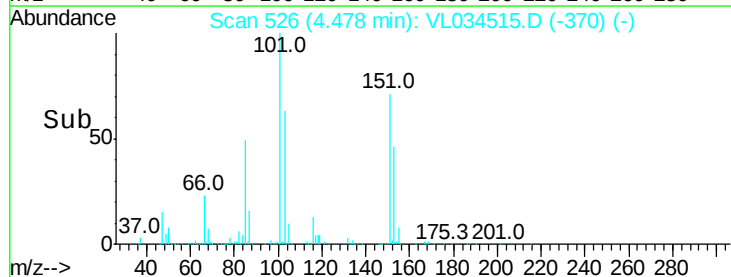
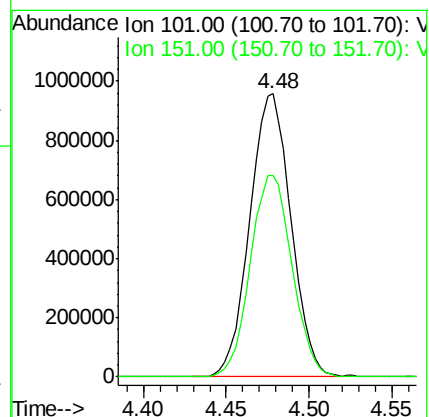
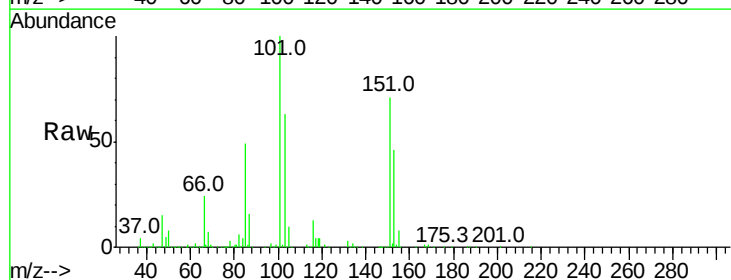
Acq: 30 Dec 2019 14:16

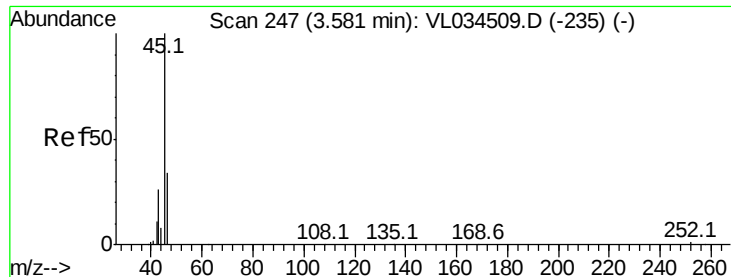
Tgt Ion:101 Resp: 1661604

Ion Ratio Lower Upper

101 100

151 72.2 57.8 86.6





#13

Ethanol

Concen: 7.913 ppbv

RT: 3.58 min Scan# 248

Delta R.T. 0.00 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

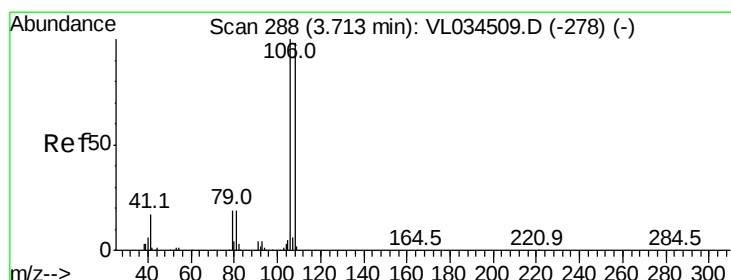
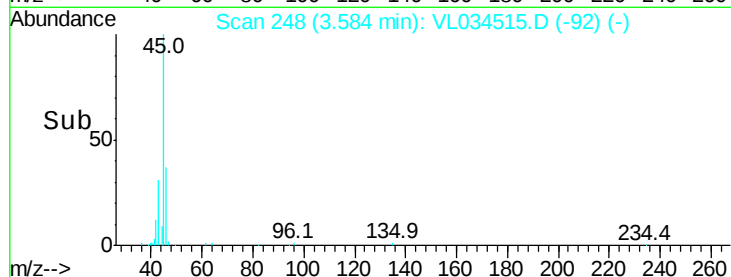
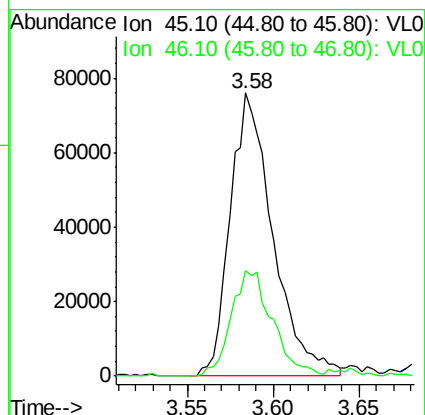
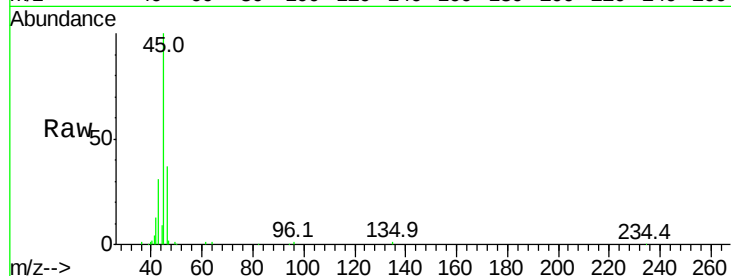
VSTDIC015

Tgt Ion: 45 Resp: 132131

Ion Ratio Lower Upper

45 100

46 38.1 14.9 59.7



#14

Bromoethene

Concen: 13.276 ppbv

RT: 3.72 min Scan# 291

Delta R.T. 0.01 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

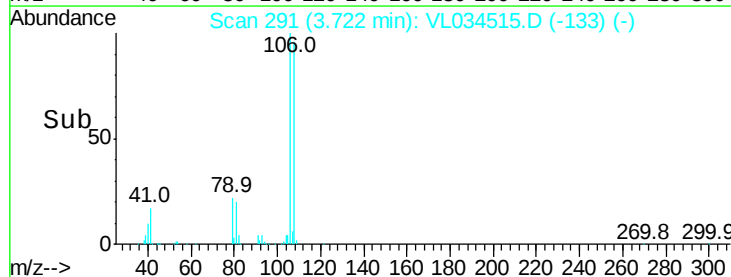
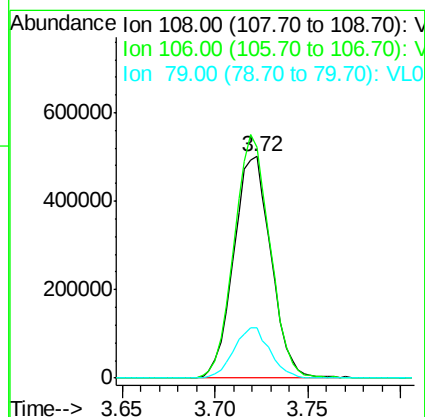
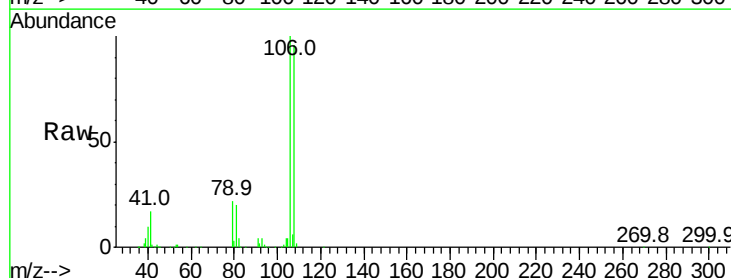
Tgt Ion: 108 Resp: 698450

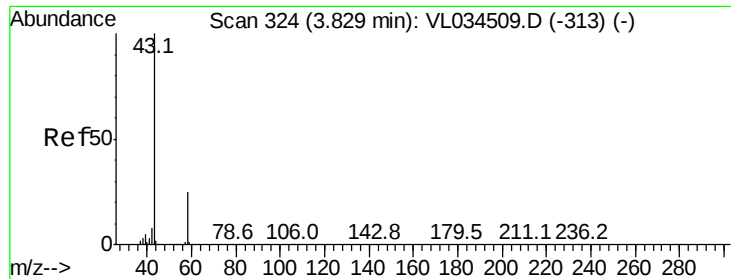
Ion Ratio Lower Upper

108 100

106 106.1 85.2 127.8

79 22.5 17.4 26.2





#15

Acetone

Concen: 11.889 ppbv

RT: 3.83 min Scan# 325

Delta R.T. 0.00 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

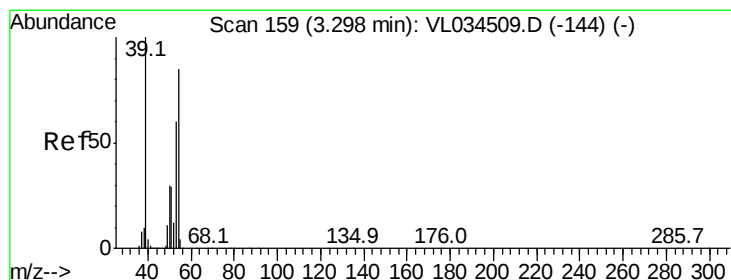
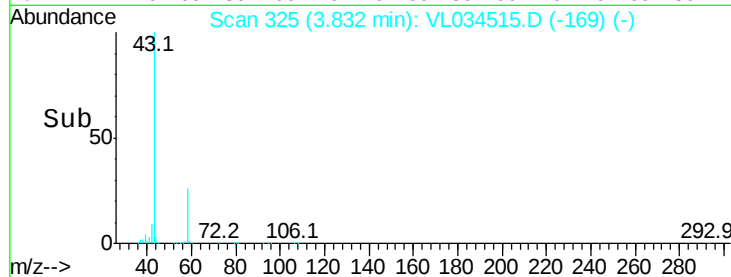
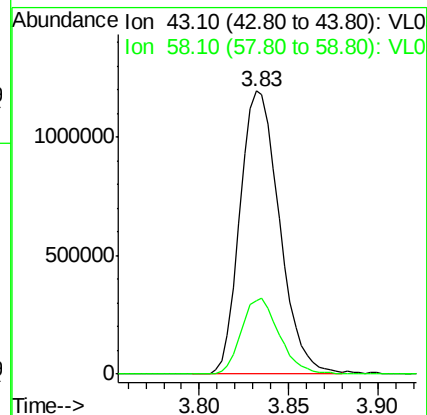
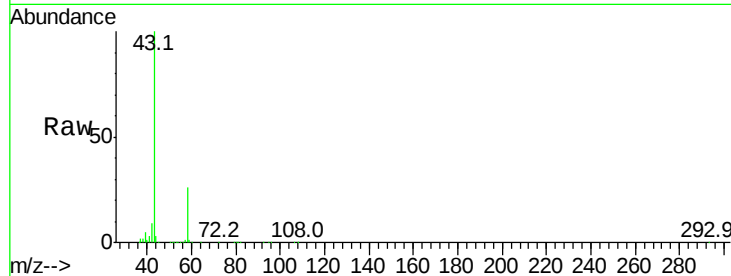
VSTDIC015

Tgt Ion: 43 Resp: 1842309

Ion Ratio Lower Upper

43 100

58 26.0 20.4 30.6



#16

1,3-Butadiene

Concen: 13.031 ppbv

RT: 3.30 min Scan# 160

Delta R.T. 0.00 min

Lab File: VL034515.D

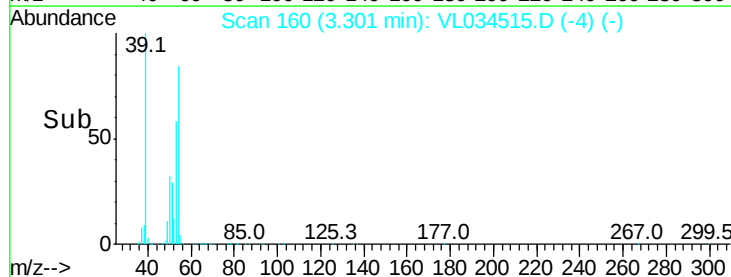
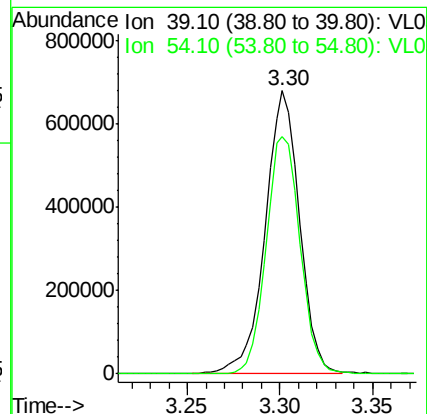
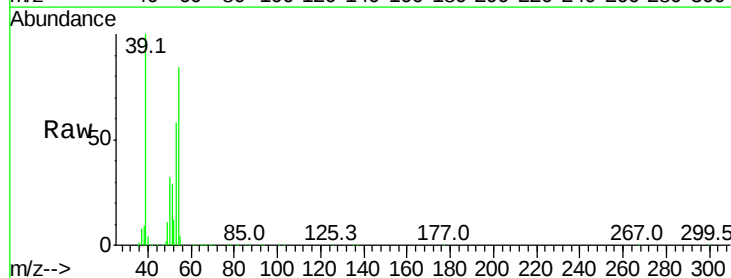
Acq: 30 Dec 2019 14:16

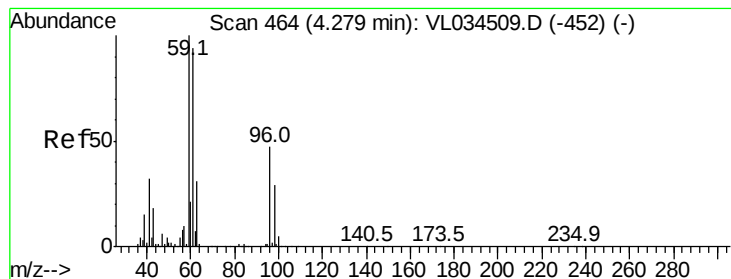
Tgt Ion: 39 Resp: 879628

Ion Ratio Lower Upper

39 100

54 82.9 66.2 99.2



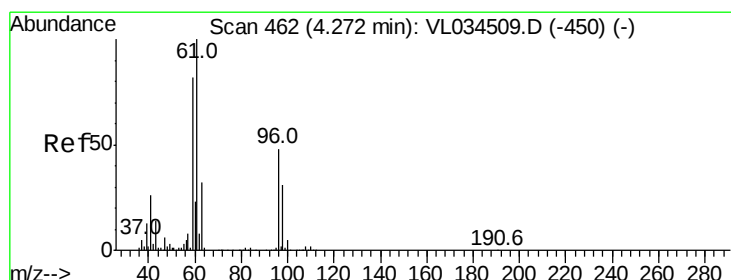
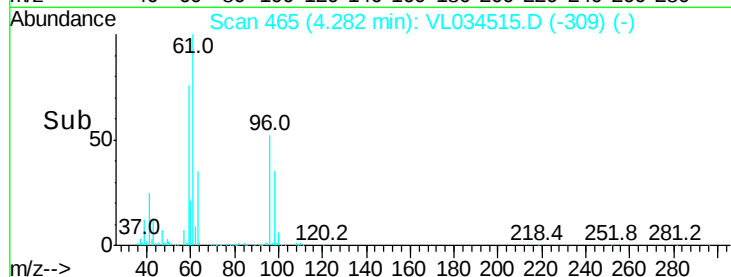
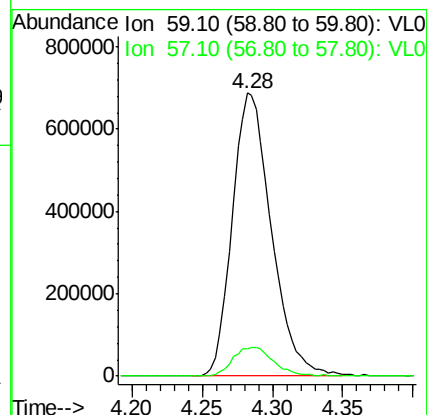
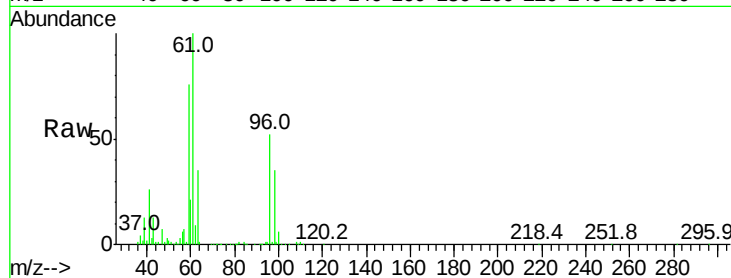


#17

tert-Butyl alcohol  
Concen: 10.200 ppbv  
RT: 4.28 min Scan# 465  
Delta R.T. 0.00 min  
Lab File: VL034515.D  
Acq: 30 Dec 2019 14:16

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

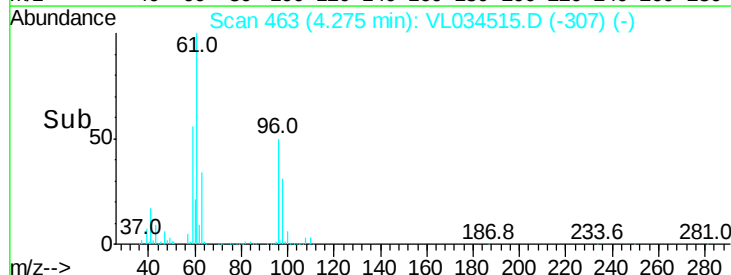
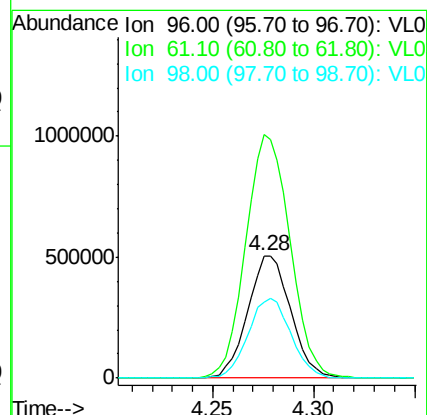
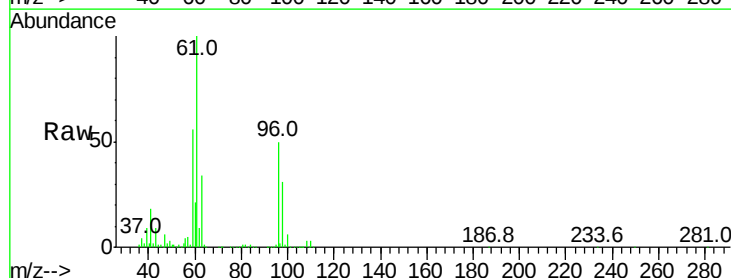
Tgt Ion: 59 Resp: 1328644  
Ion Ratio Lower Upper  
59 100  
57 10.8 8.6 12.8

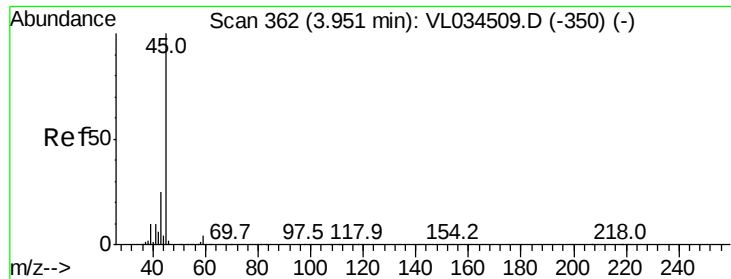


#18

1,1-Dichloroethene  
Concen: 13.312 ppbv  
RT: 4.28 min Scan# 463  
Delta R.T. 0.00 min  
Lab File: VL034515.D  
Acq: 30 Dec 2019 14:16

Tgt Ion: 96 Resp: 753427  
Ion Ratio Lower Upper  
96 100  
61 198.4 165.9 248.9  
98 61.7 51.9 77.9



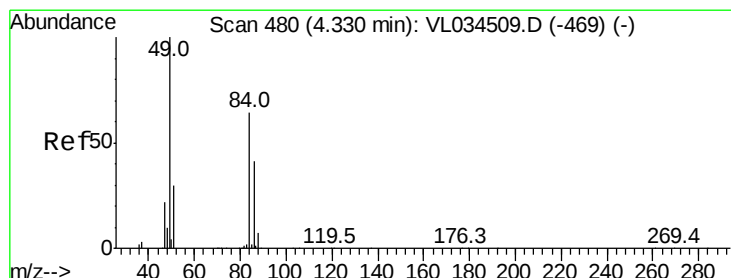
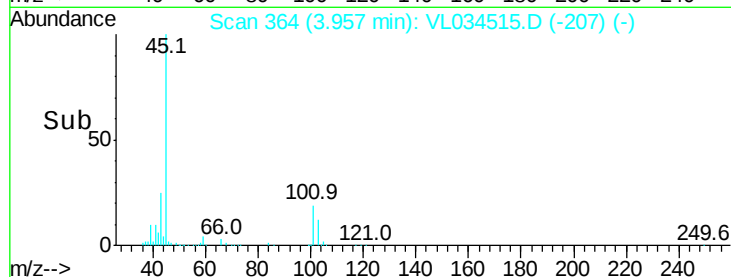
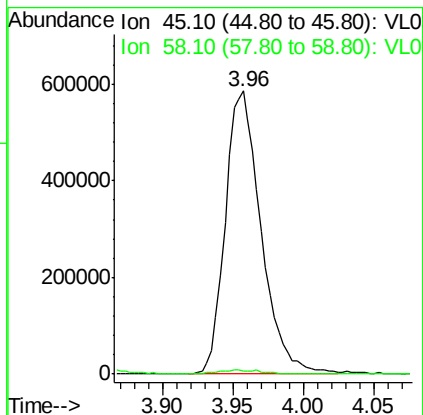
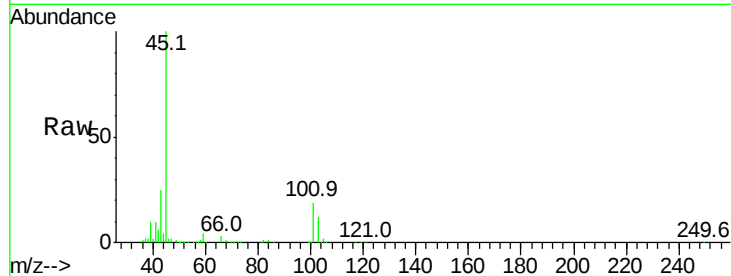


#19

Isopropyl Alcohol  
 Concen: 10.443 ppbv  
 RT: 3.96 min Scan# 364  
 Delta R.T. 0.01 min  
 Lab File: VL034515.D  
 Acq: 30 Dec 2019 14:16

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

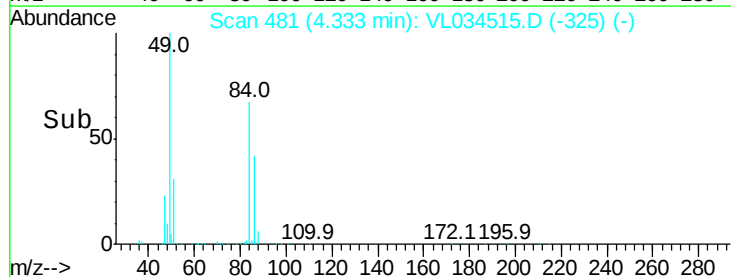
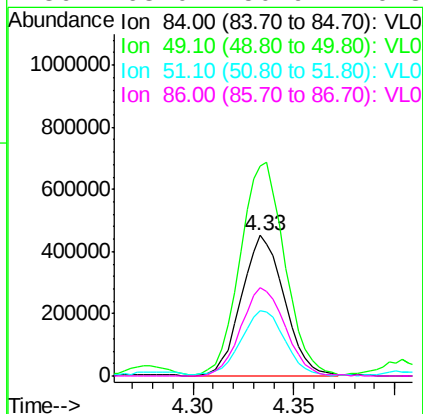
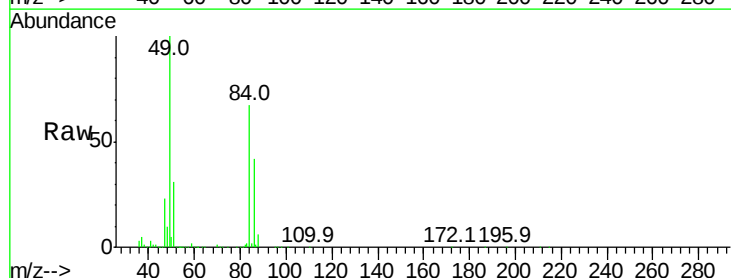
Tgt Ion: 45 Resp: 1037272  
 Ion Ratio Lower Upper  
 45 100  
 58 1.9 1.4 2.0

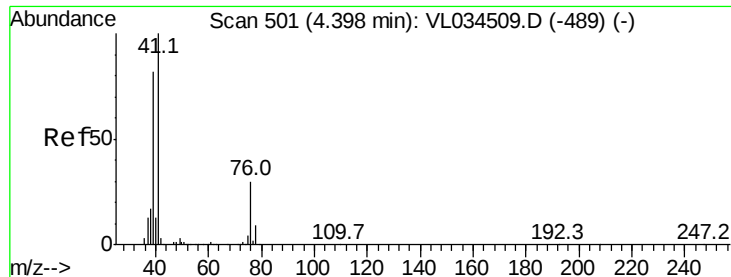


#20

Methylene Chloride  
 Concen: 12.234 ppbv  
 RT: 4.33 min Scan# 481  
 Delta R.T. 0.00 min  
 Lab File: VL034515.D  
 Acq: 30 Dec 2019 14:16

Tgt Ion: 84 Resp: 672236  
 Ion Ratio Lower Upper  
 84 100  
 49 148.3 124.4 186.6  
 51 45.6 37.0 55.6  
 86 63.0 50.9 76.3





#21

Allyl Chloride

Concen: 13.846 ppbv

RT: 4.40 min Scan# 503

Delta R.T. 0.01 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

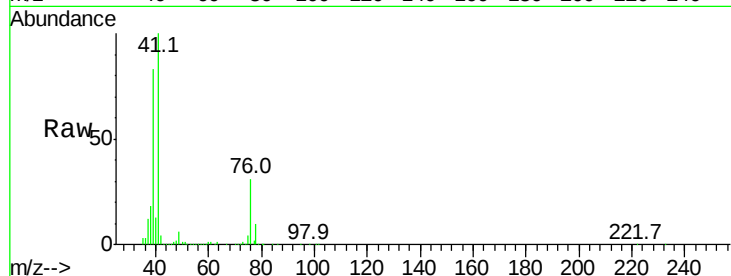
Tgt Ion: 41 Resp: 1285704

Ion Ratio Lower Upper

41 100

76 30.4 24.2 36.4

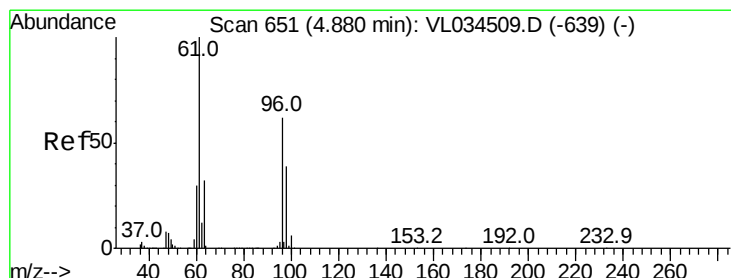
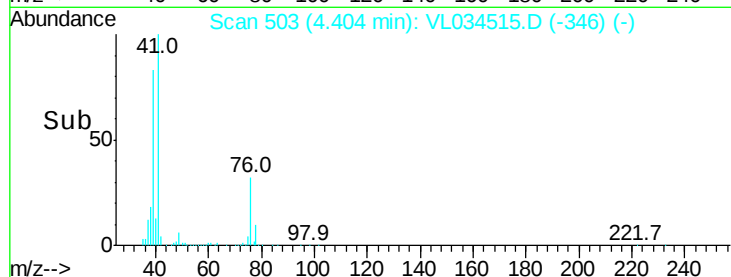
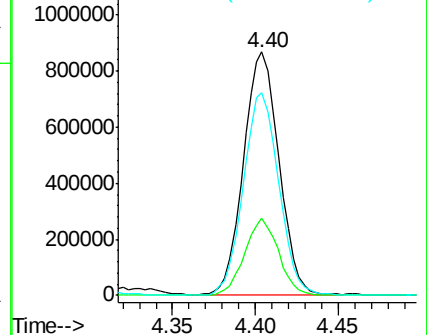
39 84.1 65.8 98.6



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: 13.648 ppbv

RT: 4.89 min Scan# 653

Delta R.T. 0.01 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

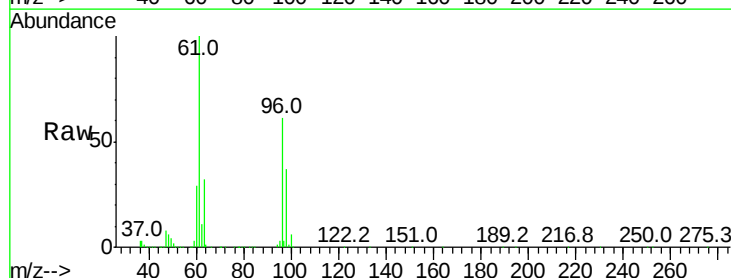
Tgt Ion: 96 Resp: 778670

Ion Ratio Lower Upper

96 100

61 163.1 128.4 192.6

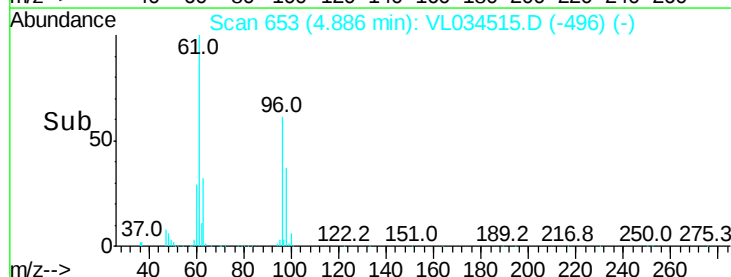
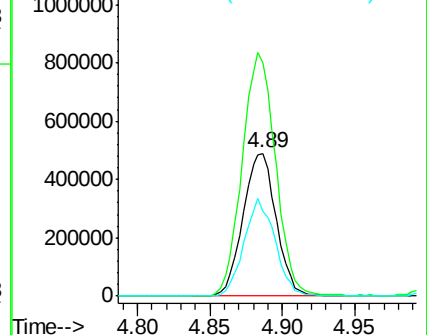
98 59.8 50.6 75.8

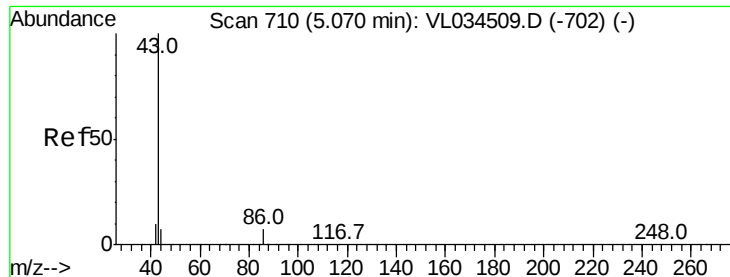


Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





#23

Vinyl Acetate

Concen: 12.903 ppbv

RT: 5.08 min Scan# 712

Delta R.T. 0.01 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

Tgt Ion: 43 Resp: 2611918

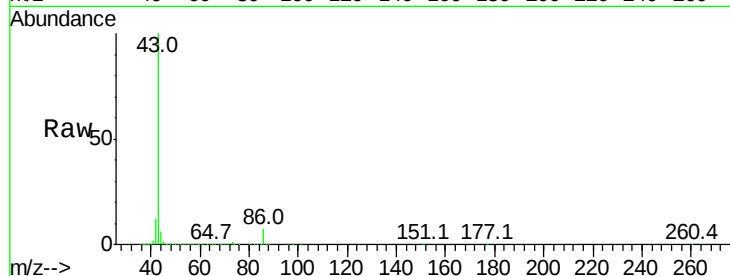
Ion Ratio Lower Upper

43 100

86 6.8 5.4 8.2

42 11.7 8.9 13.3

44 6.0 5.0 7.4

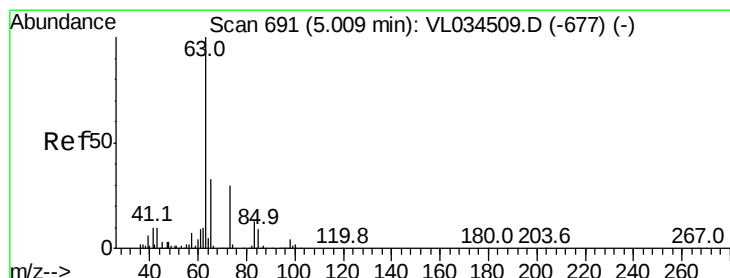
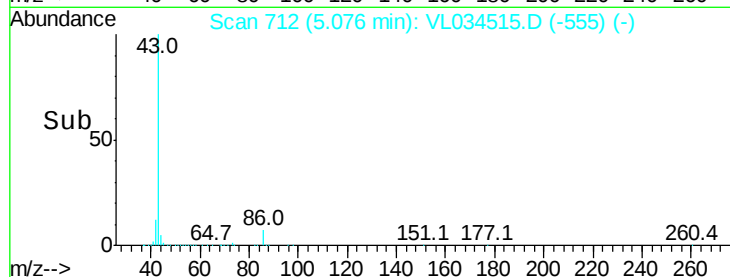
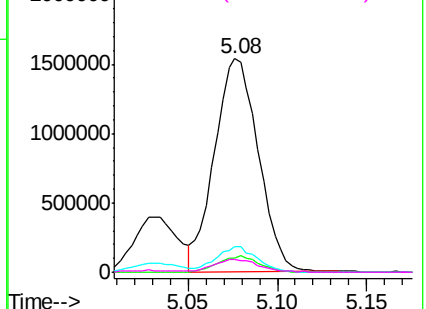


Abundance Ion 43.10 (42.80 to 43.80): VL0

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



#24

1,1-Dichloroethane

Concen: 12.508 ppbv

RT: 5.01 min Scan# 692

Delta R.T. 0.00 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

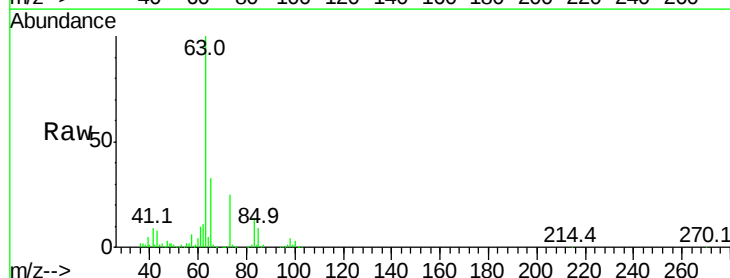
Tgt Ion: 63 Resp: 1944951

Ion Ratio Lower Upper

63 100

98 4.2 2.1 6.3

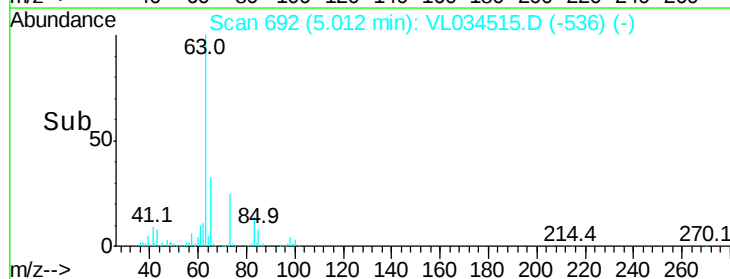
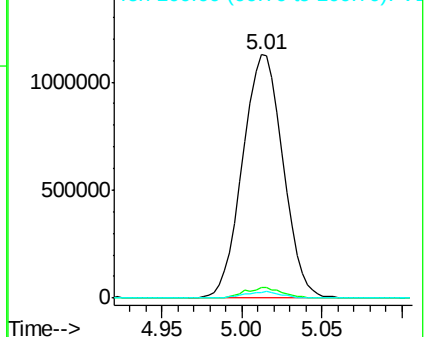
100 2.5 1.1 3.3

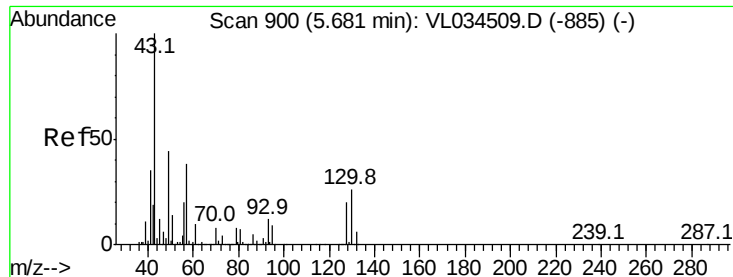


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0



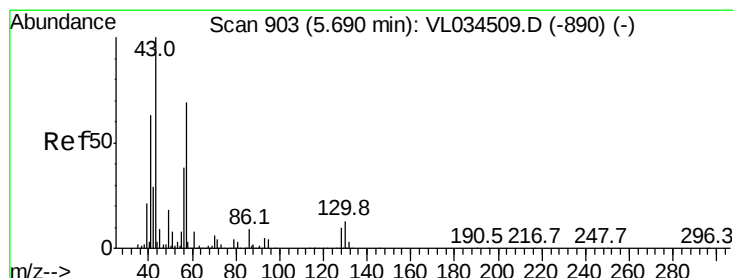
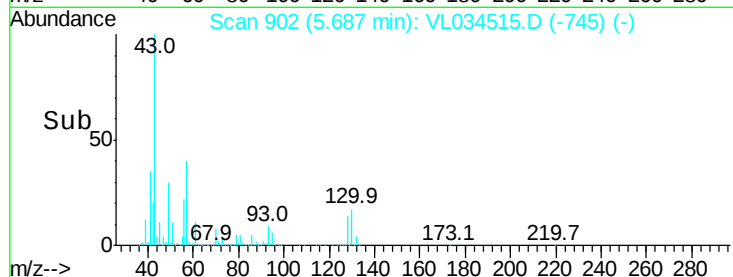
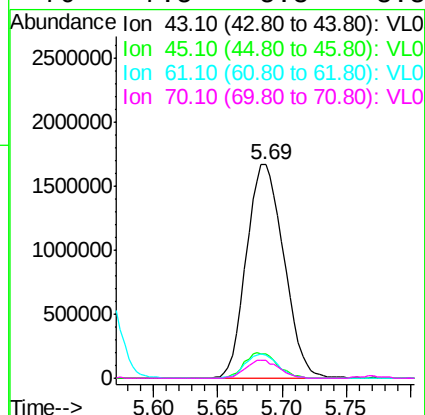
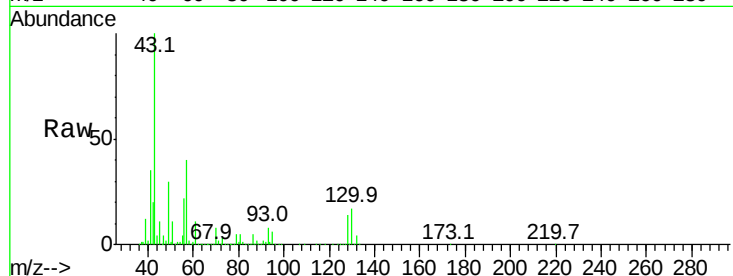


#25  
Ethyl Acetate  
Concen: 12.191 ppbv  
RT: 5.69 min Scan# 902  
Delta R.T. 0.01 min  
Lab File: VL034515.D  
Acq: 30 Dec 2019 14:16

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Tgt Ion: 43 Resp: 3371084

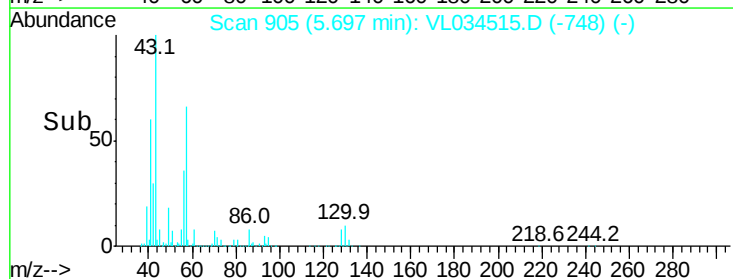
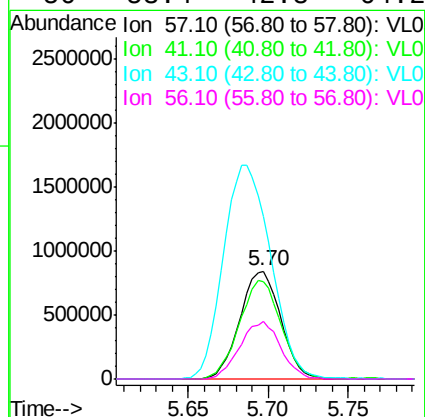
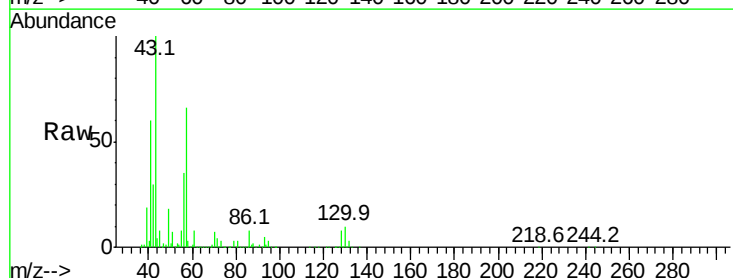
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 45  | 10.7  | 8.3   | 12.5  |
| 61  | 9.9   | 7.8   | 11.6  |
| 70  | 7.5   | 5.8   | 8.8   |

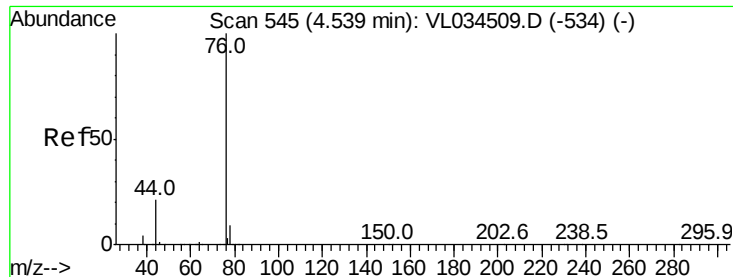


#26  
Hexane  
Concen: 12.287 ppbv  
RT: 5.70 min Scan# 905  
Delta R.T. 0.01 min  
Lab File: VL034515.D  
Acq: 30 Dec 2019 14:16

Tgt Ion: 57 Resp: 1459975

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 57  | 100   |       |       |
| 41  | 93.7  | 75.3  | 112.9 |
| 43  | 232.3 | 189.4 | 284.2 |
| 56  | 53.4  | 42.8  | 64.2  |





#27

Carbon Disulfide

Concen: 15.399 ppbv

RT: 4.54 min Scan# 546

Delta R.T. 0.00 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

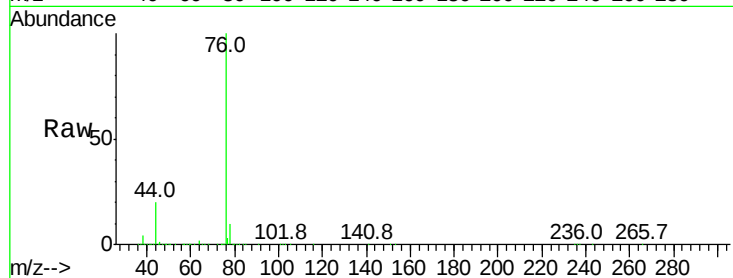
Tgt Ion: 76 Resp: 1992885

Ion Ratio Lower Upper

76 100

44 20.3 16.6 25.0

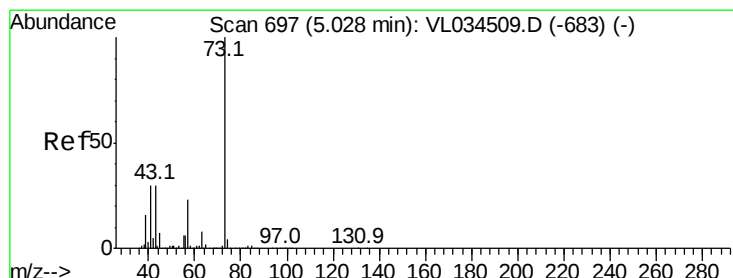
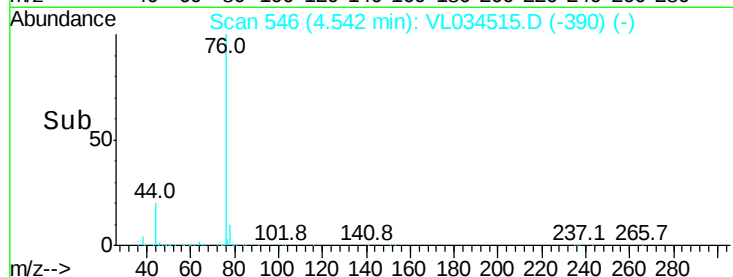
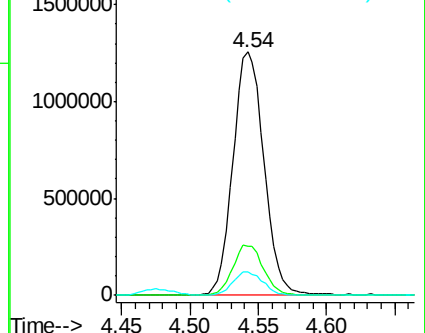
78 9.5 7.4 11.0



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: 12.473 ppbv

RT: 5.03 min Scan# 698

Delta R.T. 0.00 min

Lab File: VL034515.D

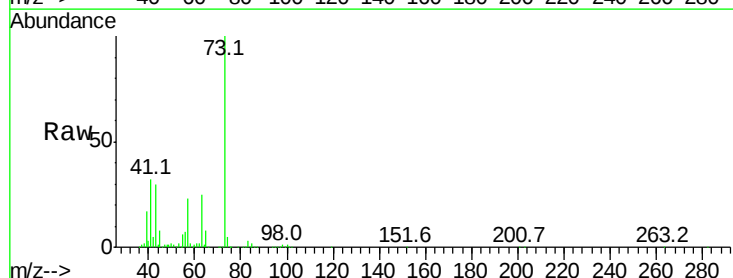
Acq: 30 Dec 2019 14:16

Tgt Ion: 73 Resp: 2457519

Ion Ratio Lower Upper

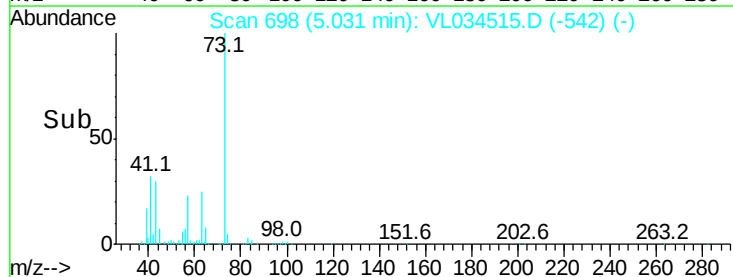
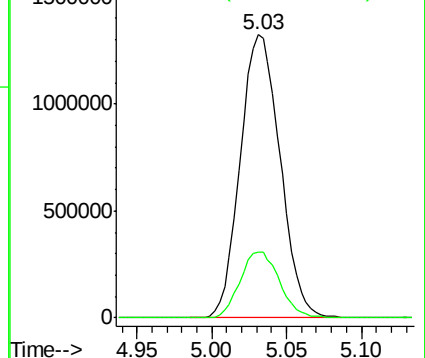
73 100

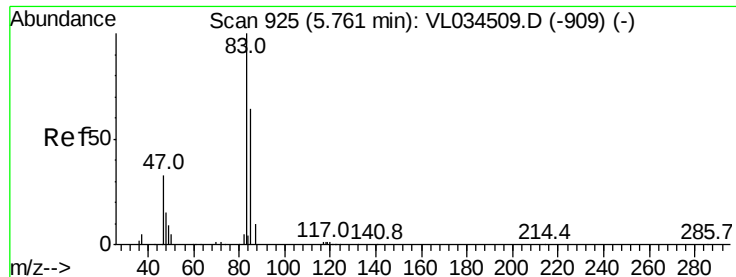
57 23.3 18.2 27.2



Abundance Ion 73.10 (72.80 to 73.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#29

Chloroform

Concen: 12.473 ppbv

RT: 5.77 min Scan# 927

Delta R.T. 0.01 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

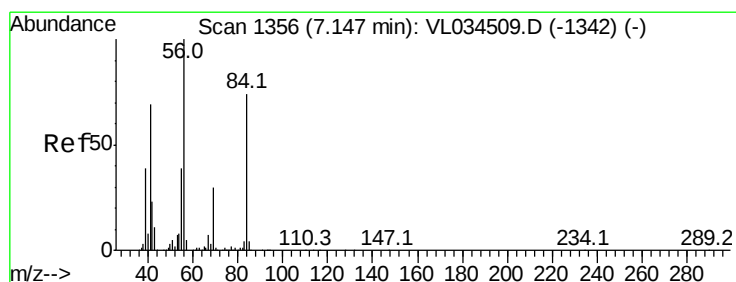
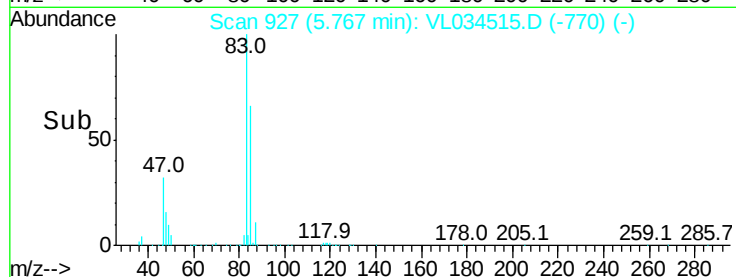
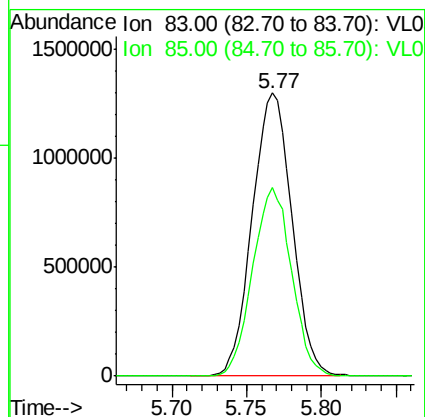
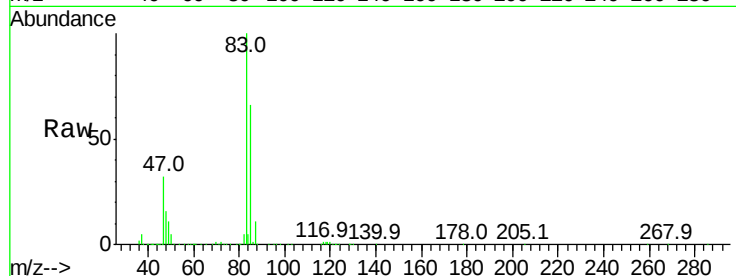
VSTDIC015

Tgt Ion: 83 Resp: 2400055

Ion Ratio Lower Upper

83 100

85 66.4 51.0 76.6



#30

Cyclohexane

Concen: 12.984 ppbv

RT: 7.15 min Scan# 1358

Delta R.T. 0.01 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

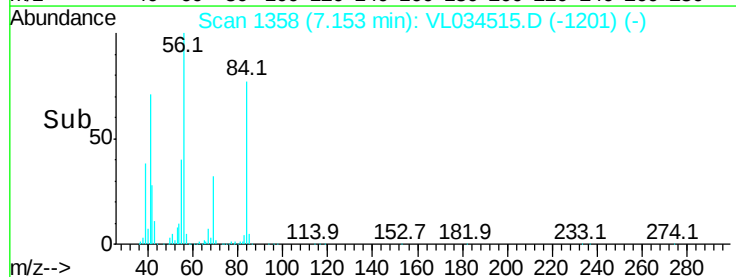
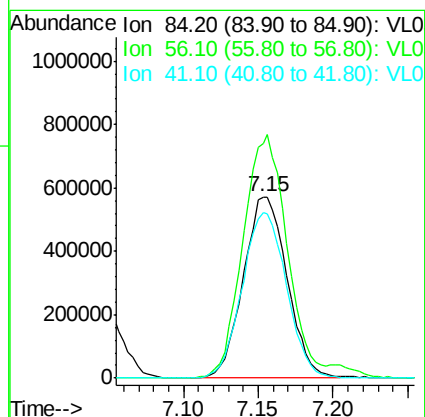
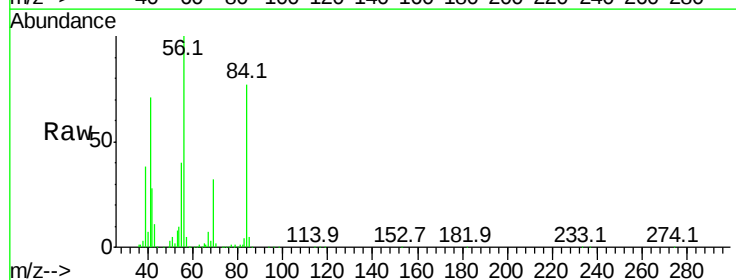
Tgt Ion: 84 Resp: 1166272

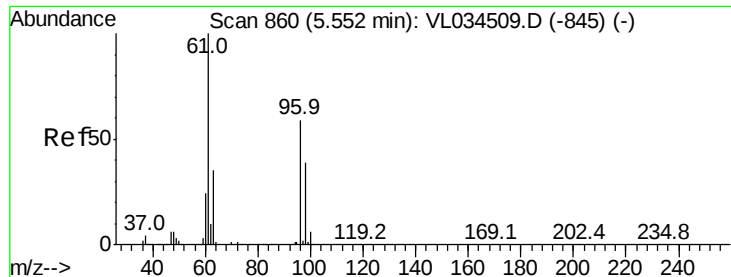
Ion Ratio Lower Upper

84 100

56 139.7 112.7 169.1

41 92.4 73.0 109.4



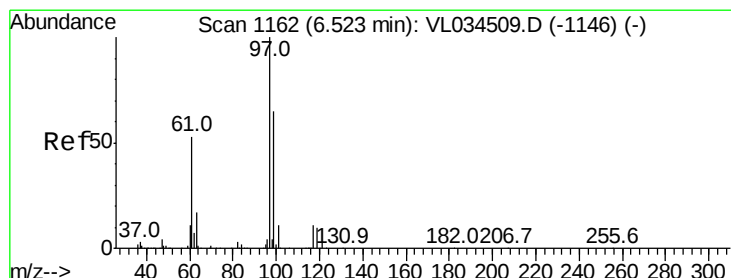
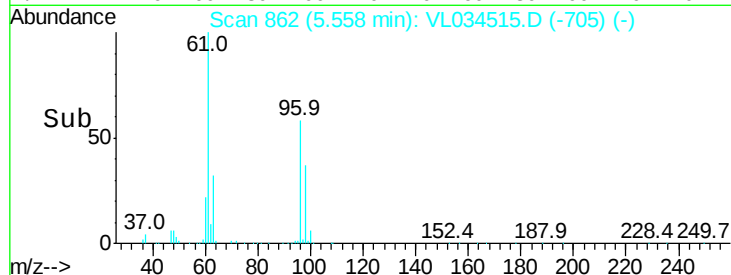
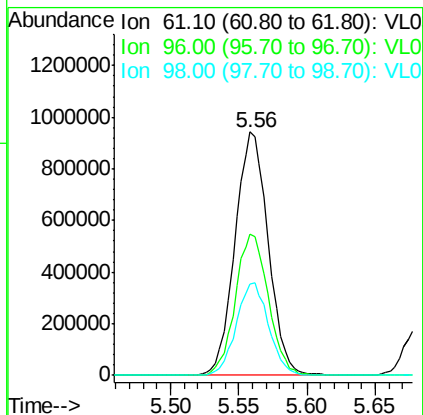
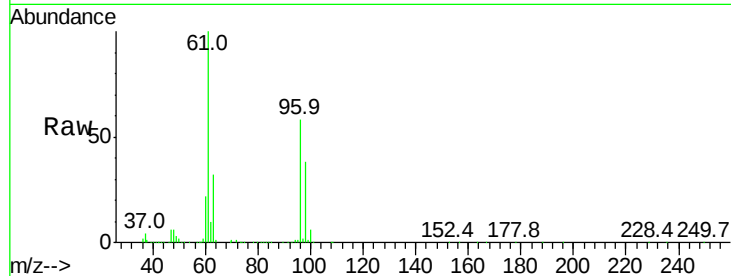


#31

cis-1,2-Dichloroethene  
Concen: 12.947 ppbv  
RT: 5.56 min Scan# 862  
Delta R.T. 0.01 min  
Lab File: VL034515.D  
Acq: 30 Dec 2019 14:16

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

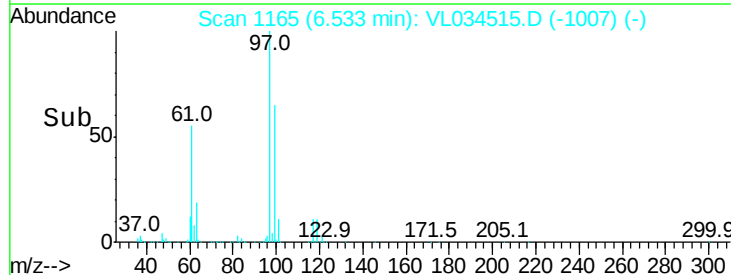
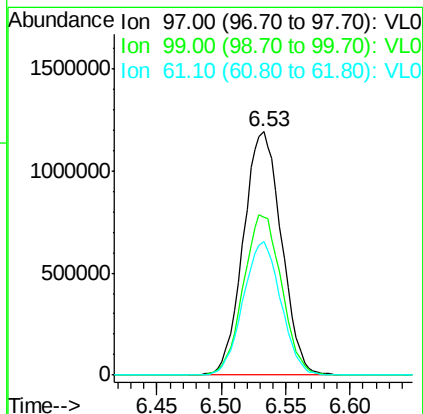
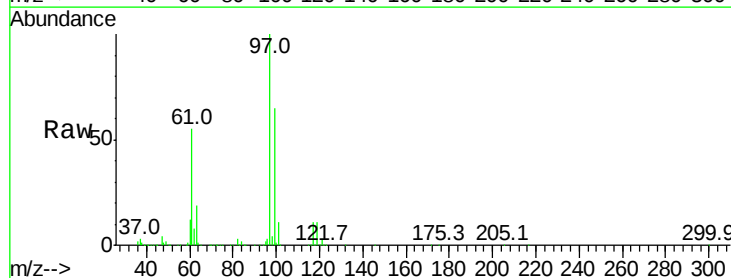
Tgt Ion: 61 Resp: 1589662  
Ion Ratio Lower Upper  
61 100  
96 57.8 47.1 70.7  
98 37.5 31.0 46.6

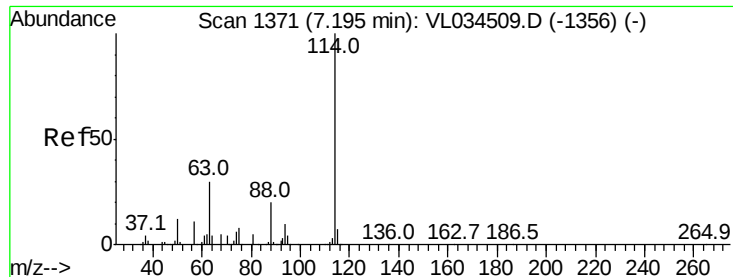


#32

1,1,1-Trichloroethane  
Concen: 13.589 ppbv  
RT: 6.53 min Scan# 1165  
Delta R.T. 0.01 min  
Lab File: VL034515.D  
Acq: 30 Dec 2019 14:16

Tgt Ion: 97 Resp: 2451456  
Ion Ratio Lower Upper  
97 100  
99 65.9 51.7 77.5  
61 54.4 42.9 64.3

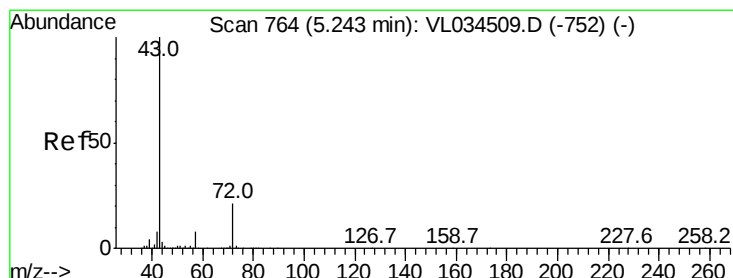
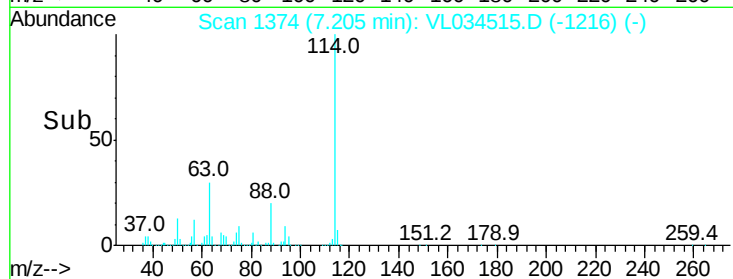
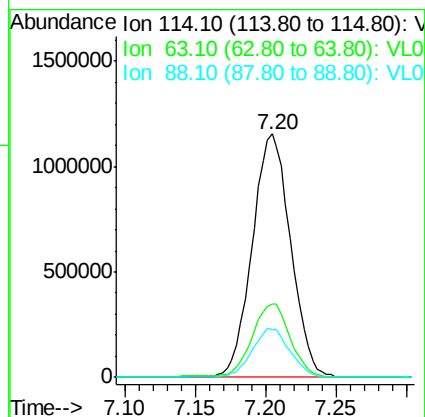
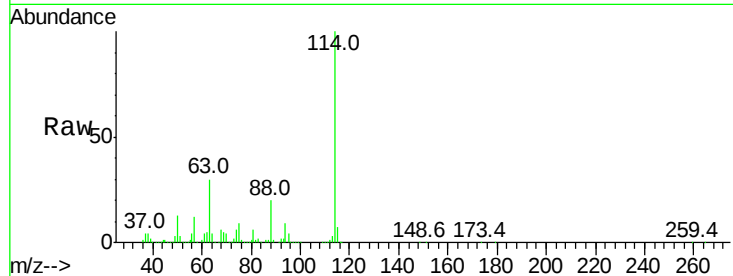




#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.20 min Scan# 1374  
 Delta R.T. 0.01 min  
 Lab File: VL034515.D  
 Acq: 30 Dec 2019 14:16

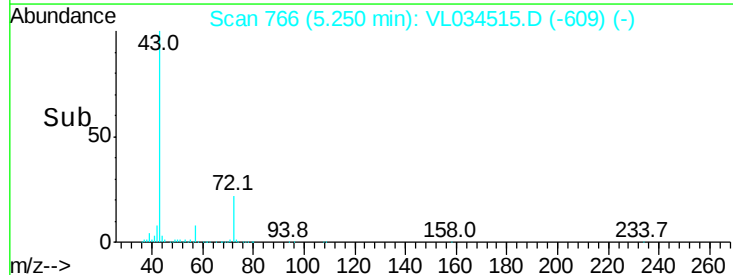
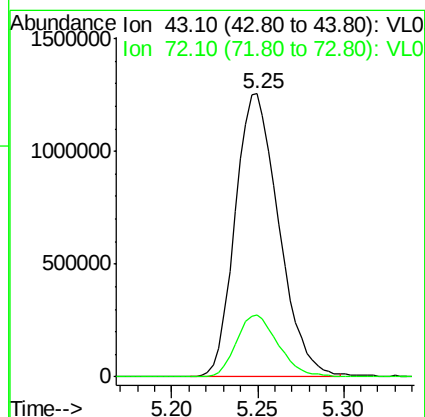
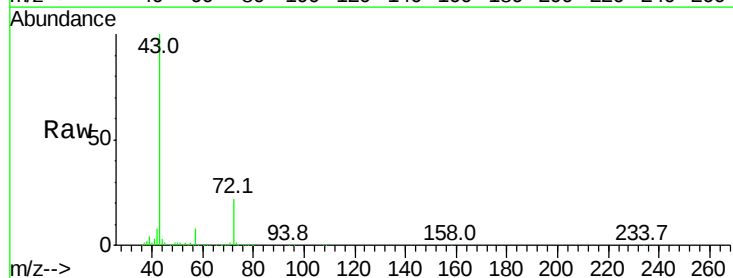
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

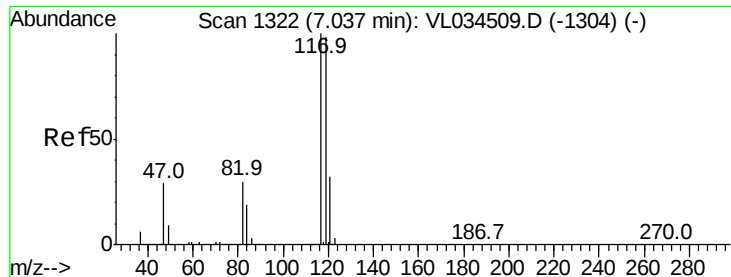
Tgt Ion: 114 Resp: 2195997  
 Ion Ratio Lower Upper  
 114 100  
 63 30.7 24.1 36.1  
 88 19.7 15.7 23.5



#34  
 2-Butanone  
 Concen: 12.241 ppbv  
 RT: 5.25 min Scan# 766  
 Delta R.T. 0.01 min  
 Lab File: VL034515.D  
 Acq: 30 Dec 2019 14:16

Tgt Ion: 43 Resp: 2212645  
 Ion Ratio Lower Upper  
 43 100  
 72 20.9 17.0 25.4





#35

Carbon Tetrachloride

Concen: 13.872 ppbv

RT: 7.04 min Scan# 1324

Delta R.T. 0.01 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

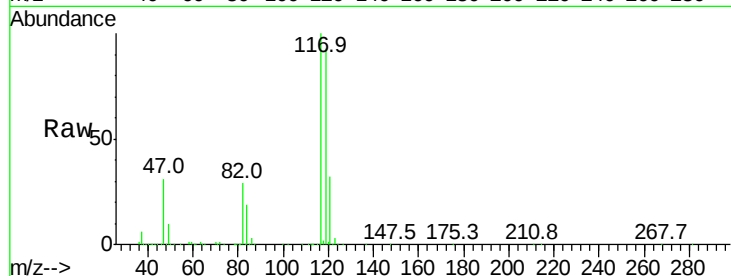
Tgt Ion:117 Resp: 2619089

Ion Ratio Lower Upper

117 100

119 93.4 78.7 118.1

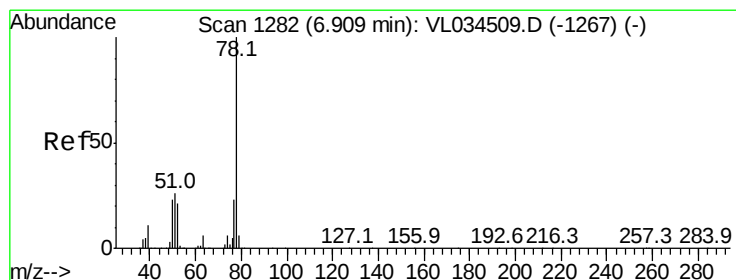
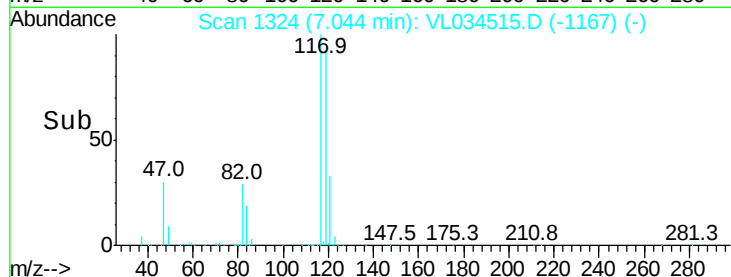
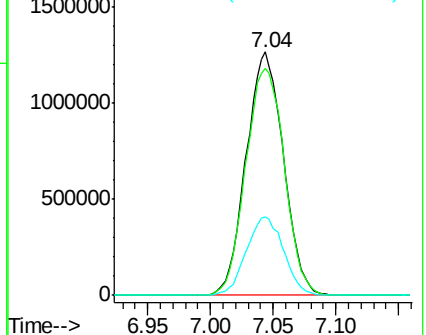
121 32.4 25.9 38.9



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: 12.504 ppbv

RT: 6.92 min Scan# 1285

Delta R.T. 0.01 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

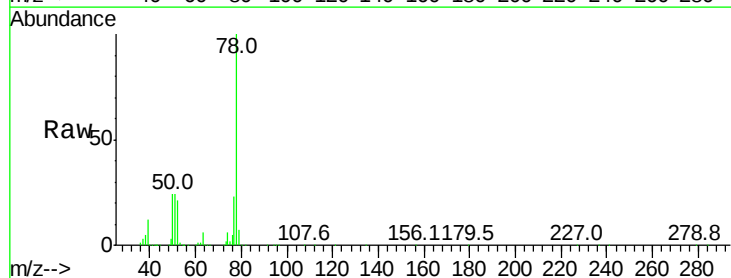
Tgt Ion: 78 Resp: 2744924

Ion Ratio Lower Upper

78 100

77 23.4 18.6 28.0

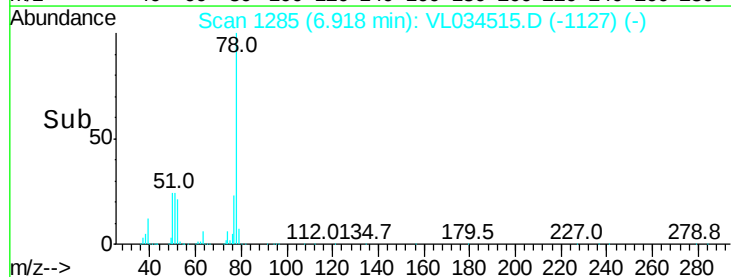
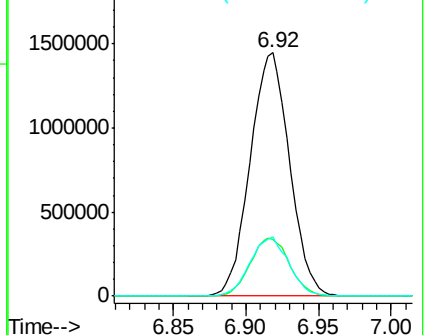
50 24.1 18.8 28.2

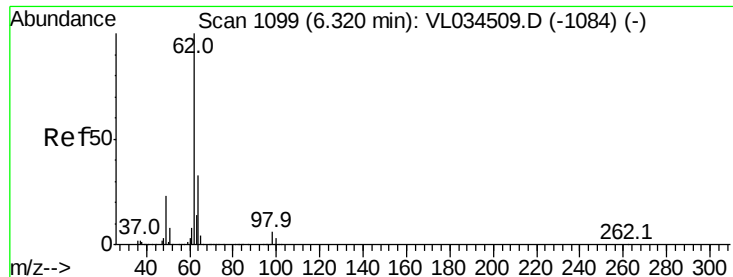


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#37

1,2-Dichloroethane

Concen: 12.950 ppbv

RT: 6.33 min Scan# 1101

Delta R.T. 0.01 min

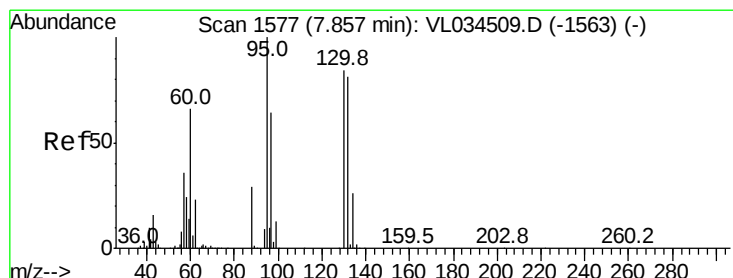
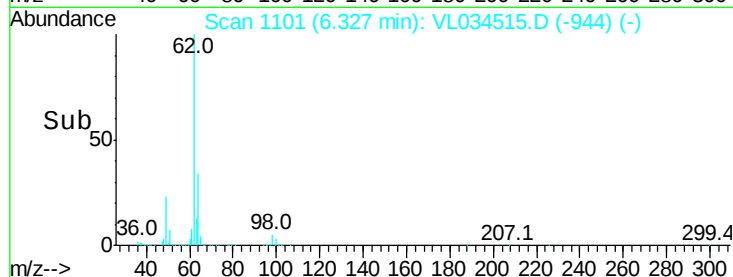
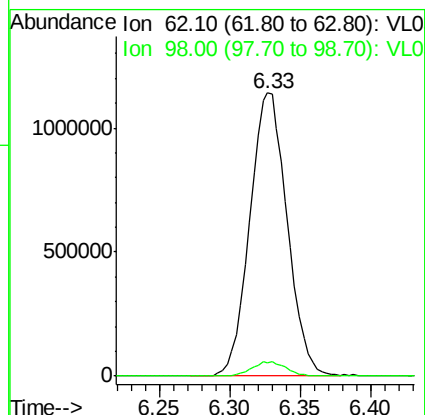
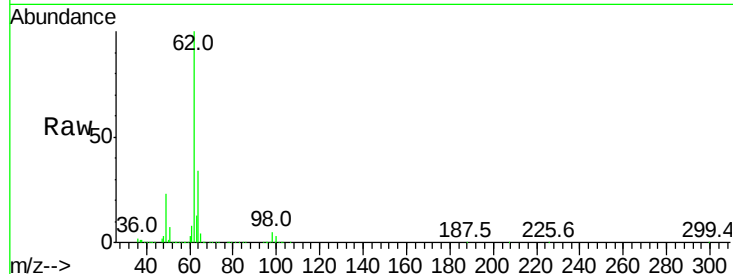
Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Tgt Ion: 62 Resp: 2111941

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 62  | 100   |       |       |
| 98  | 4.8   | 3.8   | 5.6   |



#38

Trichloroethene

Concen: 12.526 ppbv

RT: 7.87 min Scan# 1580

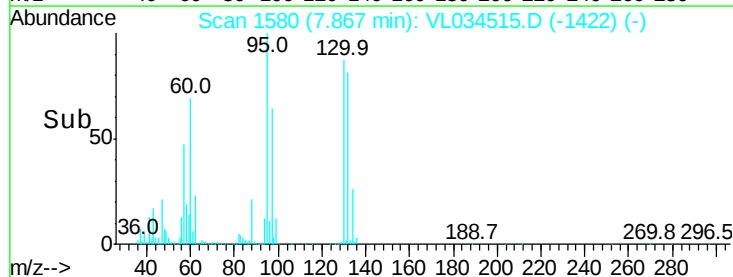
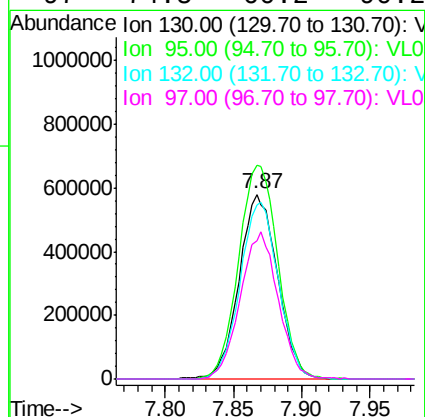
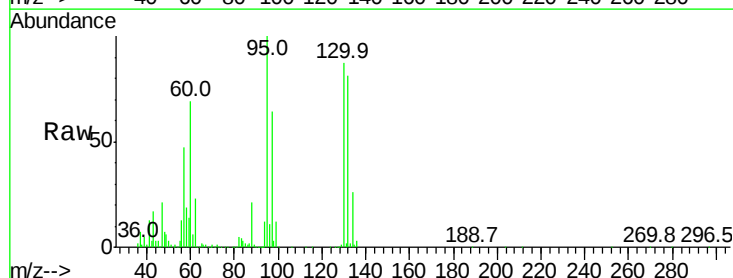
Delta R.T. 0.01 min

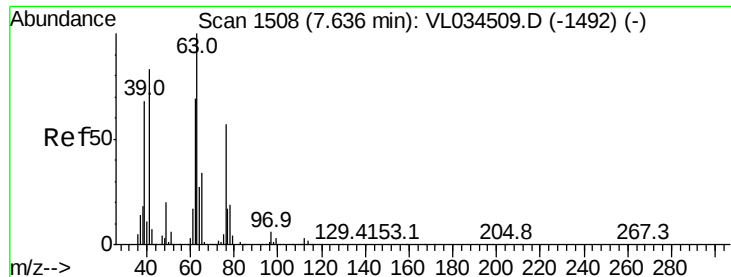
Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Tgt Ion: 130 Resp: 1128381

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 130 | 100   |       |       |
| 95  | 115.6 | 94.2  | 141.2 |
| 132 | 94.1  | 76.1  | 114.1 |
| 97  | 74.5  | 60.2  | 90.2  |





#39

1,2-Dichloropropane

Concen: 13.631 ppbv

RT: 7.64 min Scan# 1510

Delta R.T. 0.01 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

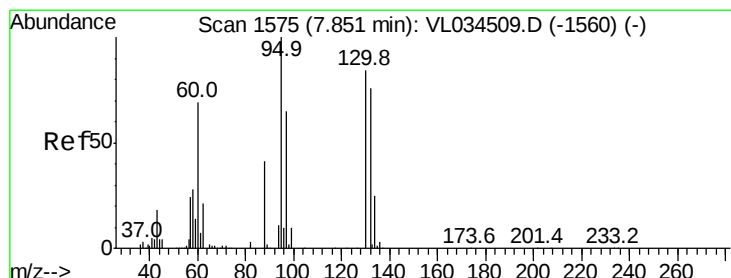
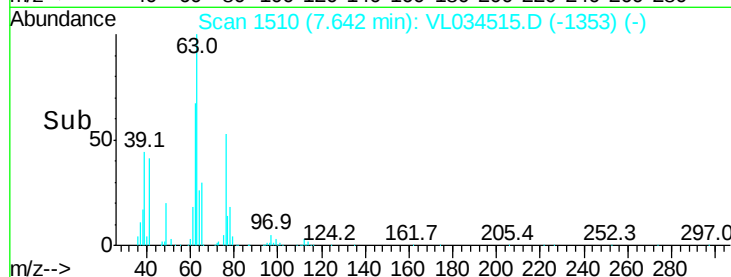
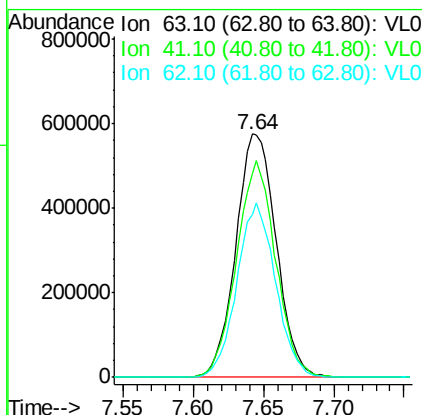
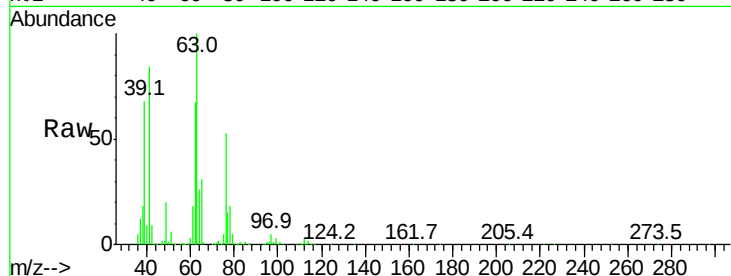
Tgt Ion: 63 Resp: 1152833

Ion Ratio Lower Upper

63 100

41 83.4 66.1 99.1

62 66.5 54.9 82.3



#40

1,4-Dioxane

Concen: 10.131 ppbv

RT: 7.86 min Scan# 1577

Delta R.T. 0.01 min

Lab File: VL034515.D

Acq: 30 Dec 2019 14:16

Tgt Ion: 88 Resp: 374287

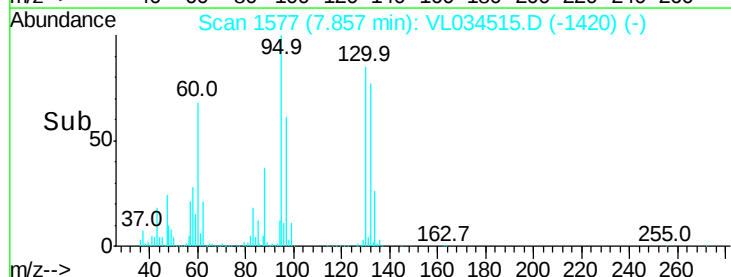
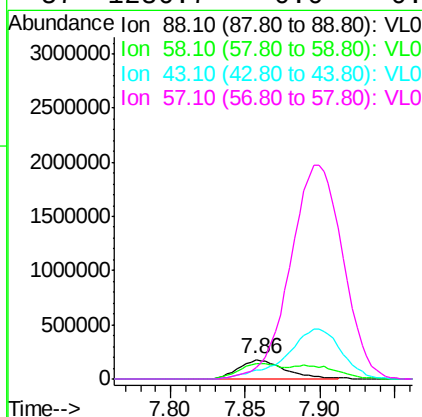
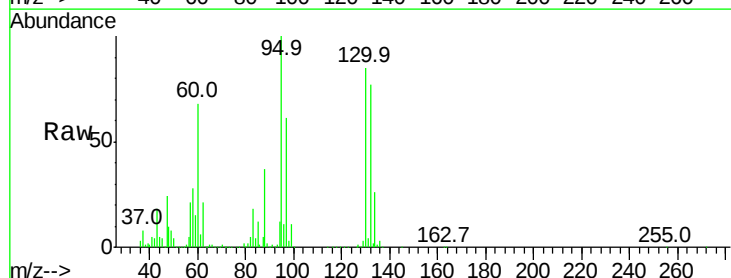
Ion Ratio Lower Upper

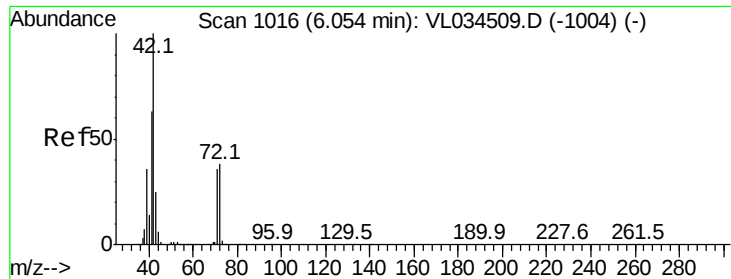
88 100

58 146.2 107.9 161.9

43 319.5 0.0 0.0#

57 1286.7 0.0 0.0#

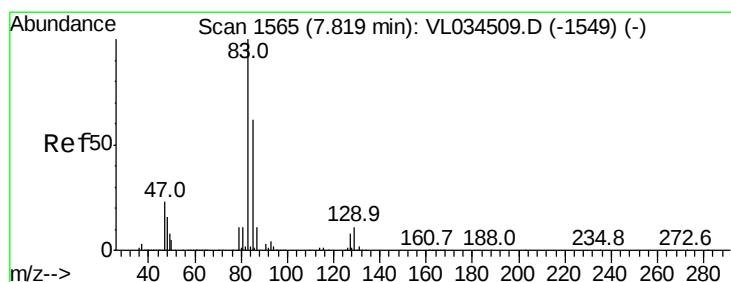
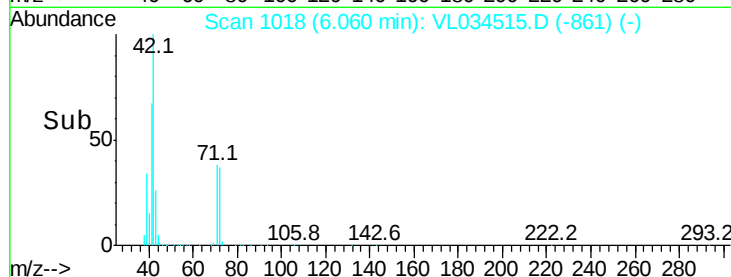
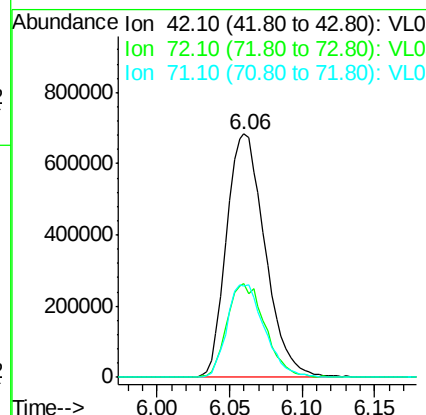
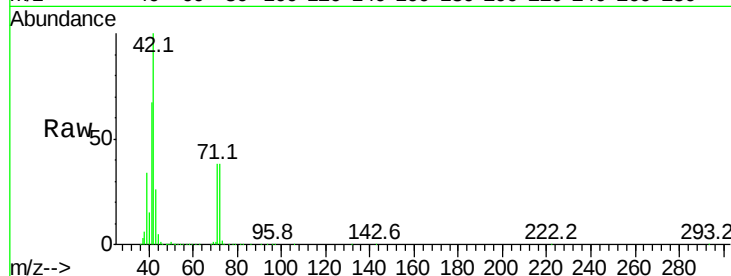




#41  
Tetrahydrofuran  
Concen: 12.394 ppbv  
RT: 6.06 min Scan# 1018  
Delta R.T. 0.01 min  
Lab File: VL034515.D  
Acq: 30 Dec 2019 14:16

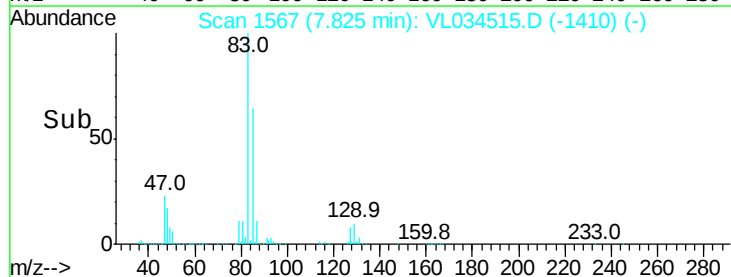
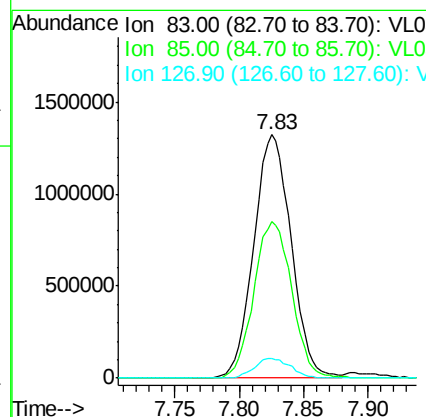
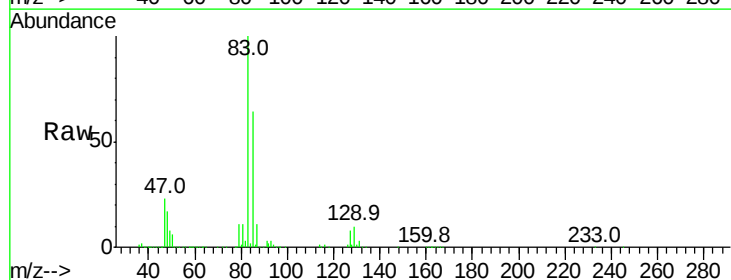
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

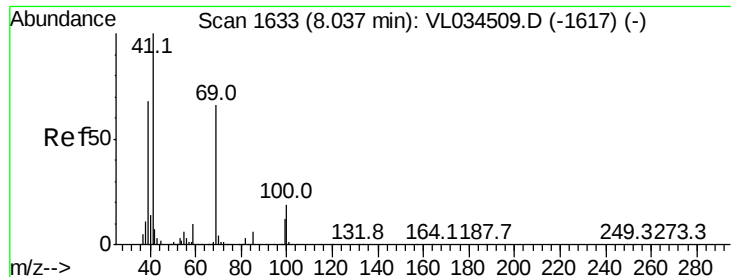
Tgt Ion: 42 Resp: 1256615  
Ion Ratio Lower Upper  
42 100  
72 38.2 30.9 46.3  
71 37.1 28.9 43.3



#42  
Bromodichloromethane  
Concen: 13.120 ppbv  
RT: 7.83 min Scan# 1567  
Delta R.T. 0.01 min  
Lab File: VL034515.D  
Acq: 30 Dec 2019 14:16

Tgt Ion: 83 Resp: 2675994  
Ion Ratio Lower Upper  
83 100  
85 64.2 49.4 74.2  
127 8.1 6.2 9.4

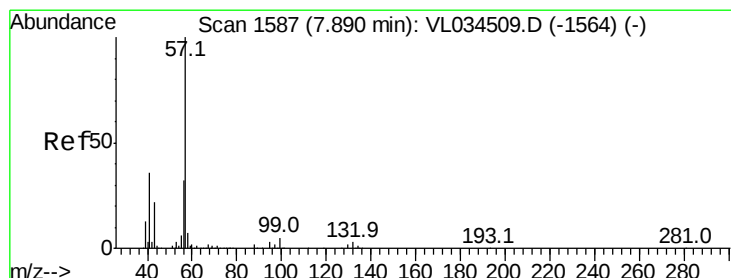
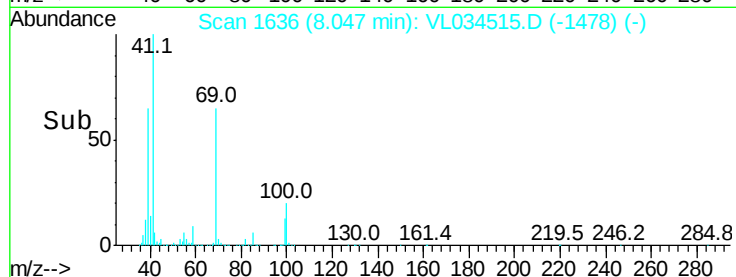
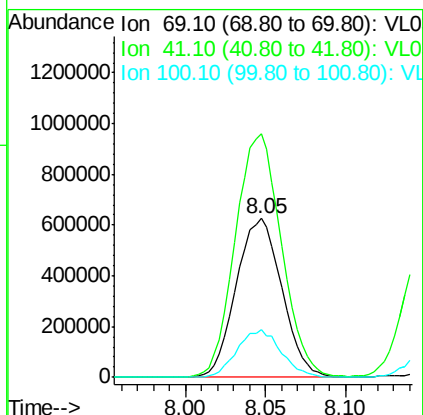
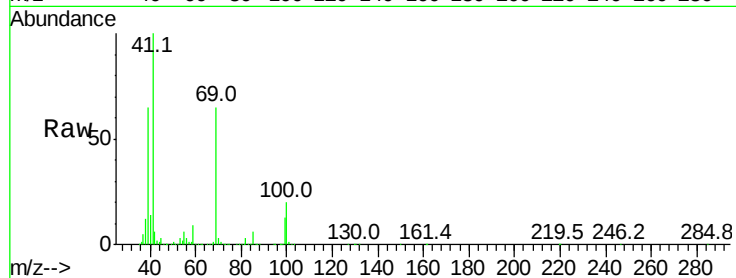




#43  
Methyl Methacrylate  
Concen: 13.363 ppbv  
RT: 8.05 min Scan# 1636  
Delta R.T. 0.01 min  
Lab File: VL034515.D  
Acq: 30 Dec 2019 14:16

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Tgt Ion: 69 Resp: 1216685  
Ion Ratio Lower Upper  
69 100  
41 155.5 124.0 186.0  
100 29.1 23.1 34.7



#44  
2,2,4-Trimethylpentane  
Concen: 11.990 ppbv  
RT: 7.90 min Scan# 1589  
Delta R.T. 0.01 min  
Lab File: VL034515.D  
Acq: 30 Dec 2019 14:16

Tgt Ion: 57 Resp: 4810018  
Ion Ratio Lower Upper  
57 100  
41 37.0 29.0 43.4  
56 32.5 24.9 37.3

