

Data File : VL033995.D  
Acq On : 2 Jul 2019 17:30  
Operator : SY/AP  
Sample : VSTDIC015  
Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Quant Time: Jul 02 19:27:55 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL070219AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Jul 02 16:27:55 2019  
QLast Update : Tue Jul 02 16:27:55 2019  
Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.74  | 49   | 1163368  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.27  | 114  | 2975217  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.21 | 117  | 3230775  | 10.00 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.55  | 95    | 2345335  | 8.84     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 88.40% |

#### Target Compounds

|                                |      |     |         |        |        | Qvalue |
|--------------------------------|------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.06 | 85  | 2652031 | 14.049 | ppbv   | 97     |
| 3) Chlorodifluoromethane       | 3.00 | 51  | 1860423 | 13.584 | ppbv   | 99     |
| 4) Chloromethane               | 3.16 | 50  | 1074151 | 13.750 | ppbv   | 98     |
| 5) Vinyl Chloride              | 3.27 | 62  | 1189739 | 16.414 | ppbv   | 99     |
| 6) Bromomethane                | 3.50 | 94  | 764624  | 15.879 | ppbv   | 100    |
| 7) Chloroethane                | 3.58 | 64  | 463711  | 16.176 | ppbv   | 99     |
| 8) Dichlorotetrafluoroethane   | 3.20 | 85  | 3047037 | 15.103 | ppbv   | 100    |
| 9) Propene                     | 3.02 | 41  | 727433  | 14.195 | ppbv   | 95     |
| 10) Heptane                    | 8.22 | 43  | 2084237 | 16.091 | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 3.99 | 101 | 4603576 | 18.900 | ppbv   | 97     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.53 | 101 | 3318379 | 20.158 | ppbv   | 100    |
| 13) Ethanol                    | 3.63 | 45  | 166892  | 10.010 | ppbv   | 94     |
| 14) Bromoethene                | 3.77 | 108 | 1030760 | 16.803 | ppbv   | 99     |
| 15) Acetone                    | 3.88 | 43  | 3135781 | 18.481 | ppbv   | 99     |
| 16) 1,3-Butadiene              | 3.35 | 39  | 1004703 | 15.557 | ppbv   | 100    |
| 17) tert-Butyl alcohol         | 4.34 | 59  | 2758584 | 20.798 | ppbv   | 99     |
| 18) 1,1-Dichloroethene         | 4.33 | 96  | 1507883 | 21.686 | ppbv   | 96     |
| 19) Isopropyl Alcohol          | 4.01 | 45  | 2106123 | 21.728 | ppbv   | 99     |
| 20) Methylene Chloride         | 4.39 | 84  | 1353373 | 20.454 | ppbv   | 93     |
| 21) Allyl Chloride             | 4.46 | 41  | 2296581 | 23.828 | ppbv   | 100    |
| 22) trans-1,2-Dichloroethene   | 4.94 | 96  | 1134069 | 15.473 | ppbv   | 98     |
| 23) Vinyl Acetate              | 5.13 | 43  | 2922836 | 14.820 | ppbv   | 99     |
| 24) 1,1-Dichloroethane         | 5.07 | 63  | 2343648 | 15.279 | ppbv   | 99     |
| 25) Ethyl Acetate              | 5.74 | 43  | 3947062 | 15.275 | ppbv   | 100    |
| 26) Hexane                     | 5.76 | 57  | 1831000 | 15.563 | ppbv   | 97     |
| 27) Carbon Disulfide           | 4.60 | 76  | 4071405 | 24.909 | ppbv   | 99     |
| 28) Methyl tert-Butyl Ether    | 5.09 | 73  | 3032956 | 17.048 | ppbv   | 100    |
| 29) Chloroform                 | 5.83 | 83  | 3104941 | 15.409 | ppbv   | 97     |
| 30) Cyclohexane                | 7.22 | 84  | 1515771 | 18.235 | ppbv   | 96     |
| 31) cis-1,2-Dichloroethene     | 5.62 | 61  | 1863060 | 18.059 | ppbv   | 98     |
| 32) 1,1,1-Trichloroethane      | 6.60 | 97  | 3161085 | 16.263 | ppbv   | 99     |
| 34) 2-Butanone                 | 5.31 | 43  | 2309651 | 13.761 | ppbv   | 99     |
| 35) Carbon Tetrachloride       | 7.11 | 117 | 3310713 | 14.402 | ppbv   | 98     |
| 36) Benzene                    | 6.98 | 78  | 3619151 | 15.924 | ppbv   | 100    |
| 37) 1,2-Dichloroethane         | 6.39 | 62  | 2471316 | 14.703 | ppbv   | 99     |
| 38) Trichloroethene            | 7.93 | 130 | 1610683 | 18.202 | ppbv   | 97     |
| 39) 1,2-Dichloropropane        | 7.71 | 63  | 1321154 | 15.062 | ppbv   | 98     |
| 40) 1,4-Dioxane                | 7.93 | 88  | 522127  | 14.594 | ppbv # | 93     |
| 41) Tetrahydrofuran            | 6.12 | 42  | 1254199 | 14.722 | ppbv   | 99     |
| 42) Bromodichloromethane       | 7.89 | 83  | 3415524 | 15.206 | ppbv   | 99     |
| 43) Methyl Methacrylate        | 8.11 | 69  | 1471861 | 17.316 | ppbv   | 99     |

Data File : VL033995.D  
Acq On : 2 Jul 2019 17:30  
Operator : SY/AP  
Sample : VSTDIC015  
Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Quant Time: Jul 02 19:27:55 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL070219AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Jul 02 16:27:55 2019  
QLast Update : Tue Jul 02 16:27:55 2019  
Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.97  | 57   | 6150240  | 15.217 | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.39  | 75   | 2175185  | 19.503 | ppbv   | 95       |
| 46) cis-1,3-Dichloropropene   | 8.81  | 75   | 2442028  | 19.111 | ppbv   | 95       |
| 47) 1,1,2-Trichloroethane     | 9.59  | 97   | 1654477  | 15.822 | ppbv   | 95       |
| 48) Dibromochloromethane      | 10.43 | 129  | 3094989  | 16.470 | ppbv   | 100      |
| 49) Bromoform                 | 13.17 | 173  | 2780425  | 16.761 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.84  | 43   | 3814151  | 15.239 | ppbv   | 99       |
| 51) 2-Hexanone                | 10.24 | 43   | 3113721  | 15.931 | ppbv # | 99       |
| 52) Tetrachloroethene         | 11.34 | 164  | 1547389  | 19.350 | ppbv   | 98       |
| 53) Toluene                   | 9.92  | 91   | 4585412  | 18.232 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.73 | 107  | 2578639  | 16.359 | ppbv   | 96       |
| 56) 1,1,1,2-Tetrachloroethane | 12.25 | 131  | 1943255  | 13.769 | ppbv # | 71       |
| 57) Chlorobenzene             | 12.27 | 112  | 3456974  | 14.287 | ppbv # | 97       |
| 58) Ethyl Benzene             | 12.84 | 91   | 6098842  | 16.744 | ppbv   | 100      |
| 59) m/p-Xylene                | 13.12 | 91   | 5638149  | 17.021 | ppbv # | 43       |
| 60) o-Xylene                  | 13.82 | 91   | 5025149  | 14.693 | ppbv   | 100      |
| 61) Styrene                   | 13.66 | 104  | 3829013  | 17.301 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.79 | 105  | 6803837  | 14.761 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.81 | 83   | 3497420  | 13.586 | ppbv   | 100      |
| 64) n-propylbenzene           | 15.70 | 120  | 1752278  | 14.845 | ppbv   | 98       |
| 65) tert-Butylbenzene         | 16.88 | 119  | 6097073  | 14.295 | ppbv   | 99       |
| 66) Benzyl Chloride           | 17.13 | 91   | 3590894  | 16.614 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 17.43 | 105  | 8486315  | 14.183 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.79 | 119  | 7082284  | 14.226 | ppbv   | 99       |
| 70) n-Butylbenzene            | 18.69 | 91   | 7278699  | 13.349 | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.59 | 91   | 5156040  | 15.184 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.97 | 105  | 6013428  | 15.451 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.13 | 105  | 5656149  | 14.754 | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene    | 16.90 | 105  | 5929758  | 13.420 | ppbv   | 97       |
| 75) 1,3-Dichlorobenzene       | 17.14 | 146  | 3566142  | 12.888 | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.28 | 146  | 3561564  | 14.018 | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 17.96 | 146  | 3386435  | 13.262 | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 23.51 | 225  | 2510755  | 12.589 | ppbv   | 99       |
| 79) Naphthalene               | 22.37 | 128  | 5657994  | 16.020 | ppbv   | 98       |
| 80) Naphthalene,2-methyl-     | 25.09 | 142  | 2241511  | 15.907 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 22.10 | 180  | 3321707  | 14.898 | ppbv   | 100      |

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

Data File : VL033995.D

Acq On : 2 Jul 2019 17:30

Operator : SY/AP

Sample : VSTDICC015

Misc : 400ml/MSVOA L

ALS Vial : 1 Sample Multiplier: 1

**Instrument :**  
MSVOA\_L  
**ClientSampleId :**  
VSTDICC015

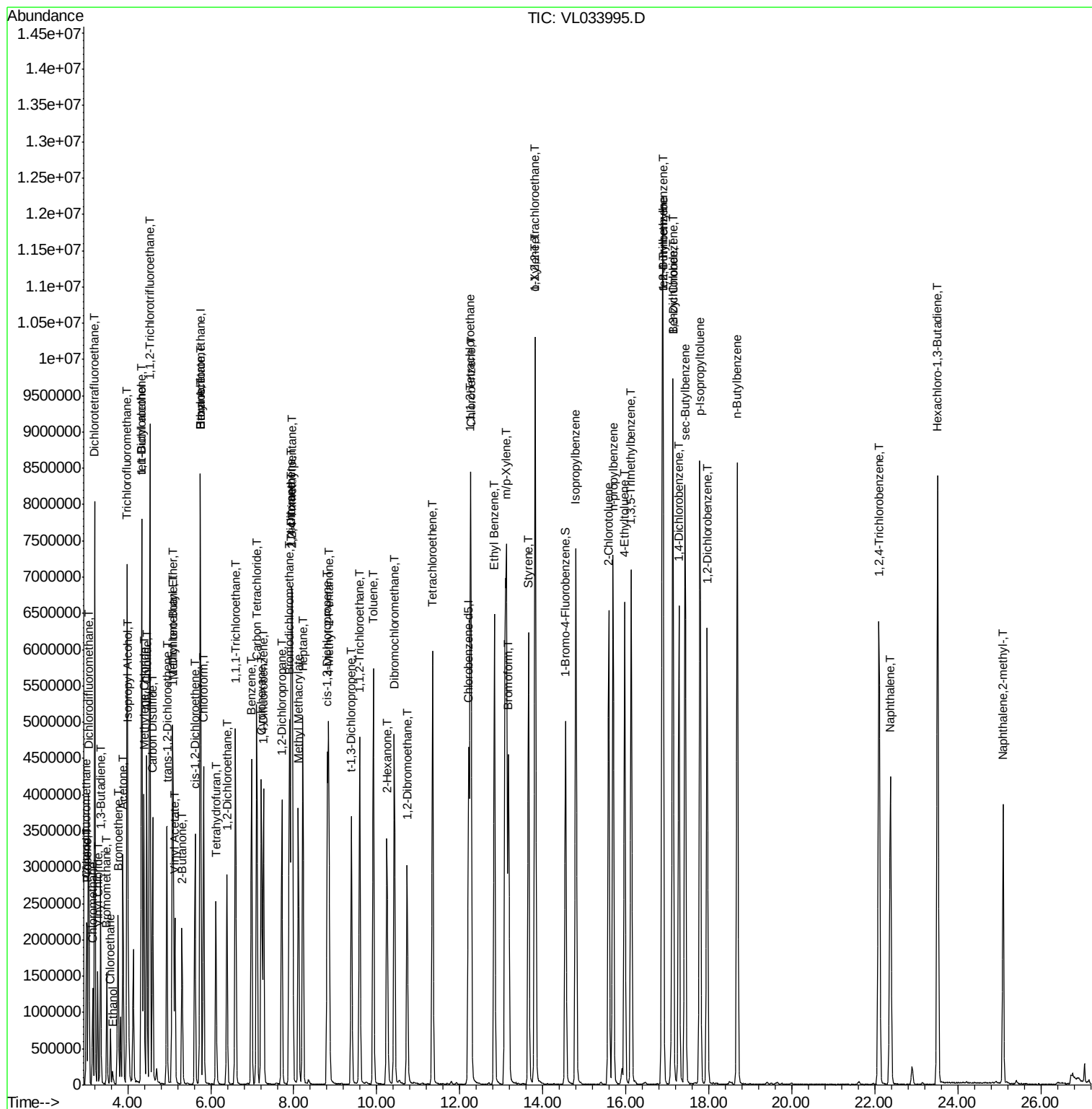
Quant Time: Jul 02 19:27:55 2019

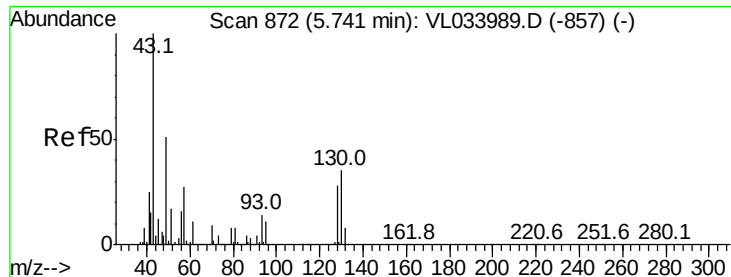
Quant Method : Z:\VOASRV\HPCHEM1\MSV0A\_L\METHODS\VL070219AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_LTue Jul 02 16:27:55 2019

QLast Update : Tue Jul 02 16:27:55 2019

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.74 min Scan# 872

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

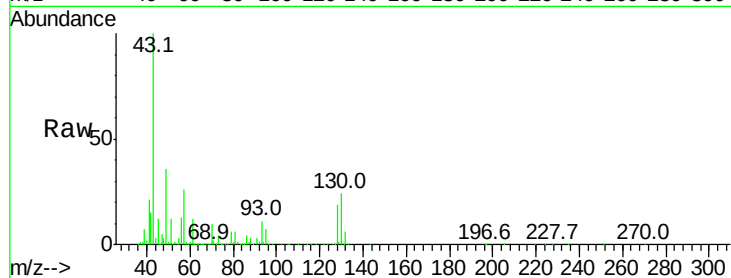
Tgt Ion: 49 Resp: 1163368

Ion Ratio Lower Upper

49 100

128 55.4 27.9 83.6

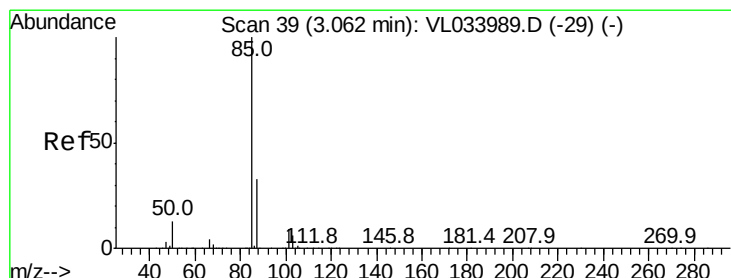
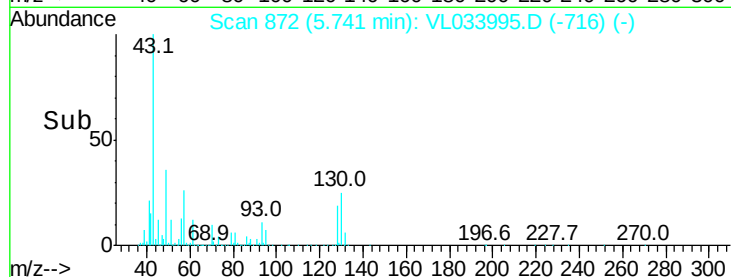
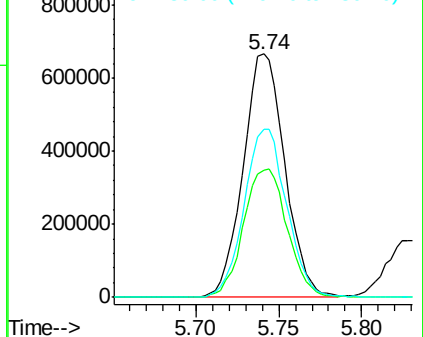
130 71.0 35.8 107.4



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: 14.049 ppbv

RT: 3.06 min Scan# 39

Delta R.T. 0.00 min

Lab File: VL033995.D

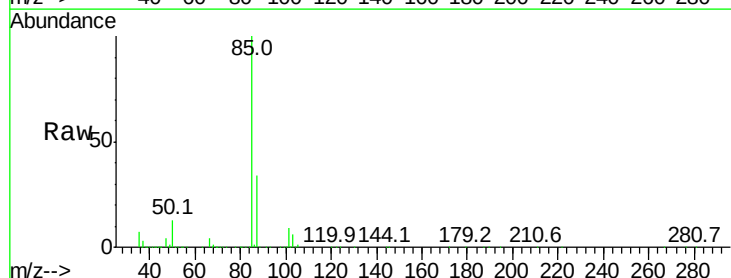
Acq: 2 Jul 2019 17:30

Tgt Ion: 85 Resp: 2652031

Ion Ratio Lower Upper

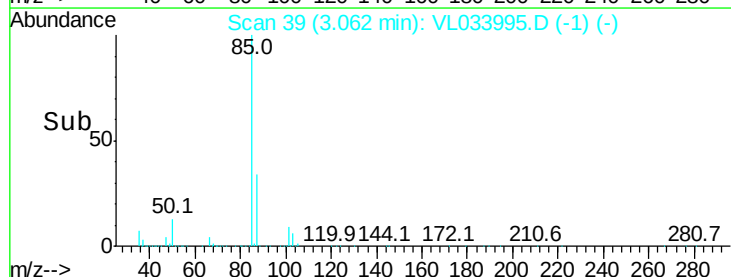
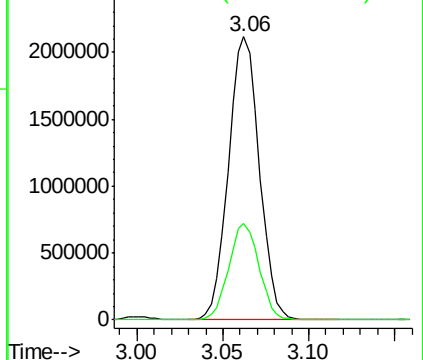
85 100

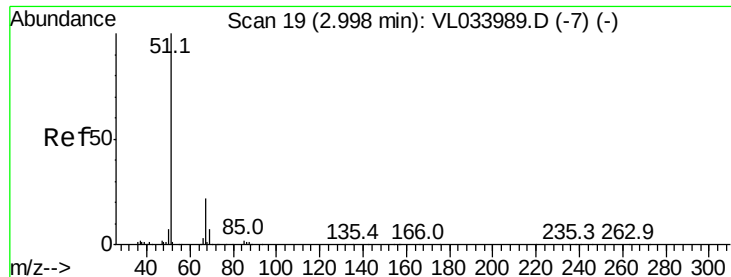
87 34.0 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

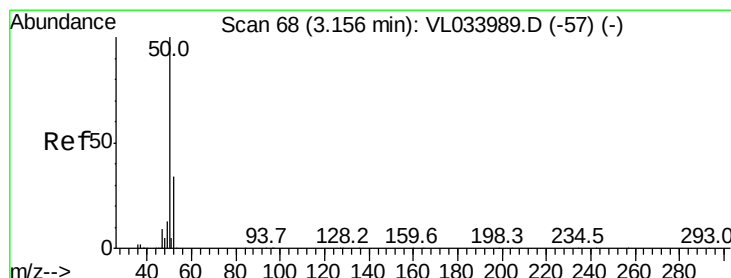
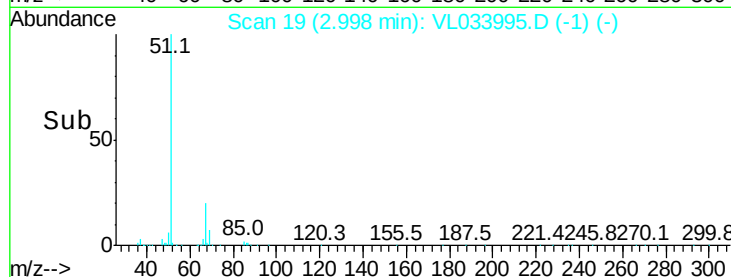
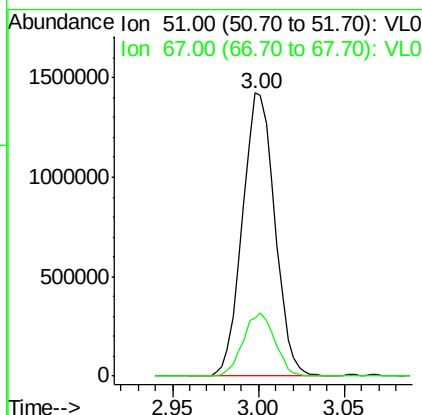
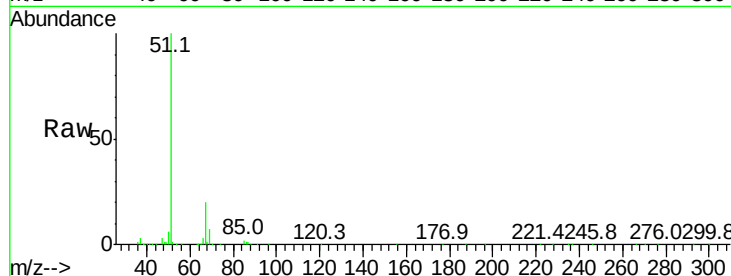




#3  
 Chlorodifluoromethane  
 Concen: 13.584 ppbv  
 RT: 3.00 min Scan# 19  
 Delta R.T. 0.00 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

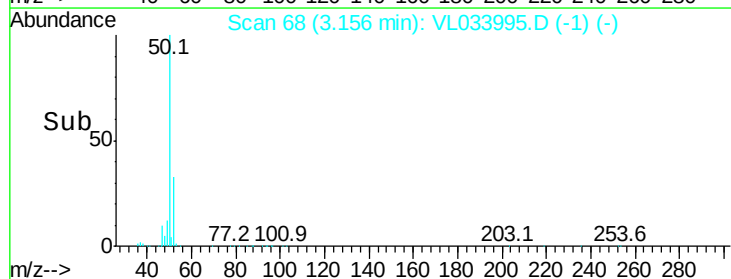
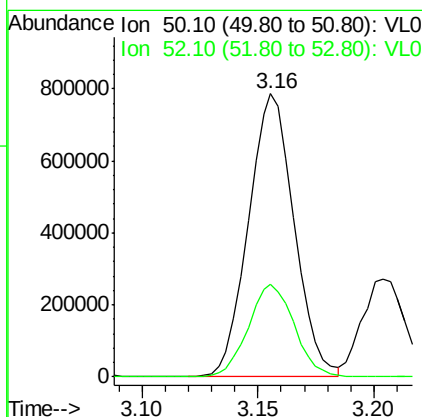
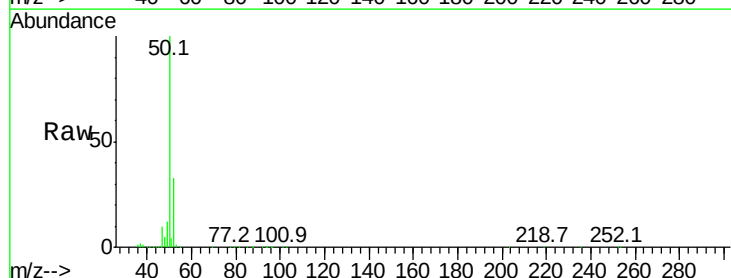
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

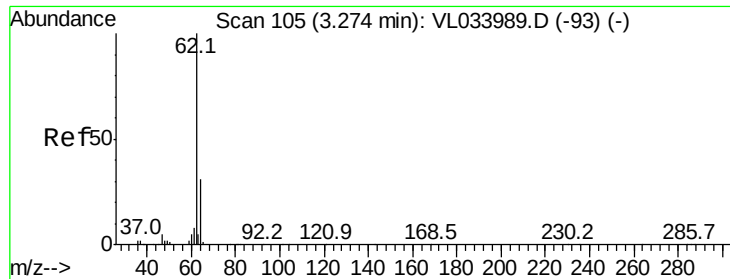
Tgt Ion: 51 Resp: 1860423  
 Ion Ratio Lower Upper  
 51 100  
 67 22.0 17.3 25.9



#4  
 Chloromethane  
 Concen: 13.750 ppbv  
 RT: 3.16 min Scan# 68  
 Delta R.T. 0.00 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

Tgt Ion: 50 Resp: 1074151  
 Ion Ratio Lower Upper  
 50 100  
 52 32.9 27.4 41.0





#5

Vinyl Chloride

Concen: 16.414 ppbv

RT: 3.27 min Scan# 105

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

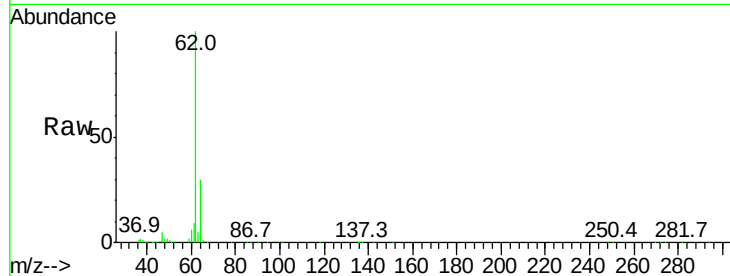
VSTDIC015

Tgt Ion: 62 Resp: 1189739

Ion Ratio Lower Upper

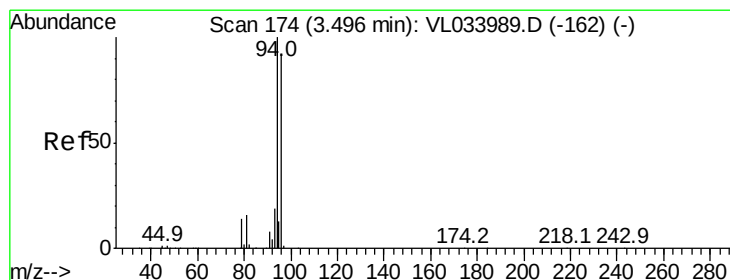
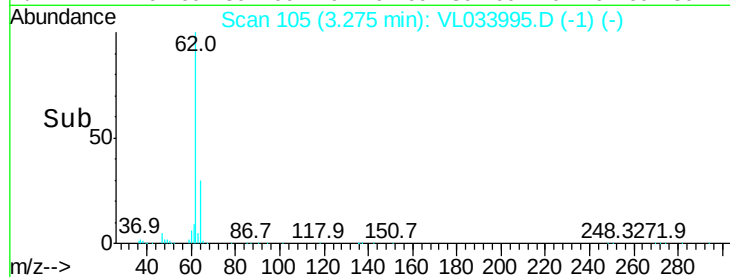
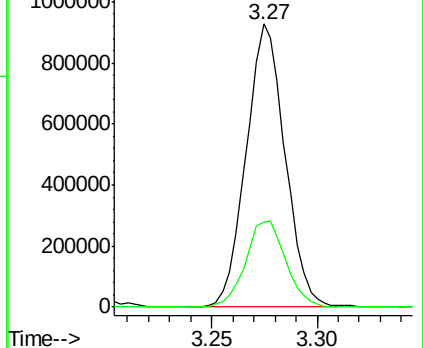
62 100

64 29.8 24.4 36.6



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 15.879 ppbv

RT: 3.50 min Scan# 175

Delta R.T. 0.00 min

Lab File: VL033995.D

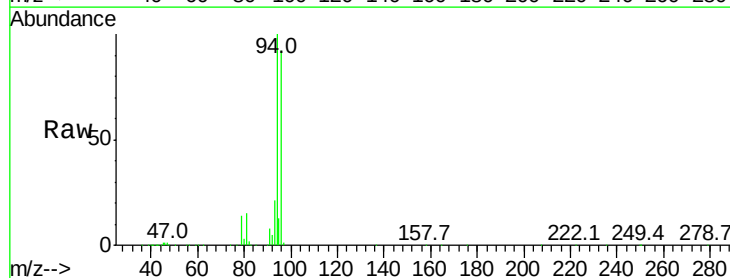
Acq: 2 Jul 2019 17:30

Tgt Ion: 94 Resp: 764624

Ion Ratio Lower Upper

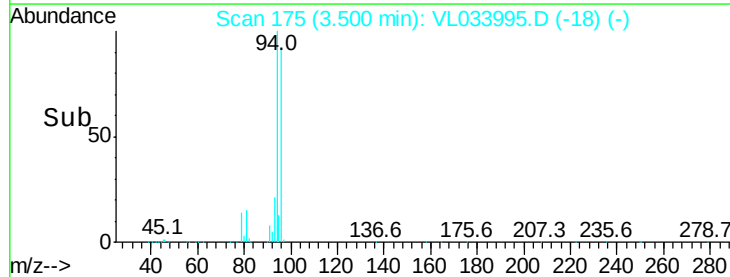
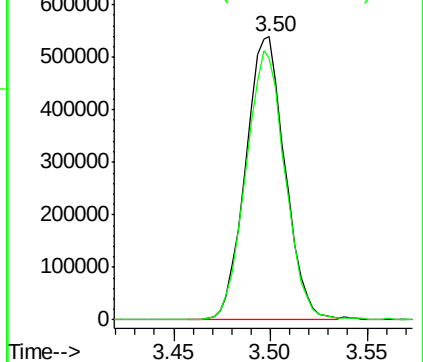
94 100

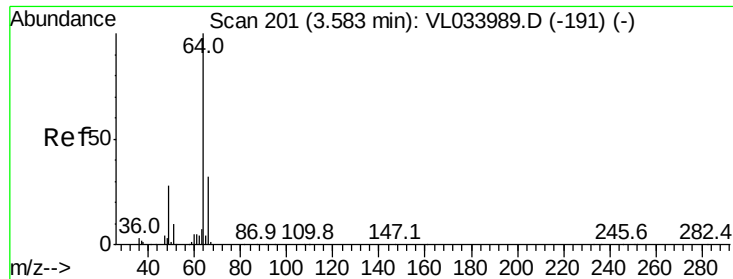
96 92.5 73.8 110.8



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 16.176 ppbv

RT: 3.58 min Scan# 201

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

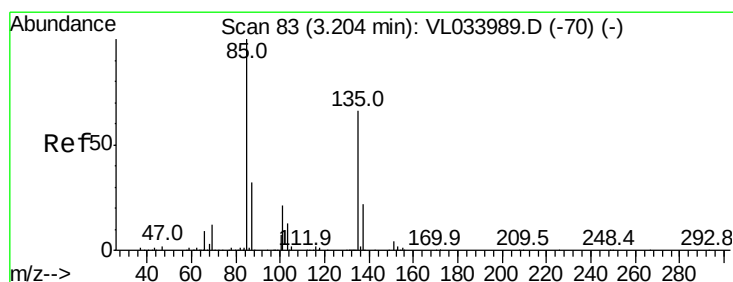
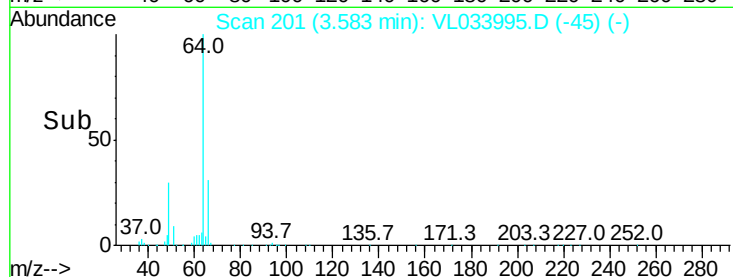
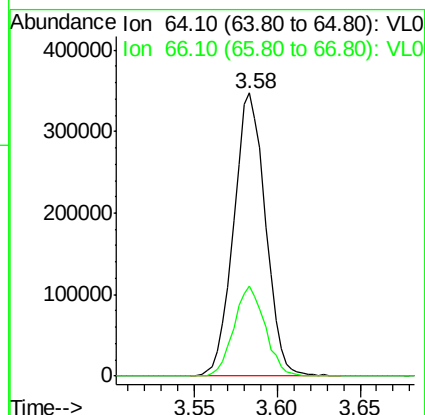
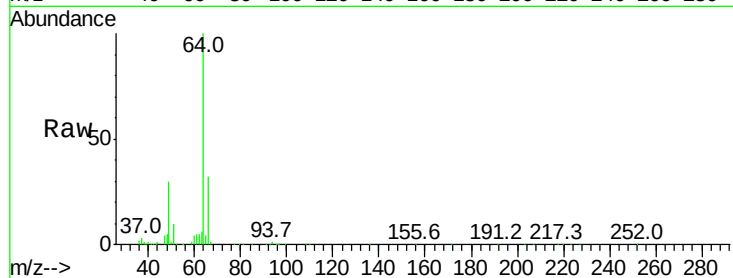
VSTDIC015

Tgt Ion: 64 Resp: 463711

Ion Ratio Lower Upper

64 100

66 31.9 25.3 37.9



#8

Dichlorotetrafluoroethane

Concen: 15.103 ppbv

RT: 3.20 min Scan# 83

Delta R.T. 0.00 min

Lab File: VL033995.D

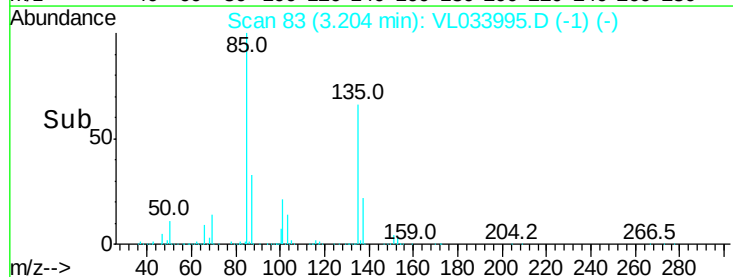
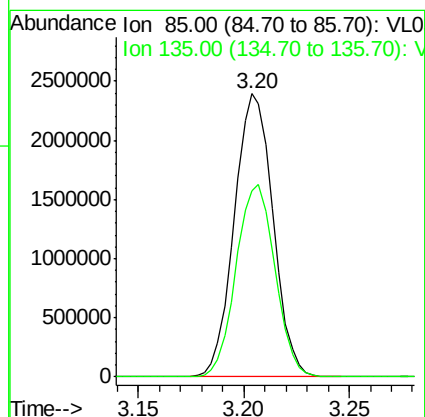
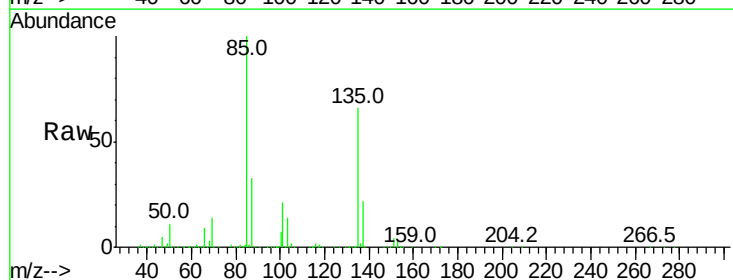
Acq: 2 Jul 2019 17:30

Tgt Ion: 85 Resp: 3047037

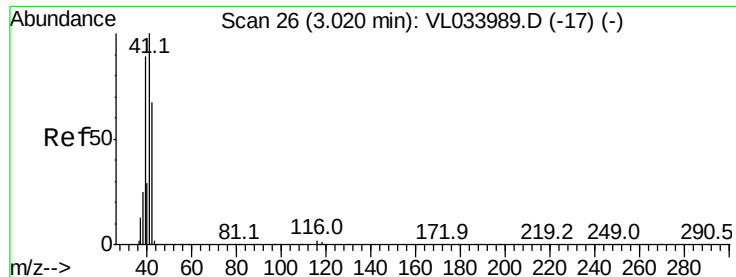
Ion Ratio Lower Upper

85 100

135 68.4 55.0 82.4







#9

Propene

Concen: 14.195 ppbv

RT: 3.02 min Scan# 26

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

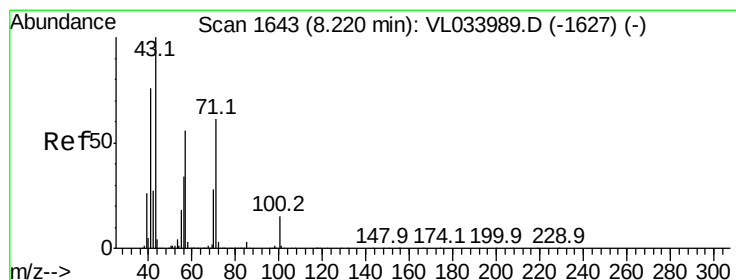
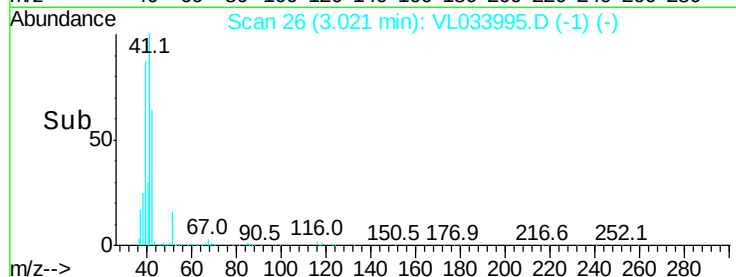
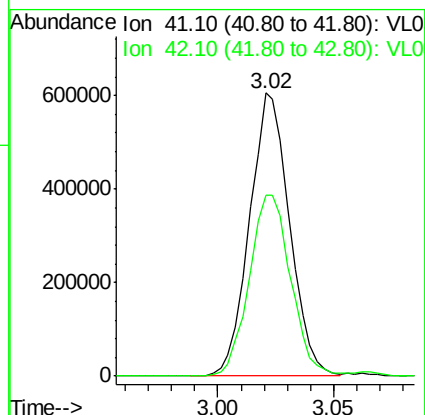
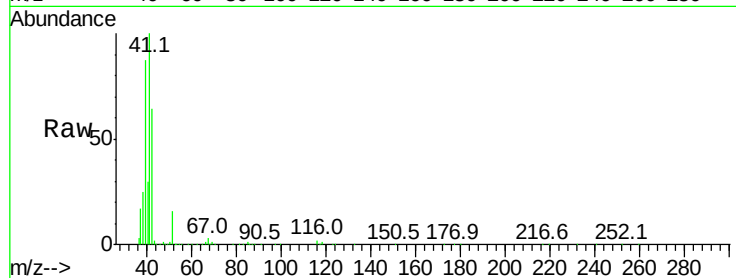
VSTDIC015

Tgt Ion: 41 Resp: 727433

Ion Ratio Lower Upper

41 100

42 67.5 57.1 85.7



#10

Heptane

Concen: 16.091 ppbv

RT: 8.22 min Scan# 1643

Delta R.T. 0.00 min

Lab File: VL033995.D

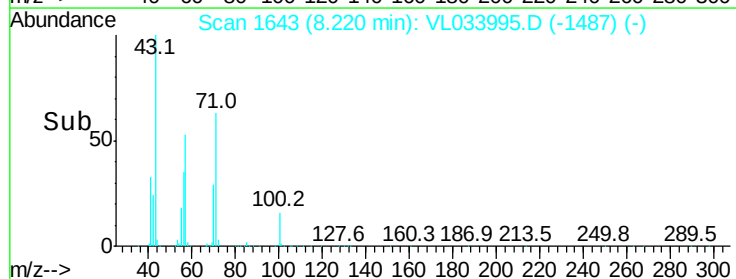
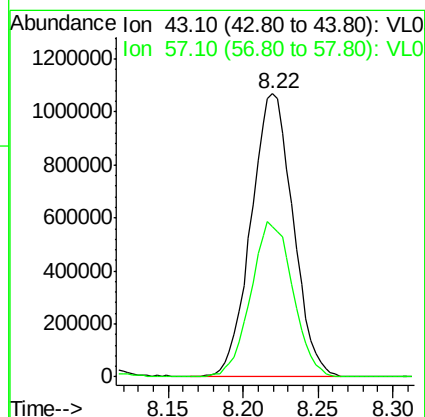
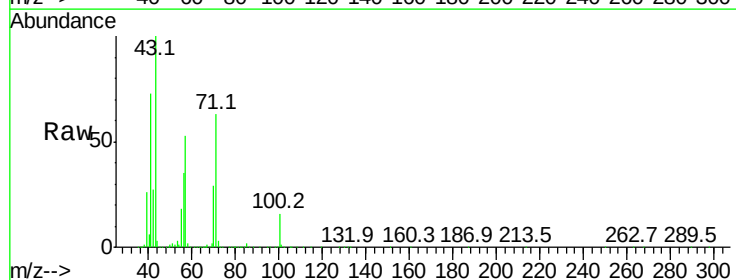
Acq: 2 Jul 2019 17:30

Tgt Ion: 43 Resp: 2084237

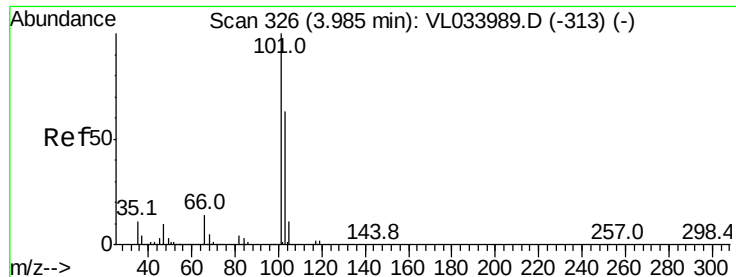
Ion Ratio Lower Upper

43 100

57 54.7 44.6 66.8



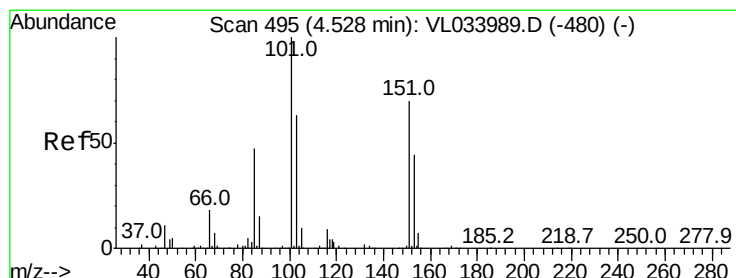
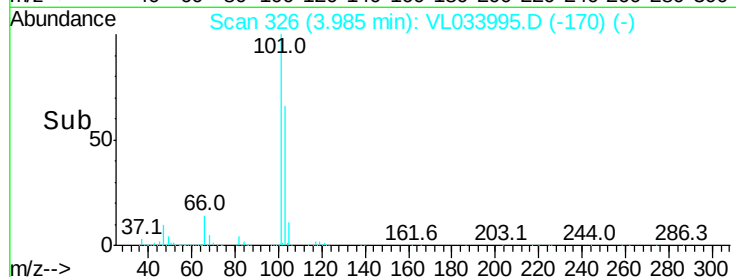
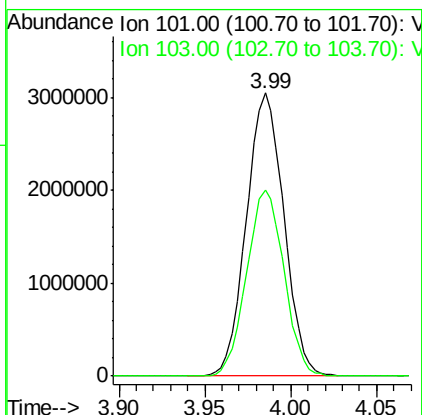
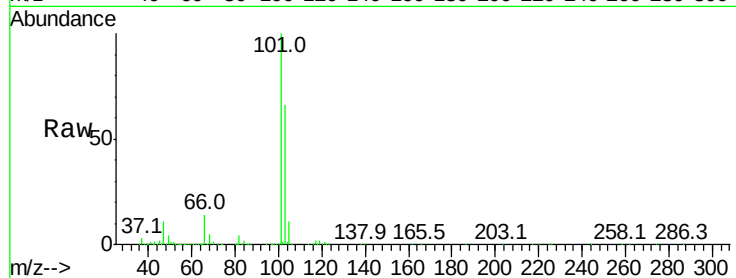




#11  
 Trichlorofluoromethane  
 Concen: 18.900 ppbv  
 RT: 3.99 min Scan# 326  
 Delta R.T. 0.00 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

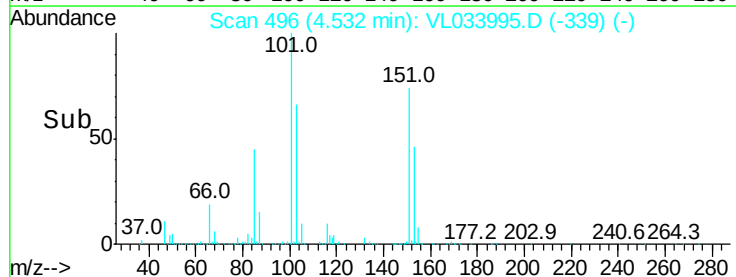
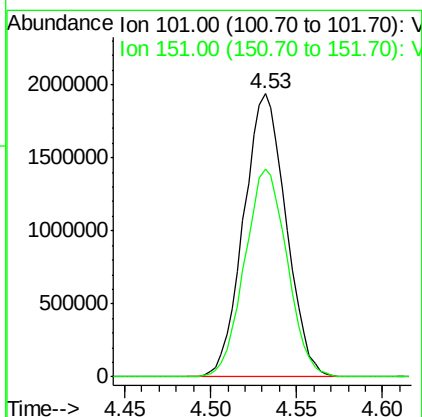
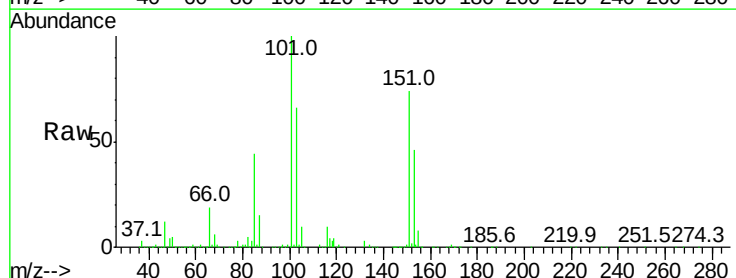
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

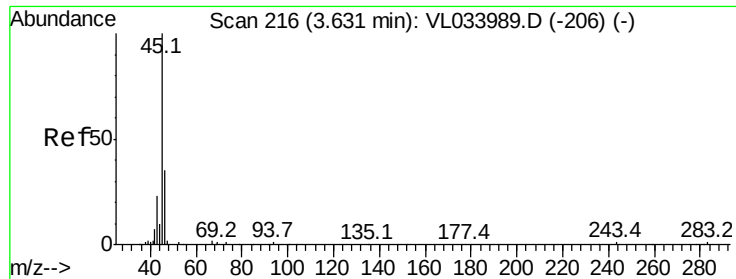
Tgt Ion:101 Resp: 4603576  
 Ion Ratio Lower Upper  
 101 100  
 103 65.7 50.8 76.2



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 20.158 ppbv  
 RT: 4.53 min Scan# 496  
 Delta R.T. 0.00 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

Tgt Ion:101 Resp: 3318379  
 Ion Ratio Lower Upper  
 101 100  
 151 73.8 59.0 88.4





#13

Ethanol

Concen: 10.010 ppbv

RT: 3.63 min Scan# 217

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

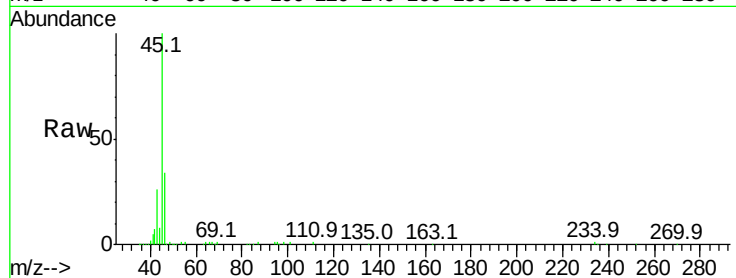
VSTDIC015

Tgt Ion: 45 Resp: 166892

Ion Ratio Lower Upper

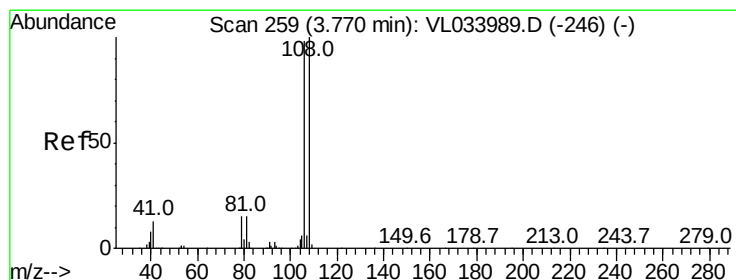
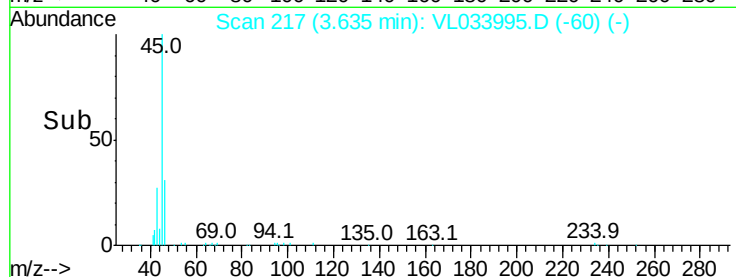
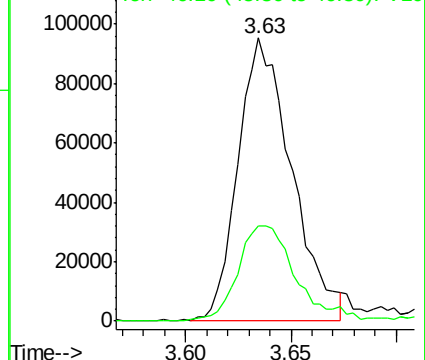
45 100

46 36.9 16.2 64.6



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0



#14

Bromoethene

Concen: 16.803 ppbv

RT: 3.77 min Scan# 259

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

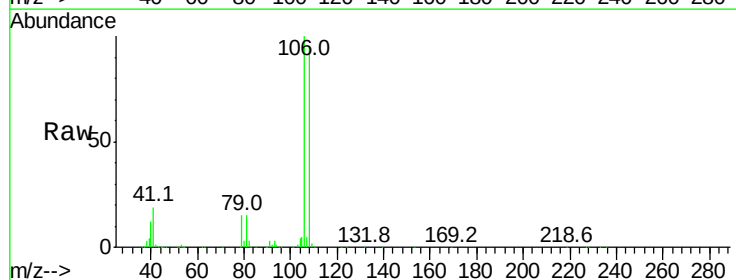
Tgt Ion: 108 Resp: 1030760

Ion Ratio Lower Upper

108 100

106 107.5 85.6 128.4

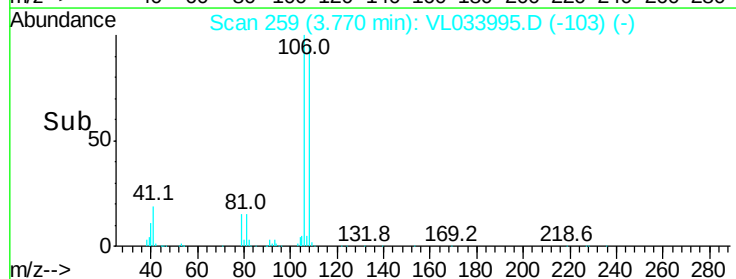
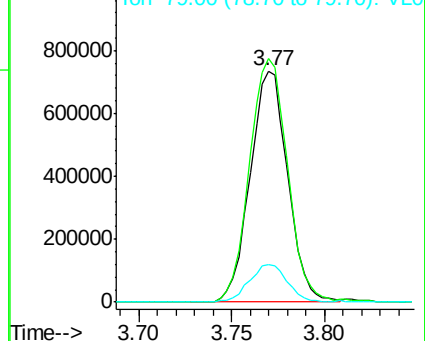
79 17.0 14.0 21.0

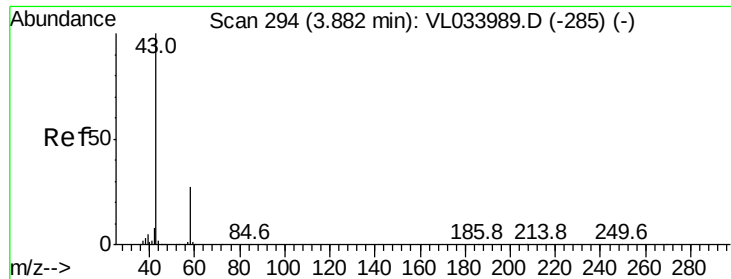


Abundance Ion 108.00 (107.70 to 108.70): V

Ion 106.00 (105.70 to 106.70): V

Ion 79.00 (78.70 to 79.70): VL0





#15

Acetone

Concen: 18.481 ppbv

RT: 3.88 min Scan# 294

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

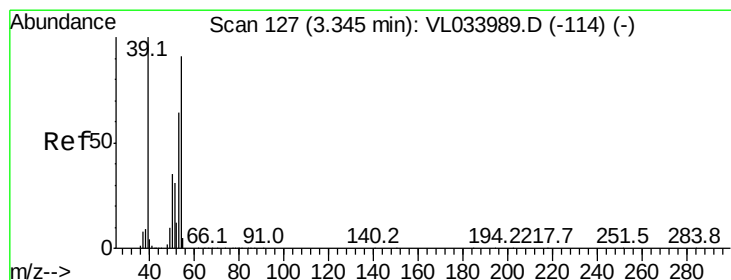
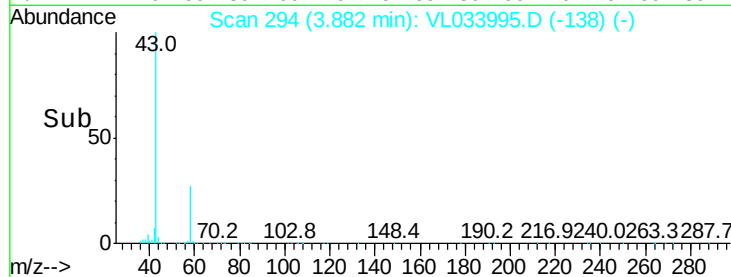
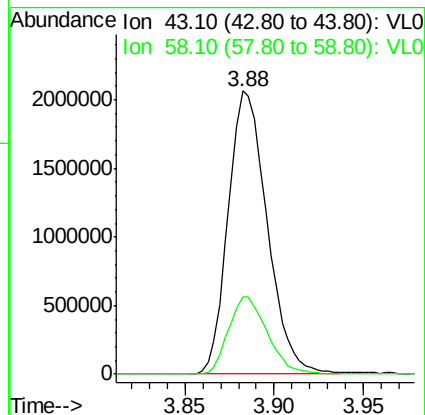
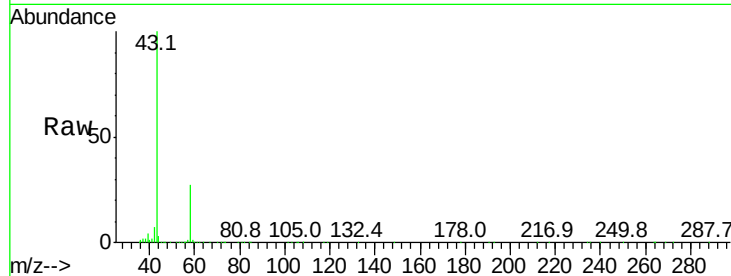
VSTDIC015

Tgt Ion: 43 Resp: 3135781

Ion Ratio Lower Upper

43 100

58 27.3 21.4 32.0



#16

1,3-Butadiene

Concen: 15.557 ppbv

RT: 3.35 min Scan# 128

Delta R.T. 0.00 min

Lab File: VL033995.D

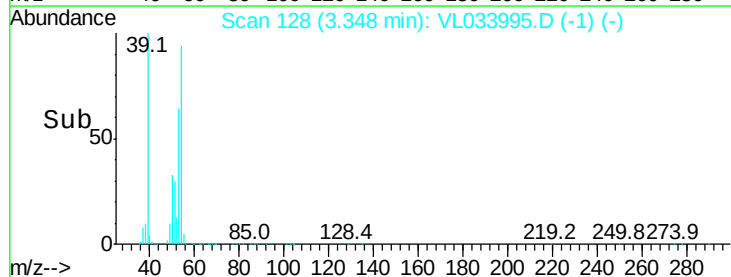
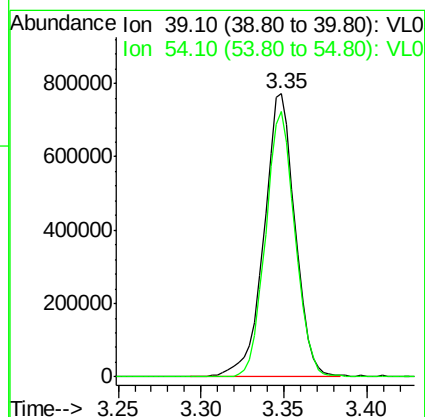
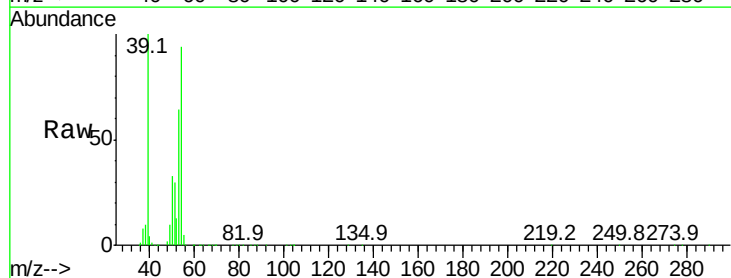
Acq: 2 Jul 2019 17:30

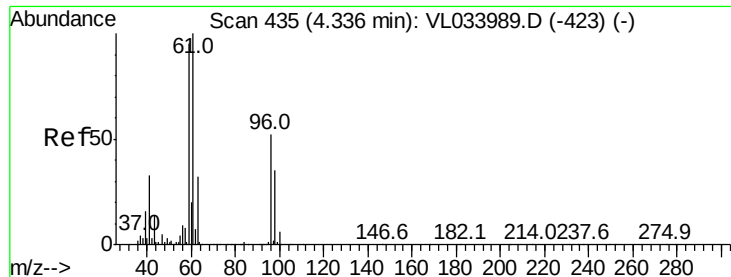
Tgt Ion: 39 Resp: 1004703

Ion Ratio Lower Upper

39 100

54 89.4 71.4 107.2





#17

tert-Butyl alcohol

Concen: 20.798 ppbv

RT: 4.34 min Scan# 436

Delta R.T. 0.00 min

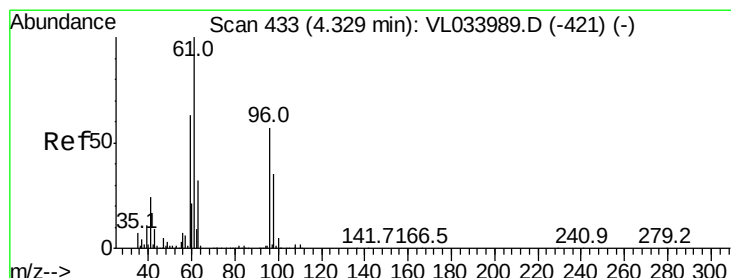
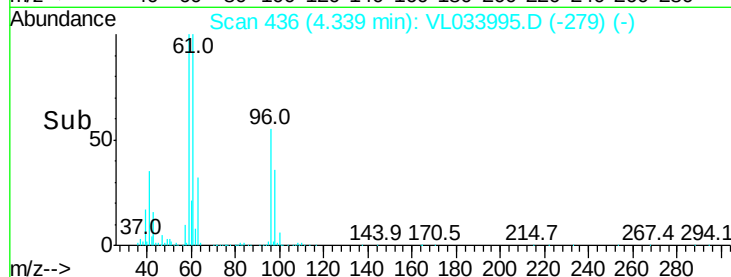
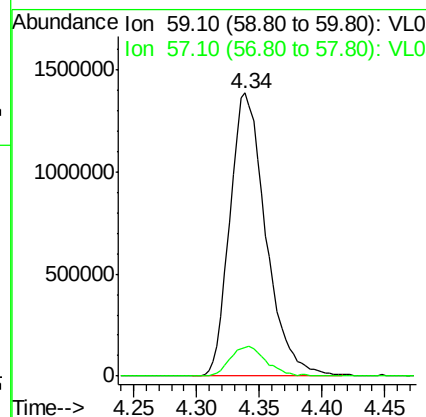
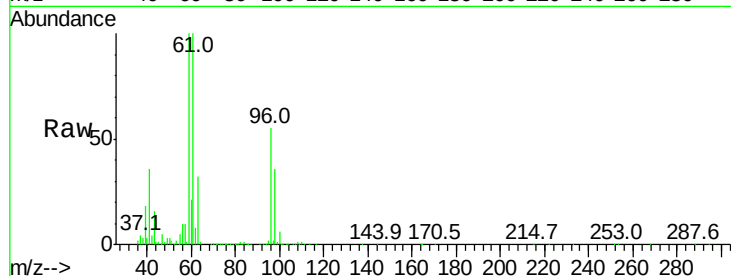
Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Tgt Ion: 59 Resp: 2758584

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 59  | 100   |       |       |
| 57  | 10.7  | 8.2   | 12.2  |



#18

1,1-Dichloroethene

Concen: 21.686 ppbv

RT: 4.33 min Scan# 434

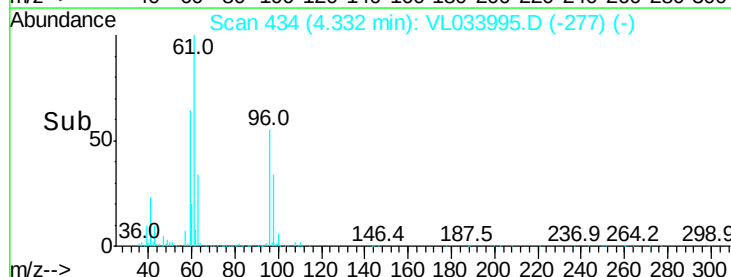
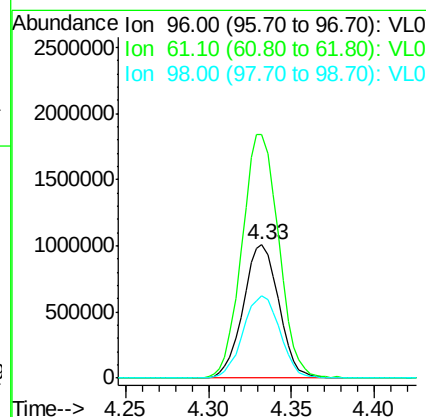
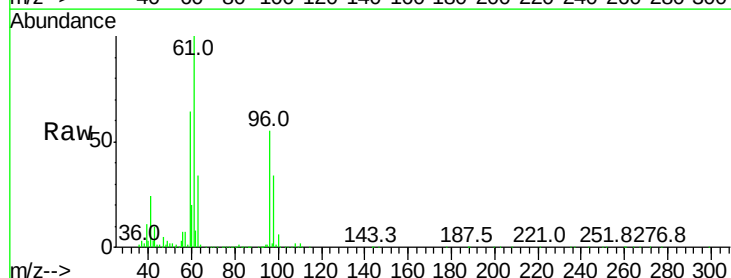
Delta R.T. 0.00 min

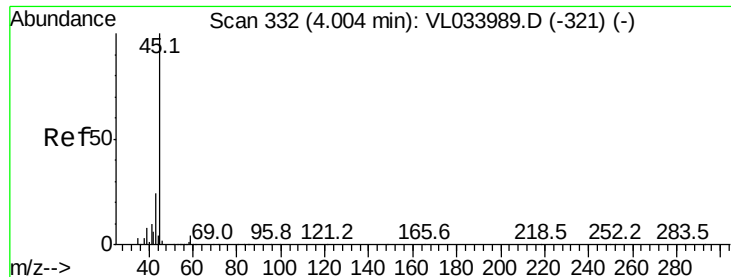
Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Tgt Ion: 96 Resp: 1507883

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 182.4 | 139.4 | 209.0 |
| 98  | 62.0  | 49.4  | 74.0  |





#19

Isopropyl Alcohol

Concen: 21.728 ppbv

RT: 4.01 min Scan# 333

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

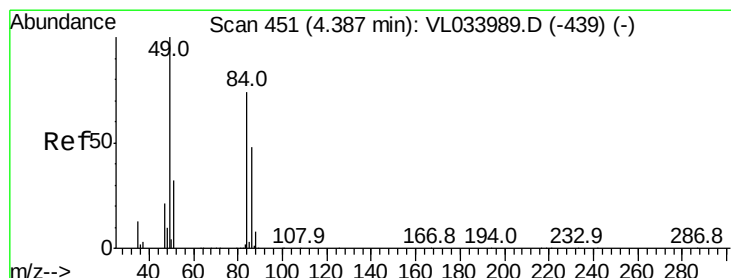
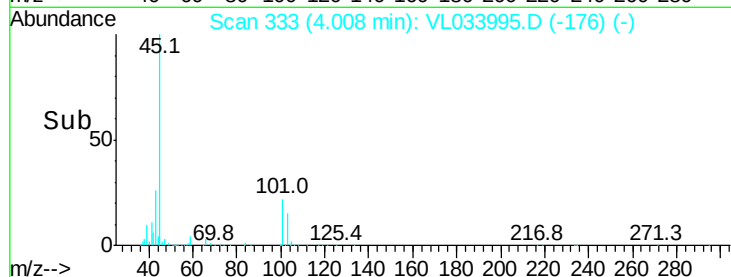
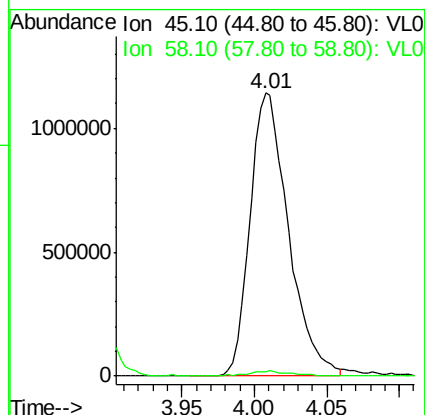
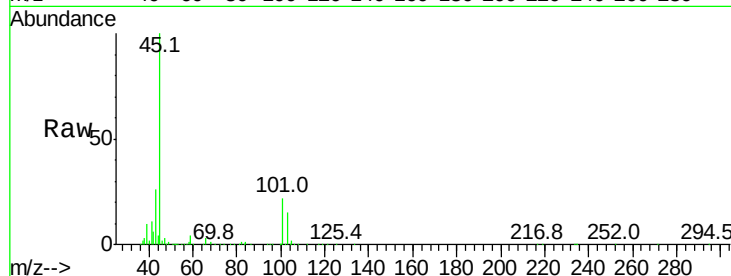
VSTDIC015

Tgt Ion: 45 Resp: 2106123

Ion Ratio Lower Upper

45 100

58 2.4 1.7 2.5



#20

Methylene Chloride

Concen: 20.454 ppbv

RT: 4.39 min Scan# 452

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Tgt Ion: 84 Resp: 1353373

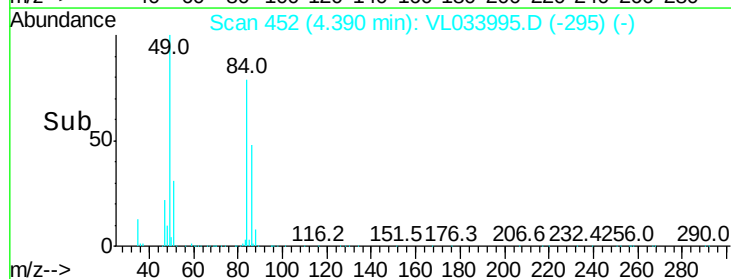
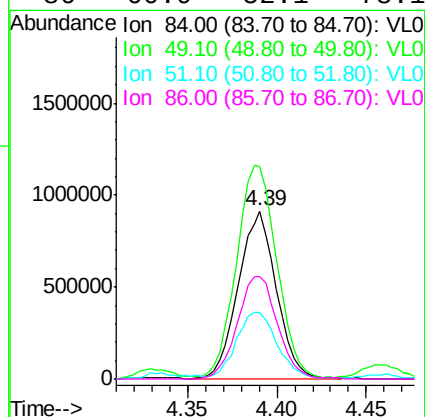
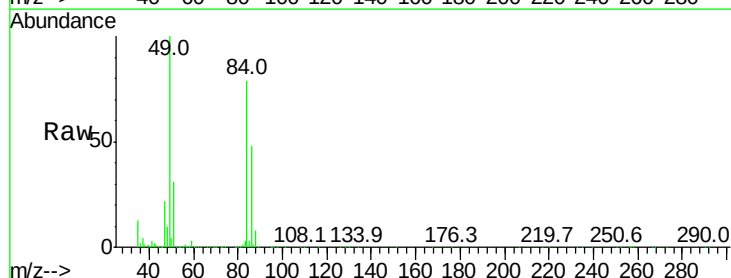
Ion Ratio Lower Upper

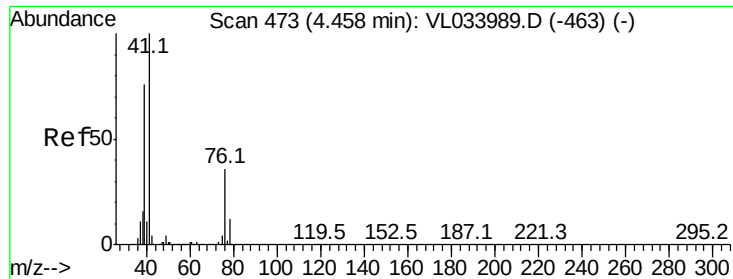
84 100

49 125.6 107.6 161.4

51 39.0 35.0 52.6

86 60.9 52.1 78.1

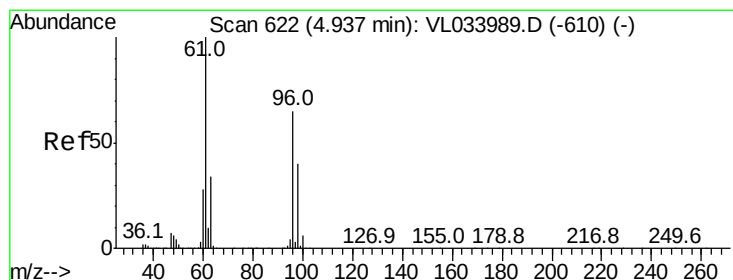
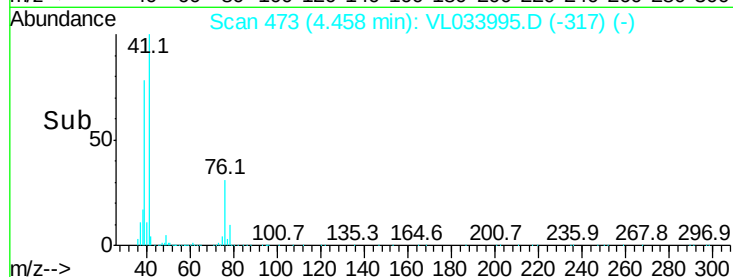
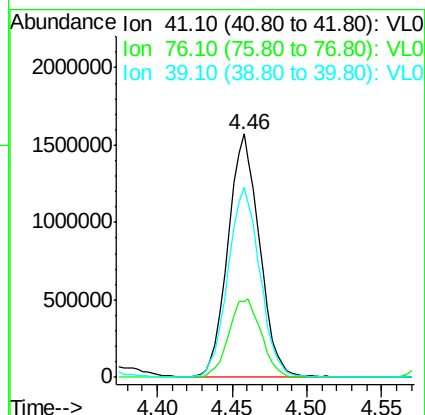
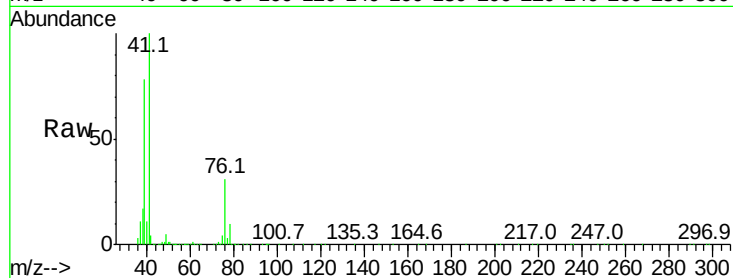




#21  
 Allyl Chloride  
 Concen: 23.828 ppbv  
 RT: 4.46 min Scan# 473  
 Delta R.T. 0.00 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

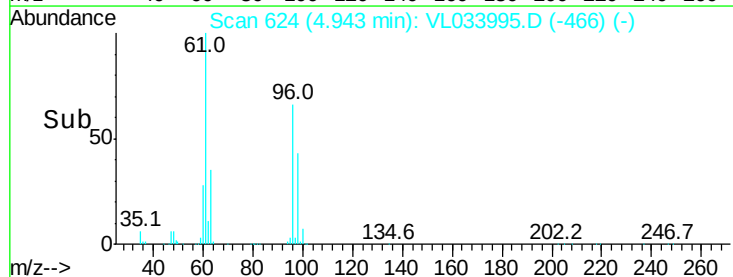
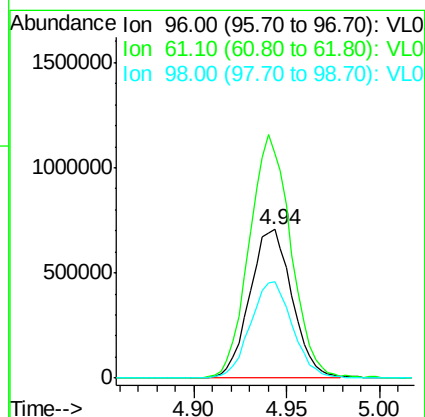
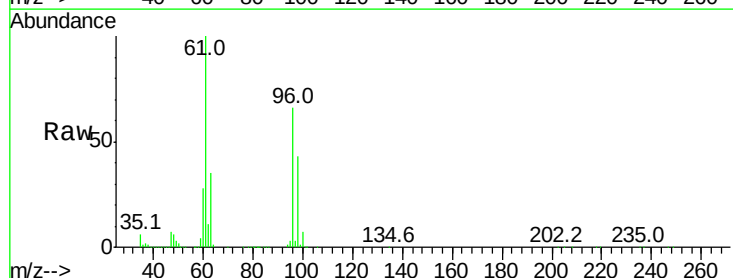
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

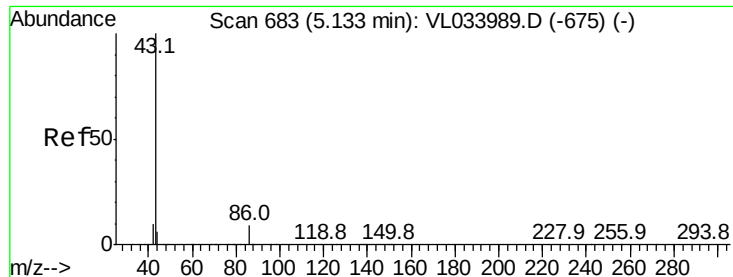
Tgt Ion: 41 Resp: 2296581  
 Ion Ratio Lower Upper  
 41 100  
 76 33.4 26.8 40.2  
 39 79.4 63.1 94.7



#22  
 trans-1,2-Dichloroethene  
 Concen: 15.473 ppbv  
 RT: 4.94 min Scan# 624  
 Delta R.T. 0.01 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

Tgt Ion: 96 Resp: 1134069  
 Ion Ratio Lower Upper  
 96 100  
 61 150.8 122.9 184.3  
 98 64.4 49.6 74.4





#23

Vinyl Acetate

Concen: 14.820 ppbv

RT: 5.13 min Scan# 683

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

Tgt Ion: 43 Resp: 2922836

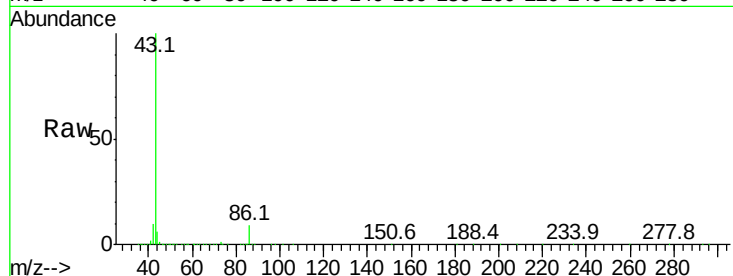
Ion Ratio Lower Upper

43 100

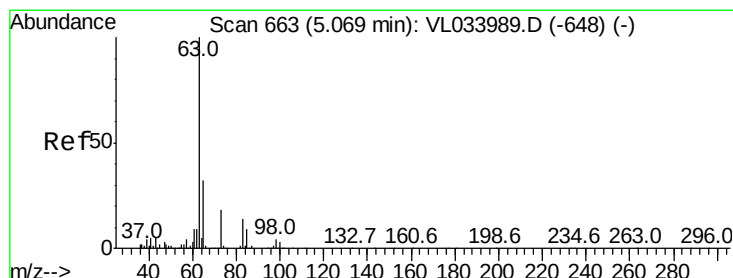
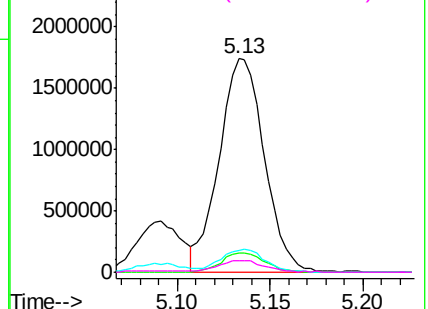
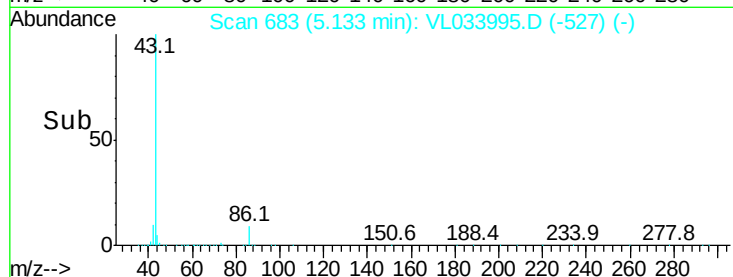
86 8.8 6.6 9.8

42 10.2 8.3 12.5

44 5.4 4.3 6.5



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: 15.279 ppbv

RT: 5.07 min Scan# 664

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

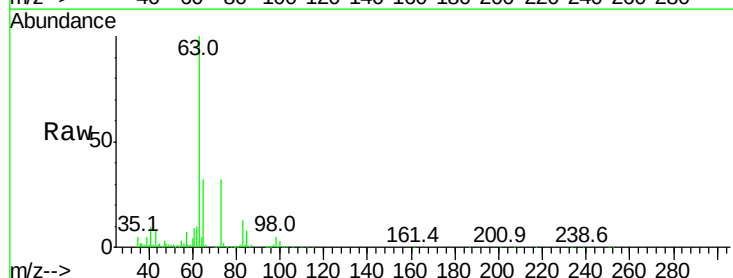
Tgt Ion: 63 Resp: 2343648

Ion Ratio Lower Upper

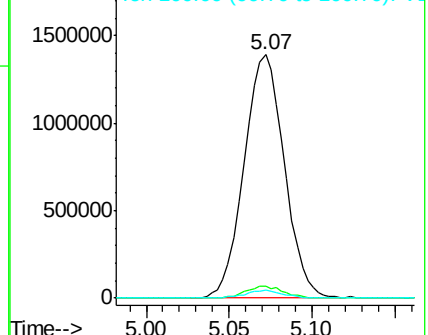
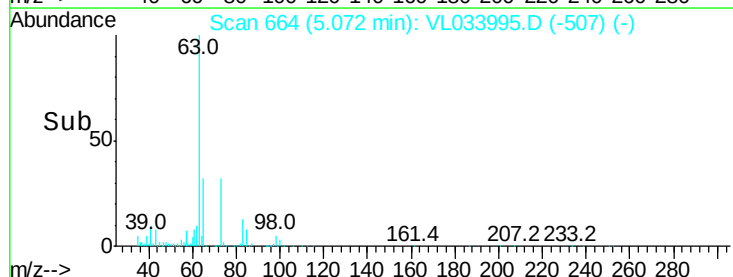
63 100

98 4.7 2.2 6.6

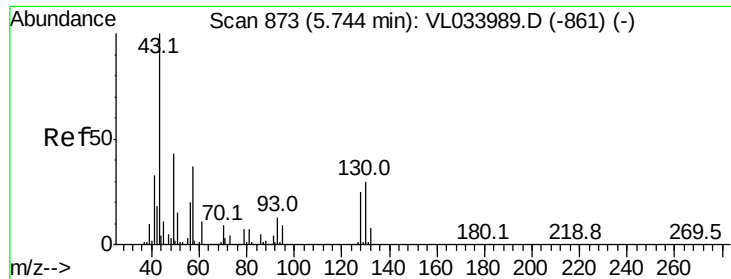
100 3.3 1.4 4.2



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: 15.275 ppbv

RT: 5.74 min Scan# 873

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

Tgt Ion: 43 Resp: 3947062

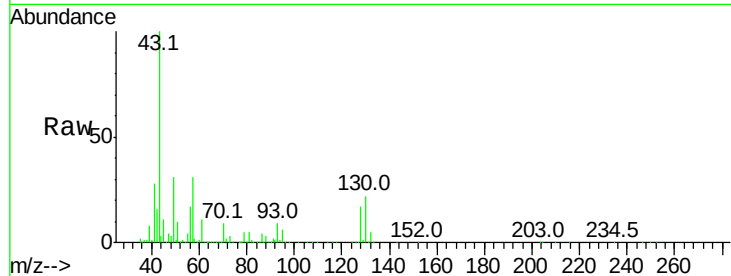
Ion Ratio Lower Upper

43 100

45 10.2 8.1 12.1

61 10.1 8.1 12.1

70 8.1 6.3 9.5

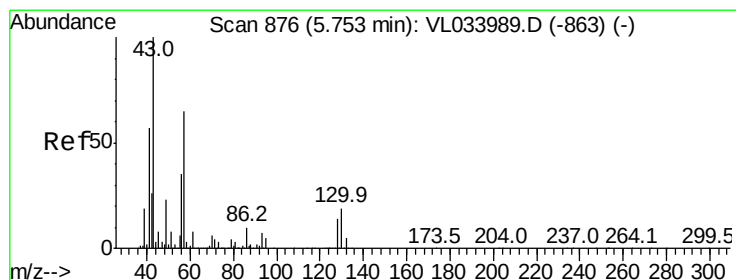
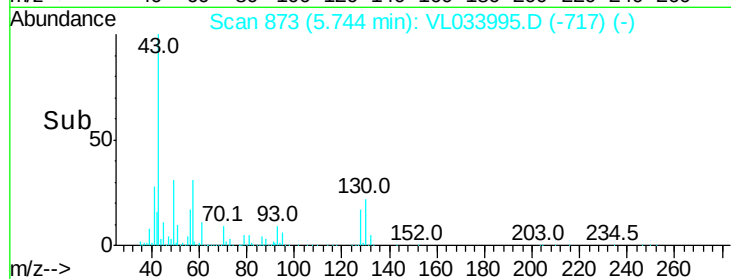
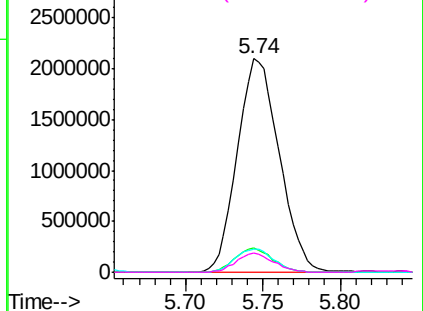


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 15.563 ppbv

RT: 5.76 min Scan# 877

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Tgt Ion: 57 Resp: 1831000

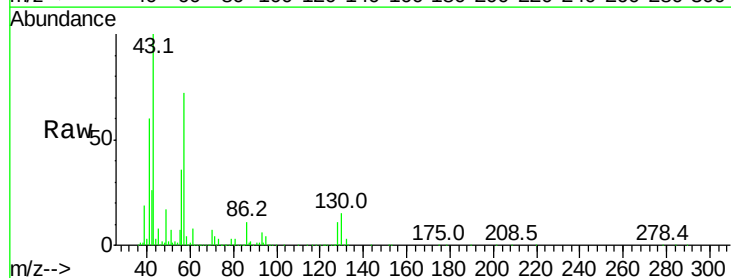
Ion Ratio Lower Upper

57 100

41 85.5 70.6 105.8

43 217.1 177.6 266.4

56 51.5 42.6 64.0

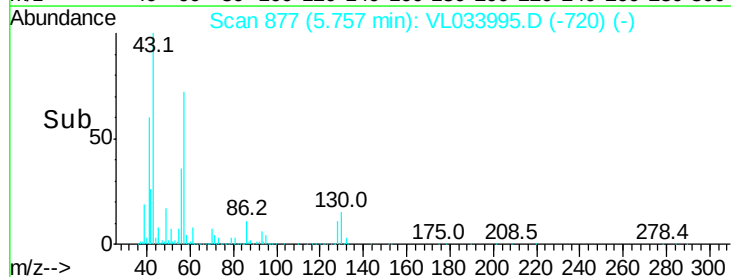
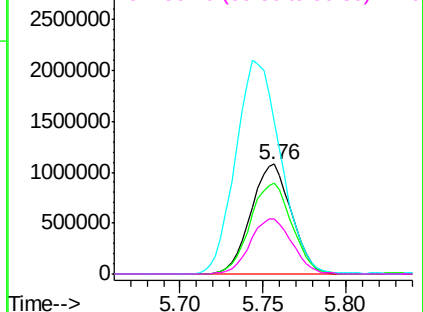


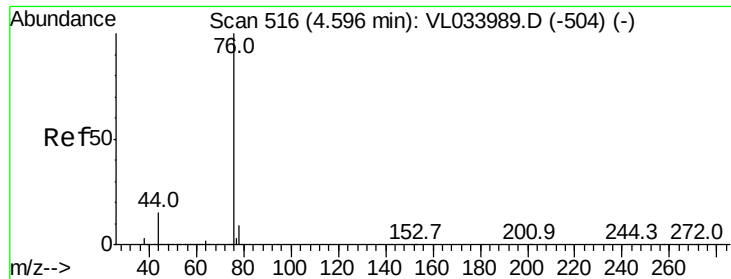
Abundance Ion 57.10 (56.80 to 57.80): VL0

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





#27

Carbon Disulfide

Concen: 24.909 ppbv

RT: 4.60 min Scan# 517

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

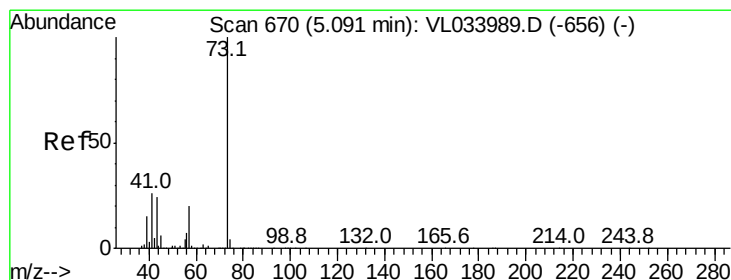
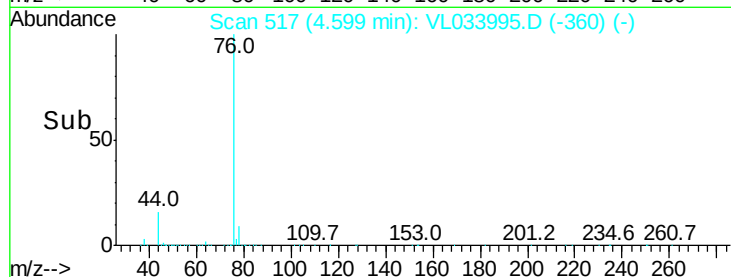
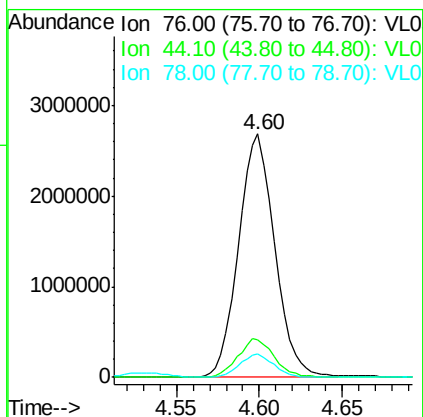
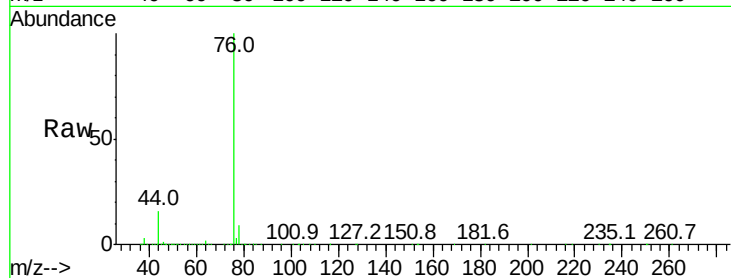
Tgt Ion: 76 Resp: 4071405

Ion Ratio Lower Upper

76 100

44 15.9 12.6 18.8

78 9.4 7.2 10.8



#28

Methyl tert-Butyl Ether

Concen: 17.048 ppbv

RT: 5.09 min Scan# 670

Delta R.T. 0.00 min

Lab File: VL033995.D

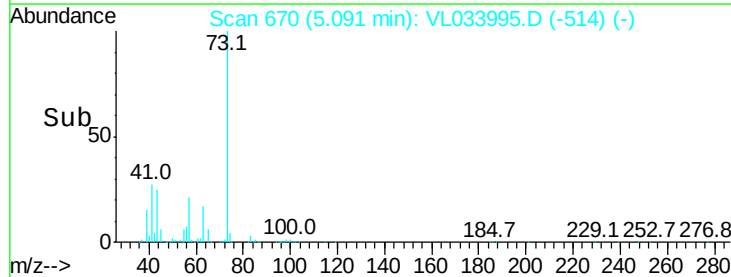
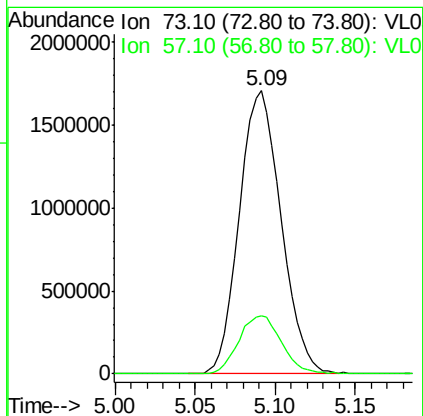
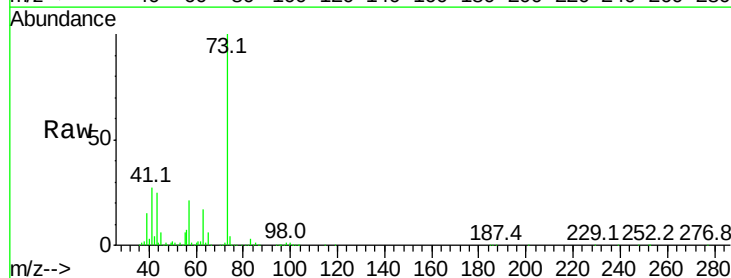
Acq: 2 Jul 2019 17:30

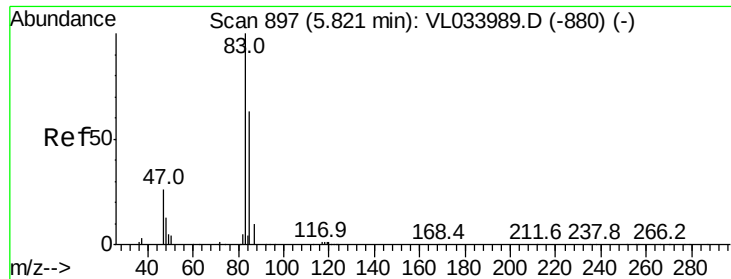
Tgt Ion: 73 Resp: 3032956

Ion Ratio Lower Upper

73 100

57 21.2 16.9 25.3





#29

Chloroform

Concen: 15.409 ppbv

RT: 5.83 min Scan# 899

Delta R.T. 0.01 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

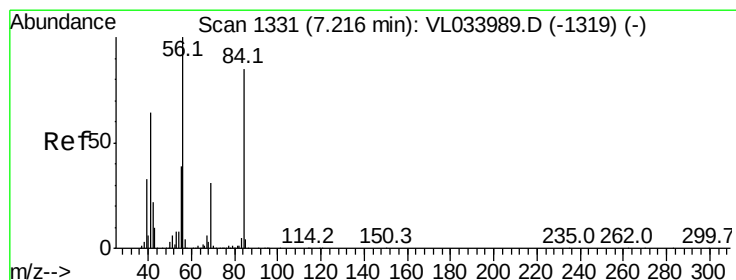
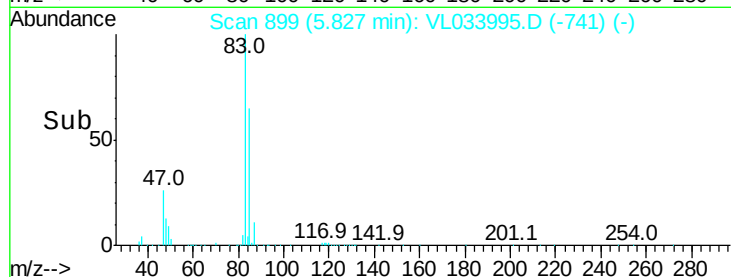
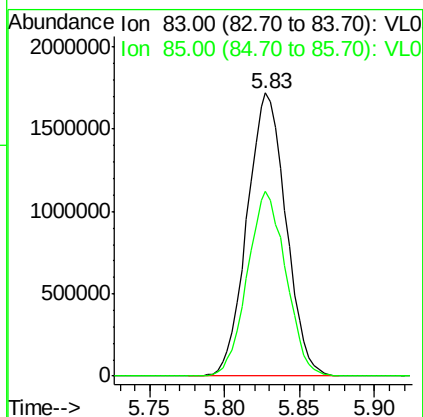
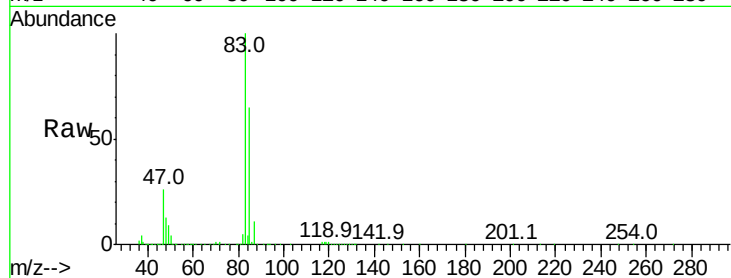
VSTDIC015

Tgt Ion: 83 Resp: 3104941

Ion Ratio Lower Upper

83 100

85 65.2 50.6 75.8



#30

Cyclohexane

Concen: 18.235 ppbv

RT: 7.22 min Scan# 1332

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

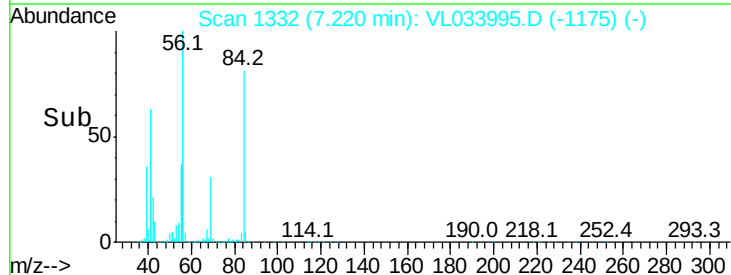
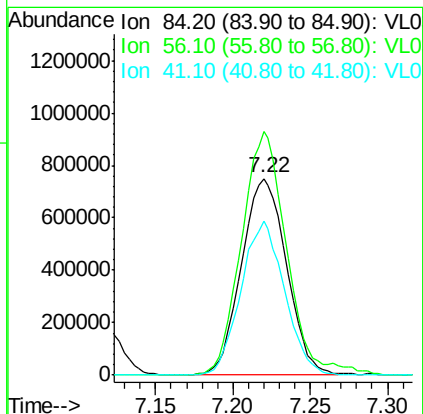
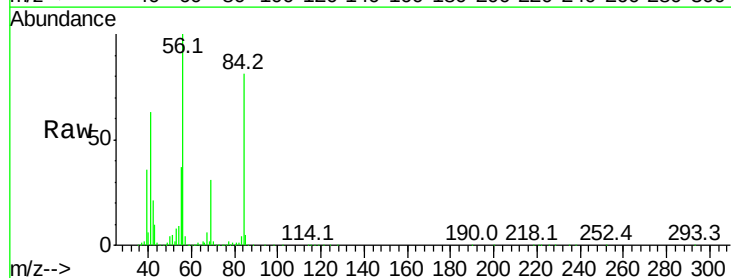
Tgt Ion: 84 Resp: 1515771

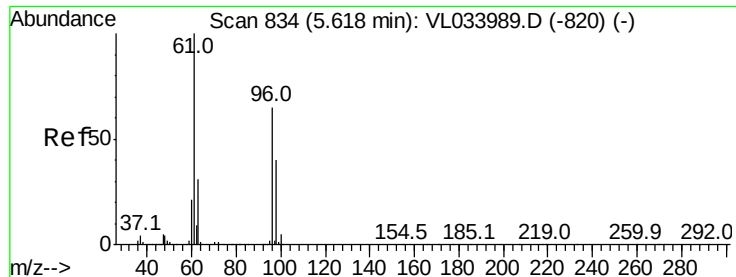
Ion Ratio Lower Upper

84 100

56 124.9 103.7 155.5

41 75.9 62.6 94.0



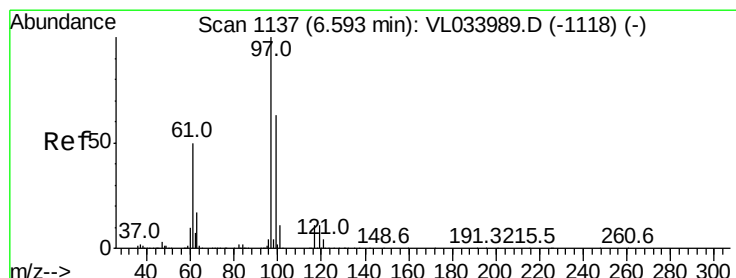
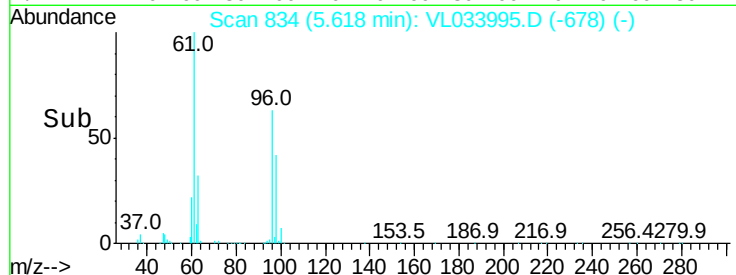
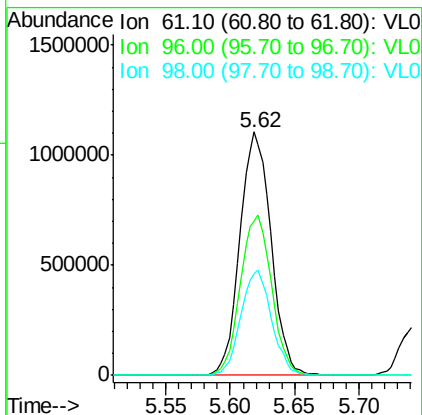
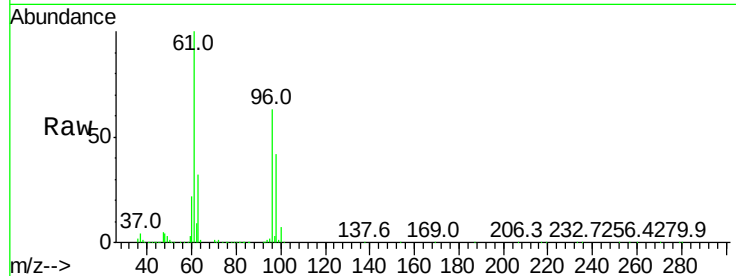


#31

cis-1,2-Dichloroethene  
 Concen: 18.059 ppbv  
 RT: 5.62 min Scan# 834  
 Delta R.T. 0.00 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

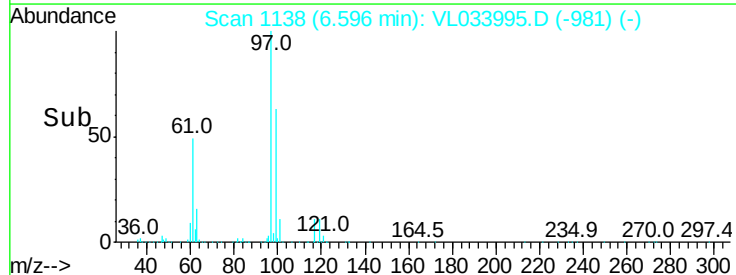
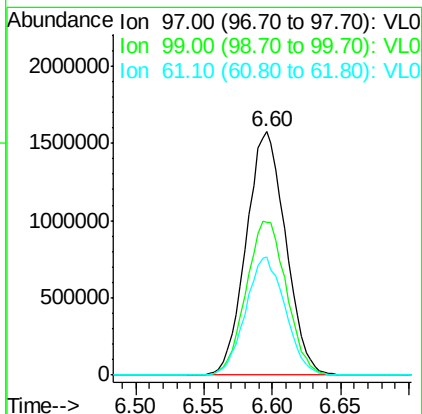
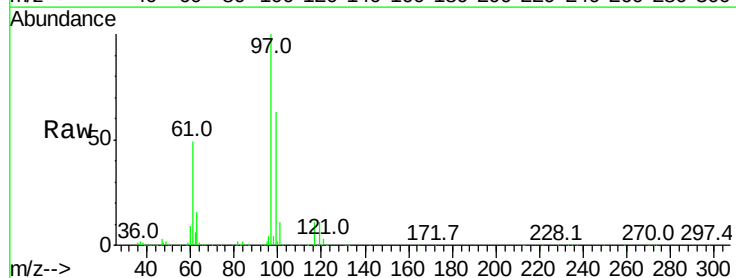
Tgt Ion: 61 Resp: 1863060  
 Ion Ratio Lower Upper  
 61 100  
 96 63.1 51.8 77.6  
 98 41.9 32.1 48.1

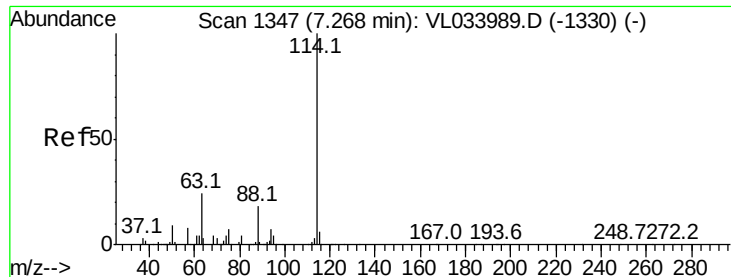


#32

1,1,1-Trichloroethane  
 Concen: 16.263 ppbv  
 RT: 6.60 min Scan# 1138  
 Delta R.T. 0.00 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

Tgt Ion: 97 Resp: 3161085  
 Ion Ratio Lower Upper  
 97 100  
 99 64.7 51.9 77.9  
 61 48.7 39.8 59.8





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.27 min Scan# 1347

Delta R.T. 0.00 min

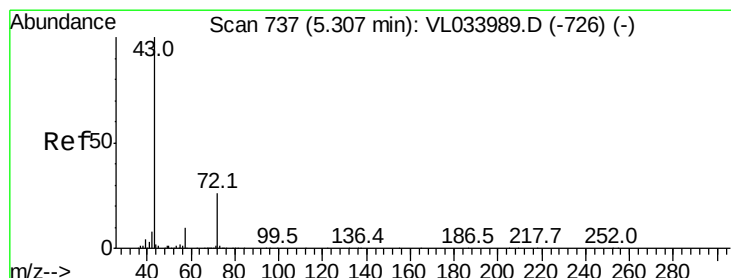
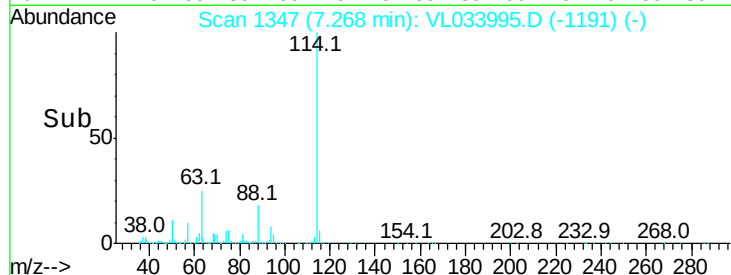
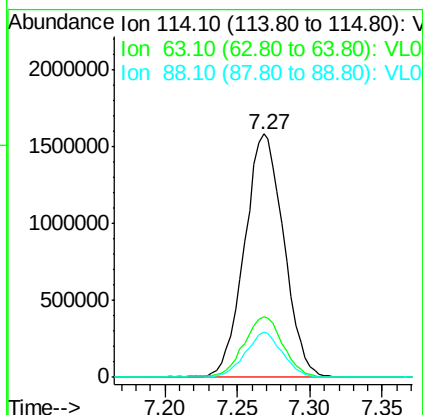
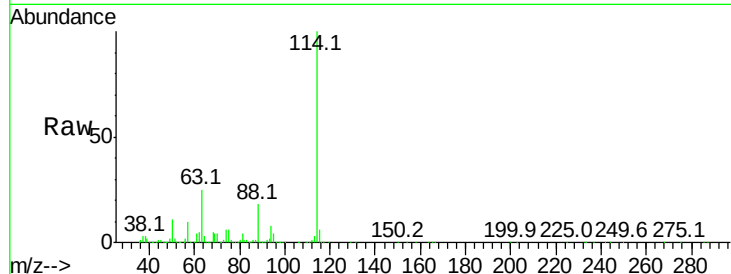
Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Tgt Ion: 114 Resp: 2975217

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 114 | 100   |       |       |
| 63  | 25.6  | 20.2  | 30.2  |
| 88  | 17.6  | 14.1  | 21.1  |



#34

2-Butanone

Concen: 13.761 ppbv

RT: 5.31 min Scan# 737

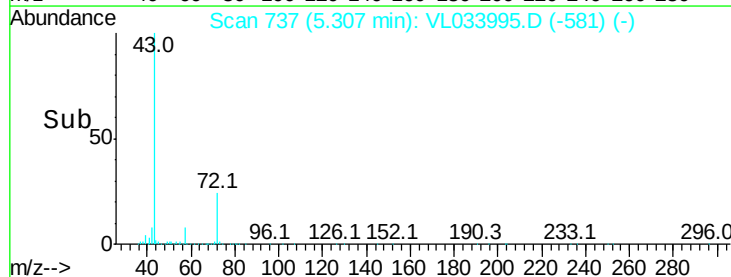
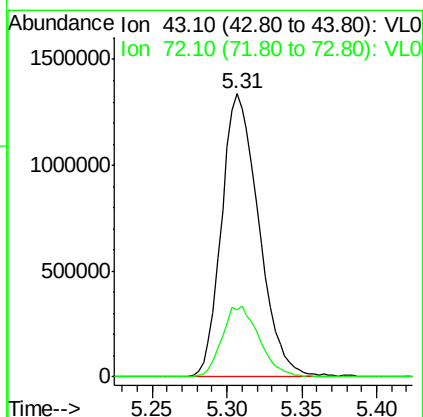
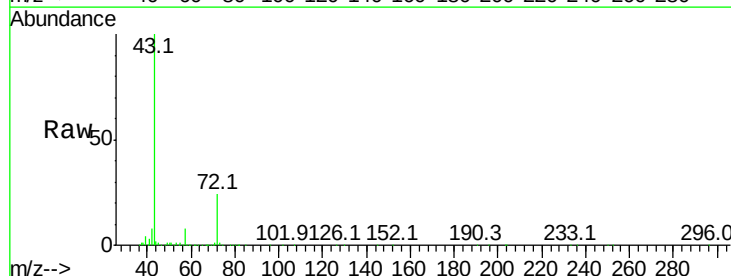
Delta R.T. 0.00 min

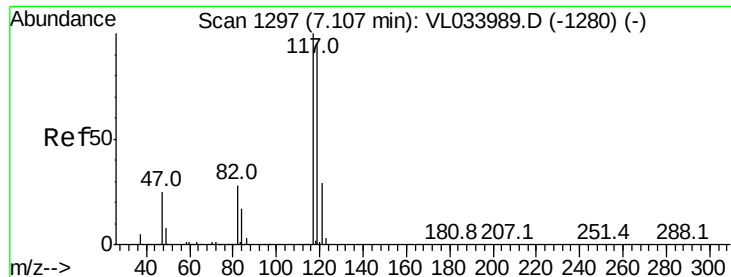
Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Tgt Ion: 43 Resp: 2309651

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 72  | 25.2  | 19.9  | 29.9  |





#35

Carbon Tetrachloride

Concen: 14.402 ppbv

RT: 7.11 min Scan# 1297

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

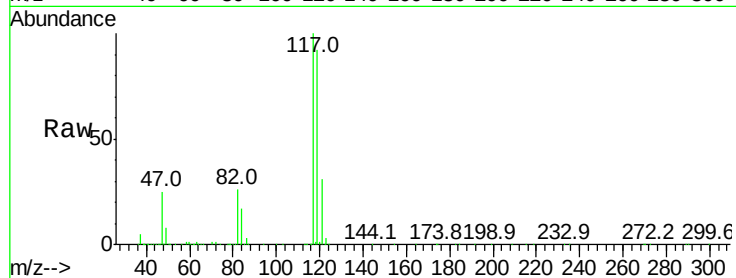
Tgt Ion:117 Resp: 3310713

Ion Ratio Lower Upper

117 100

119 92.3 75.8 113.6

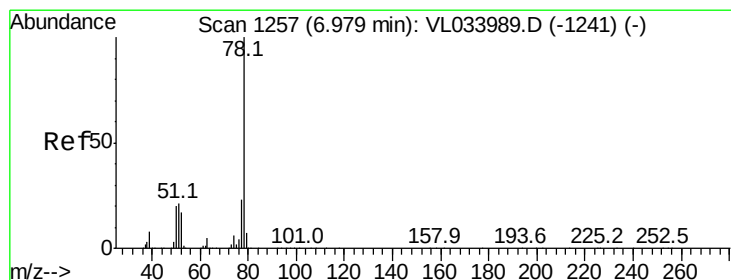
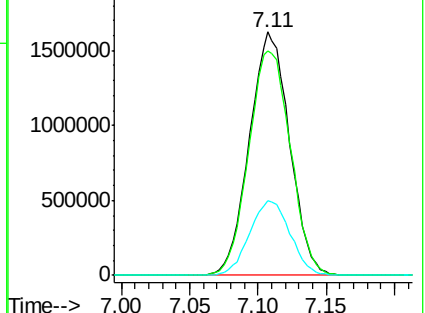
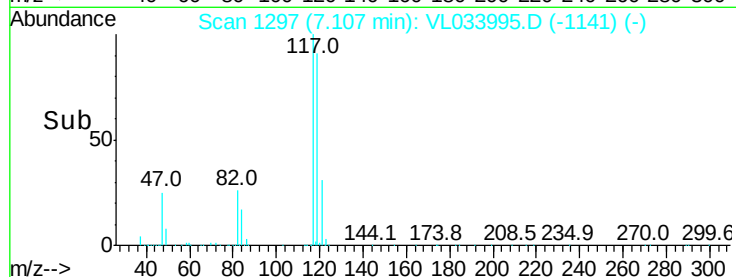
121 30.6 23.4 35.2



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: 15.924 ppbv

RT: 6.98 min Scan# 1258

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

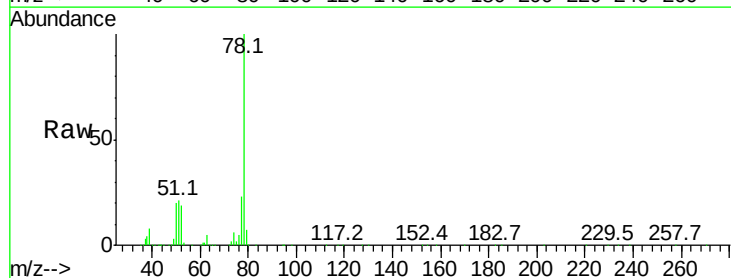
Tgt Ion: 78 Resp: 3619151

Ion Ratio Lower Upper

78 100

77 23.3 18.7 28.1

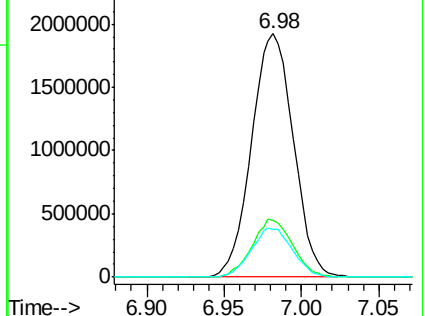
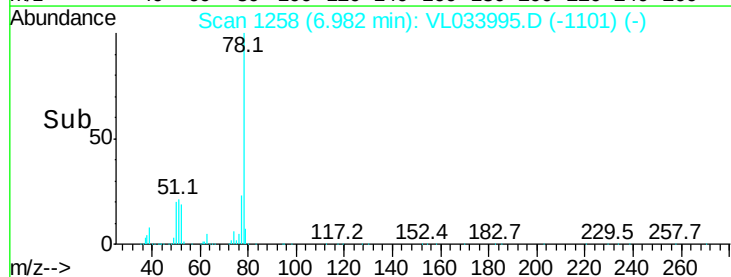
50 19.8 16.2 24.2

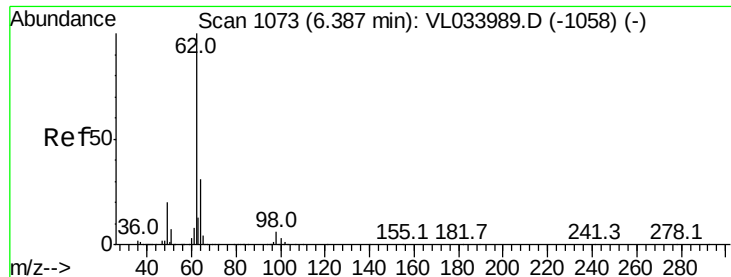


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#37

1,2-Dichloroethane

Concen: 14.703 ppbv

RT: 6.39 min Scan# 1074

Delta R.T. 0.00 min

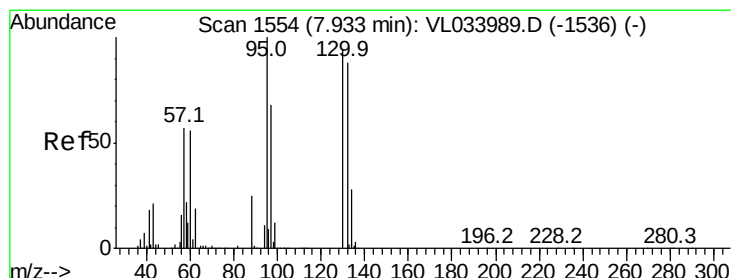
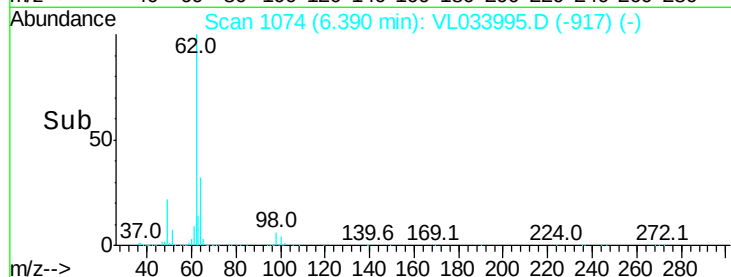
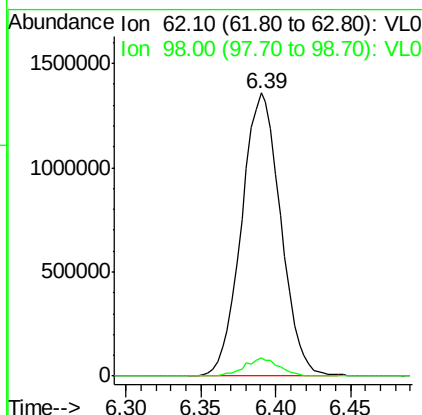
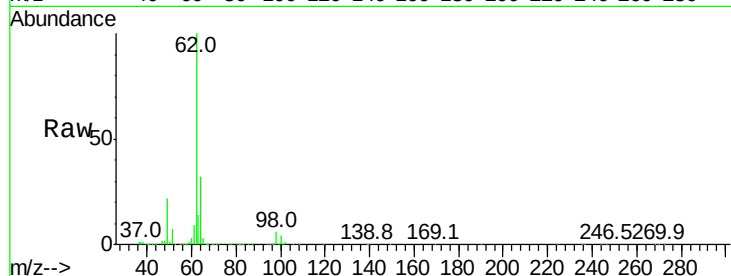
Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Tgt Ion: 62 Resp: 2471316

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 62  | 100   |       |       |
| 98  | 5.7   | 4.4   | 6.6   |



#38

Trichloroethene

Concen: 18.202 ppbv

RT: 7.93 min Scan# 1554

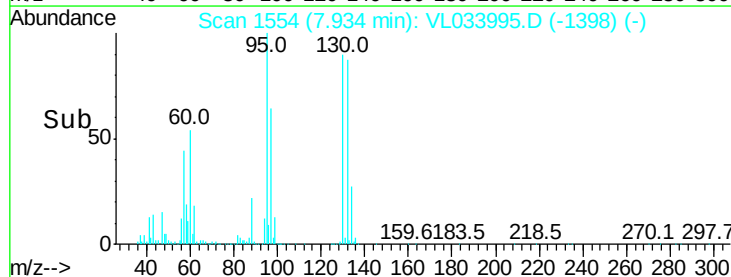
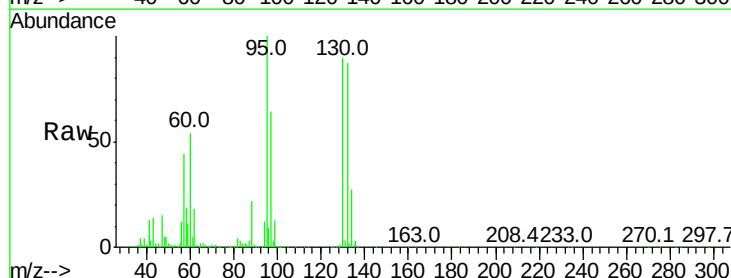
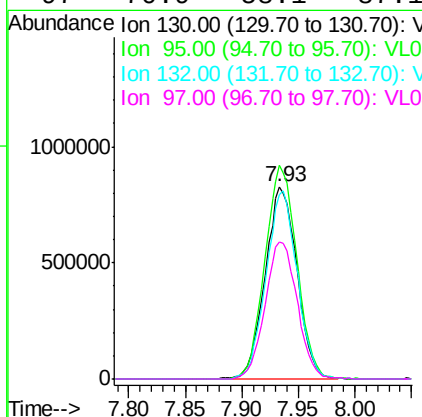
Delta R.T. 0.00 min

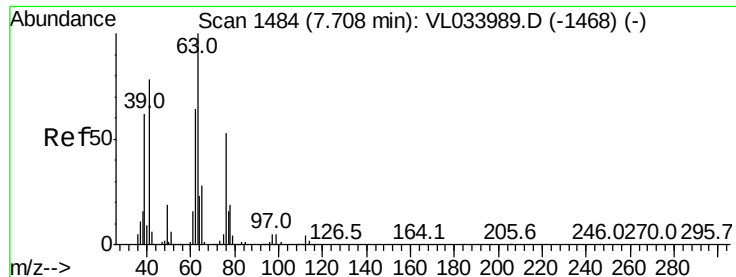
Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Tgt Ion: 130 Resp: 1610683

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 130 | 100   |       |       |
| 95  | 111.1 | 85.5  | 128.3 |
| 132 | 96.1  | 75.1  | 112.7 |
| 97  | 70.9  | 58.1  | 87.1  |





#39

1,2-Dichloropropane

Concen: 15.062 ppbv

RT: 7.71 min Scan# 1485

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

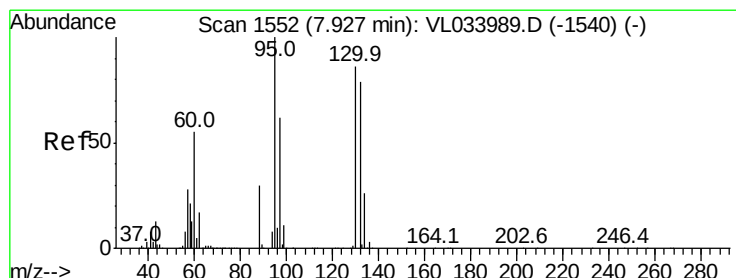
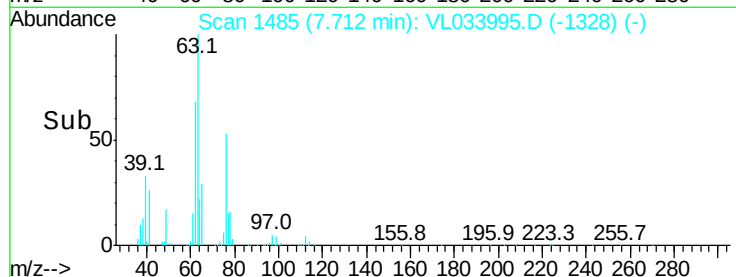
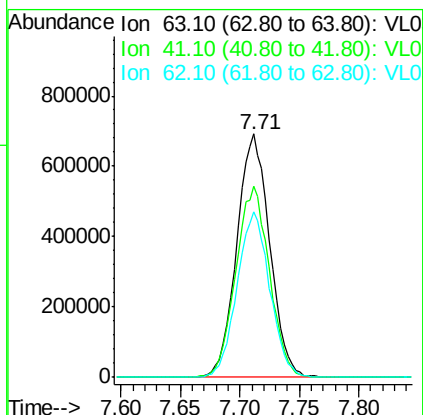
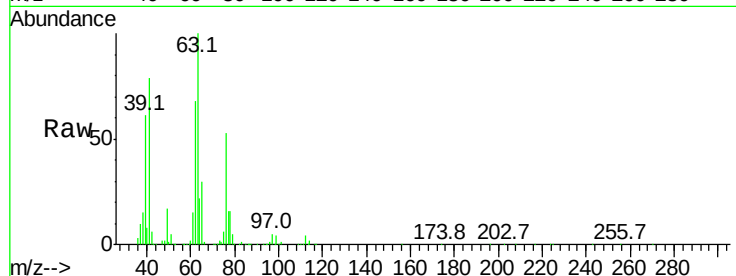
Tgt Ion: 63 Resp: 1321154

Ion Ratio Lower Upper

63 100

41 78.5 62.3 93.5

62 67.9 51.4 77.2



#40

1,4-Dioxane

Concen: 14.594 ppbv

RT: 7.93 min Scan# 1552

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Tgt Ion: 88 Resp: 522127

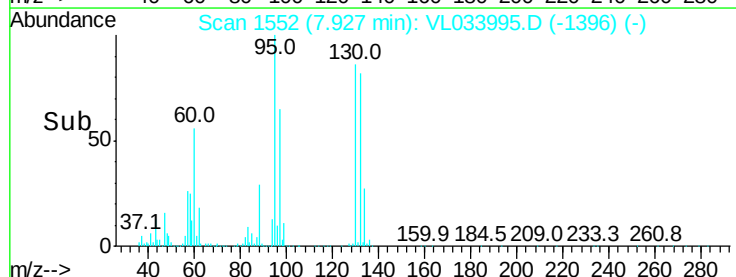
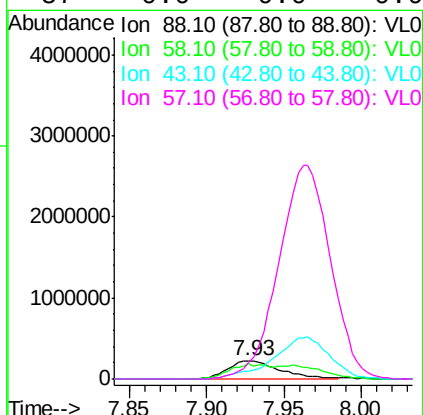
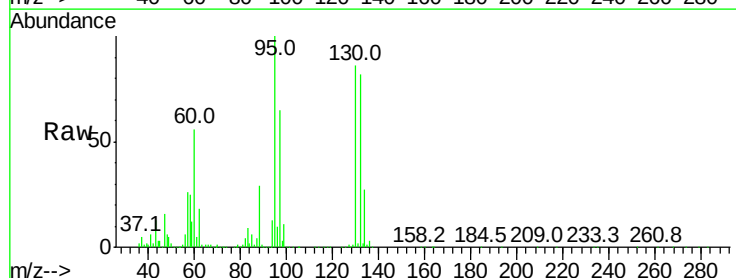
Ion Ratio Lower Upper

88 100

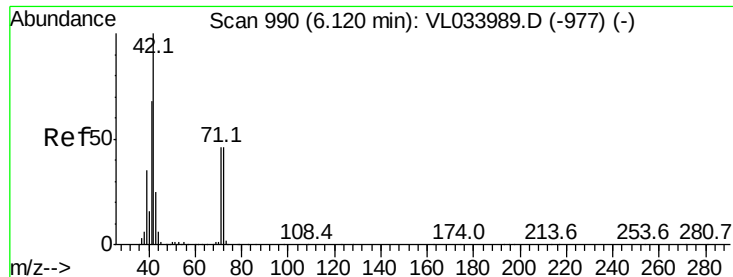
58 132.3 99.1 148.7

43 0.0 0.0 0.0

57 0.0 0.0 0.0



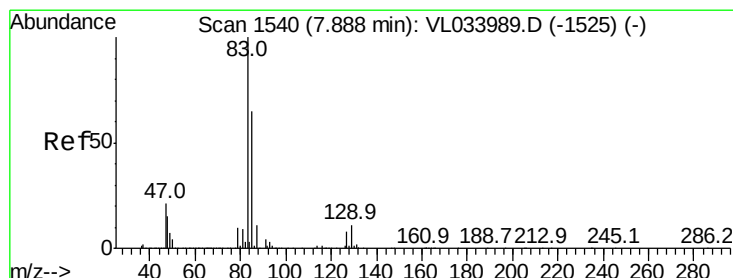
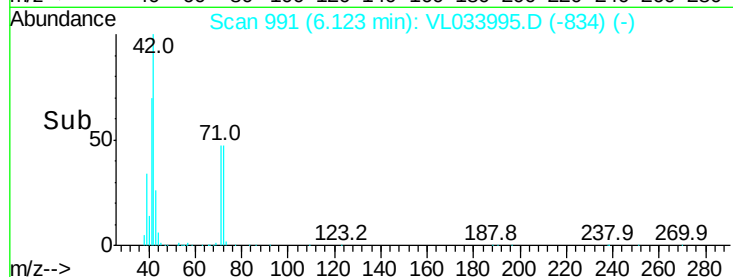
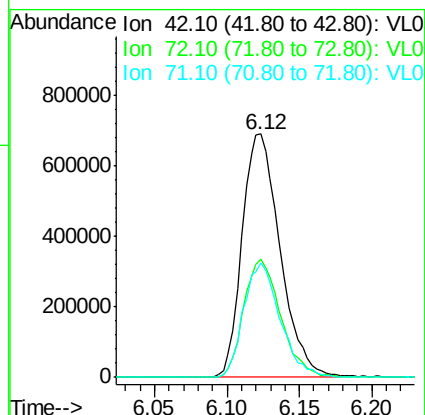
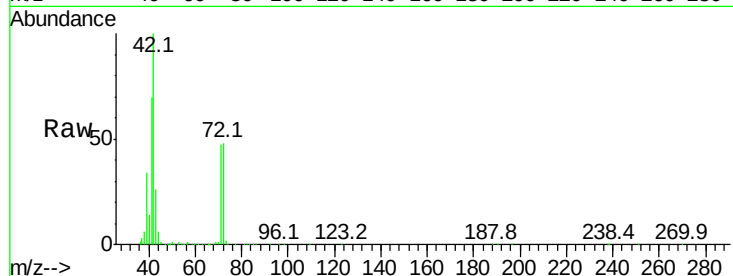




#41  
Tetrahydrofuran  
Concen: 14.722 ppbv  
RT: 6.12 min Scan# 991  
Delta R.T. 0.00 min  
Lab File: VL033995.D  
Acq: 2 Jul 2019 17:30

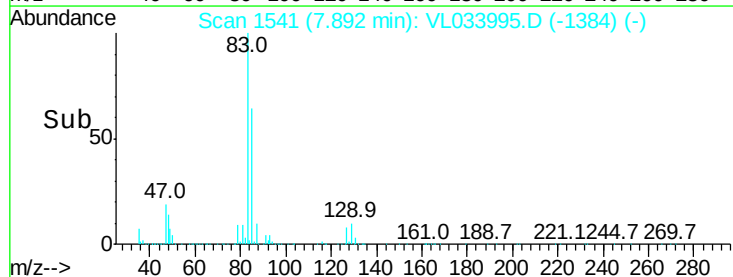
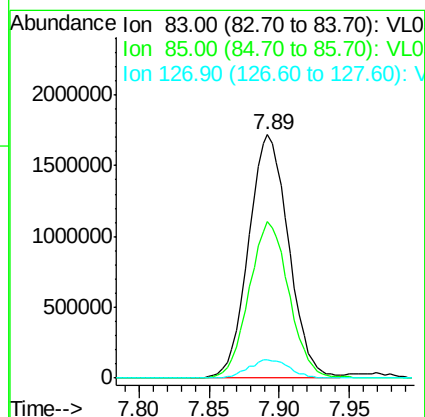
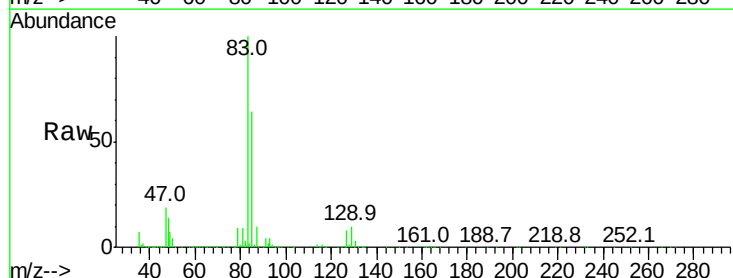
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

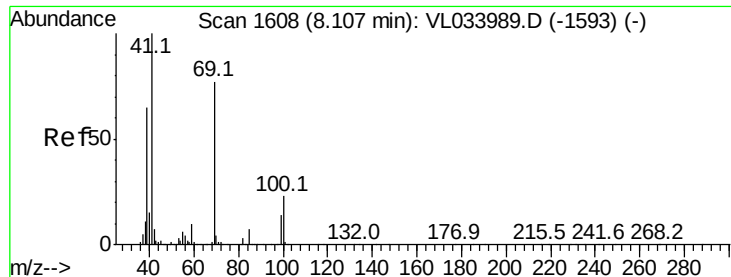
Tgt Ion: 42 Resp: 1254199  
Ion Ratio Lower Upper  
42 100  
72 47.5 37.3 55.9  
71 45.5 36.2 54.2



#42  
Bromodichloromethane  
Concen: 15.206 ppbv  
RT: 7.89 min Scan# 1541  
Delta R.T. 0.00 min  
Lab File: VL033995.D  
Acq: 2 Jul 2019 17:30

Tgt Ion: 83 Resp: 3415524  
Ion Ratio Lower Upper  
83 100  
85 64.1 51.8 77.8  
127 7.6 6.5 9.7





#43

Methyl Methacrylate

Concen: 17.316 ppbv

RT: 8.11 min Scan# 1609

Delta R.T. 0.00 min

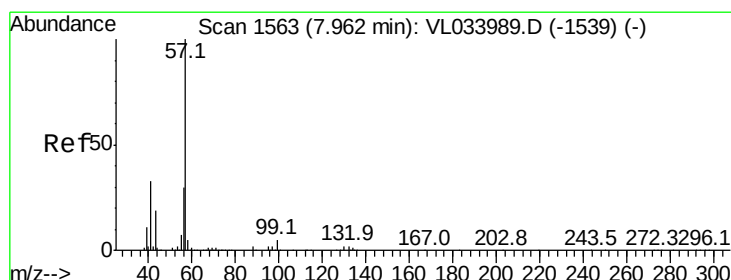
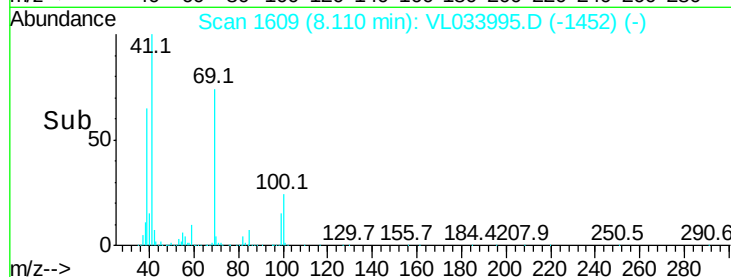
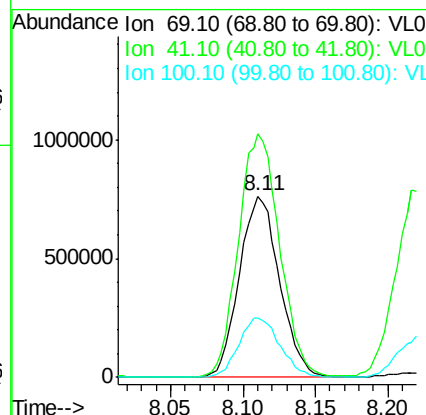
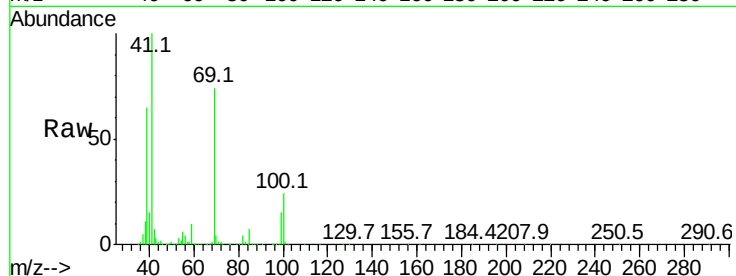
Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Tgt Ion: 69 Resp: 1471861

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 69  | 100   |       |       |
| 41  | 137.2 | 109.1 | 163.7 |
| 100 | 33.6  | 25.3  | 37.9  |



#44

2,2,4-Trimethylpentane

Concen: 15.217 ppbv

RT: 7.97 min Scan# 1564

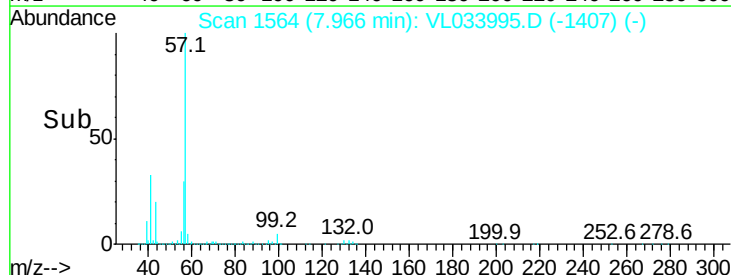
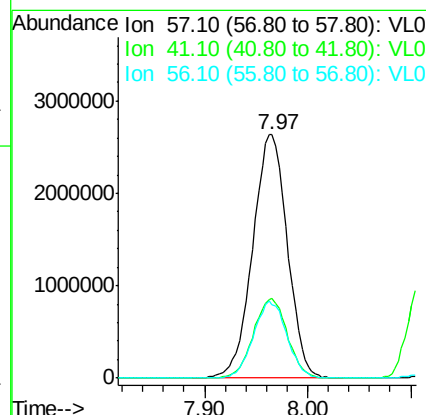
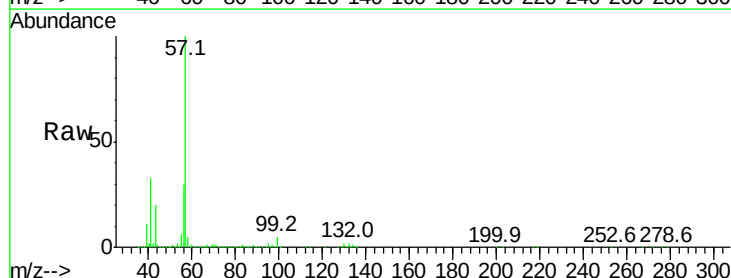
Delta R.T. 0.00 min

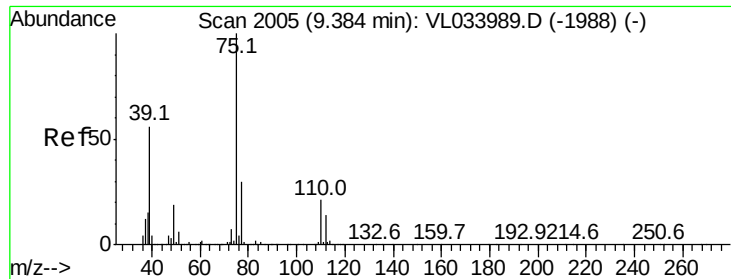
Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Tgt Ion: 57 Resp: 6150240

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 57  | 100   |       |       |
| 41  | 32.0  | 26.1  | 39.1  |
| 56  | 30.5  | 24.4  | 36.6  |

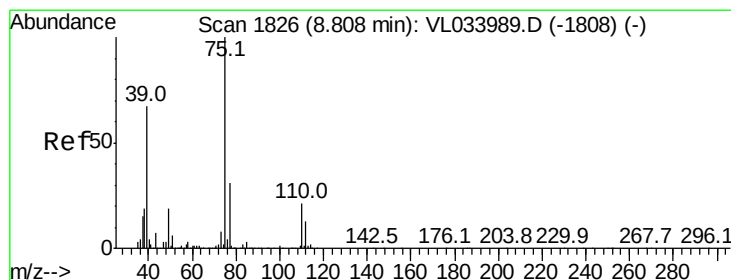
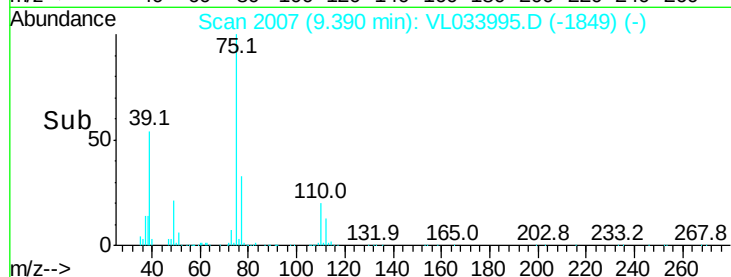
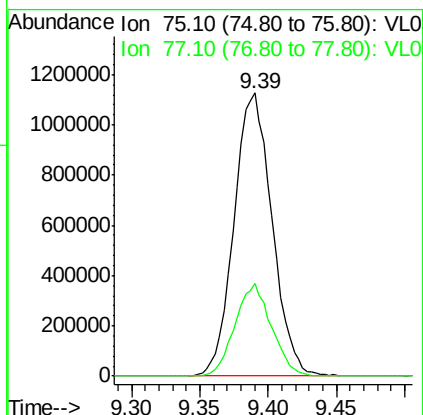
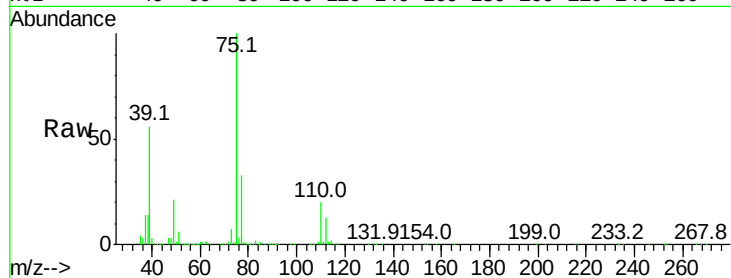




#45  
 t-1,3-Dichloropropene  
 Concen: 19.503 ppbv  
 RT: 9.39 min Scan# 2007  
 Delta R.T. 0.01 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

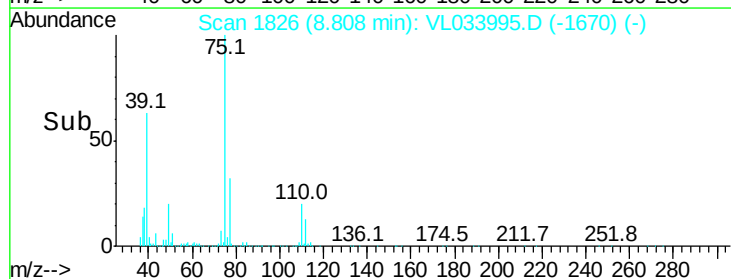
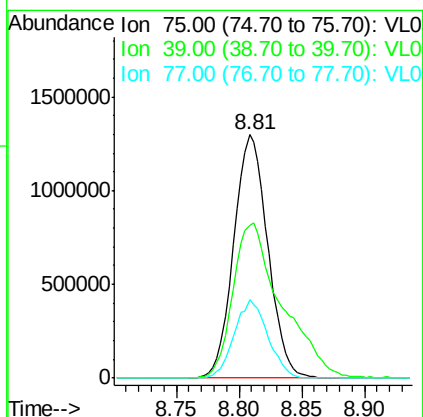
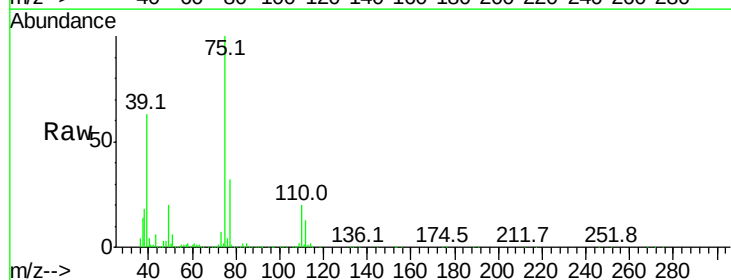
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

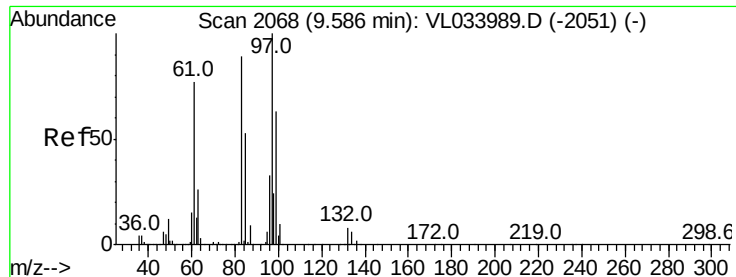
Tgt Ion: 75 Resp: 2175185  
 Ion Ratio Lower Upper  
 75 100  
 77 32.9 24.3 36.5



#46  
 cis-1,3-Dichloropropene  
 Concen: 19.111 ppbv  
 RT: 8.81 min Scan# 1826  
 Delta R.T. 0.00 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

Tgt Ion: 75 Resp: 2442028  
 Ion Ratio Lower Upper  
 75 100  
 39 62.8 53.8 80.6  
 77 32.1 24.5 36.7





#47

1,1,2-Trichloroethane

Concen: 15.822 ppbv

RT: 9.59 min Scan# 2068

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

Tgt Ion: 97 Resp: 1654477

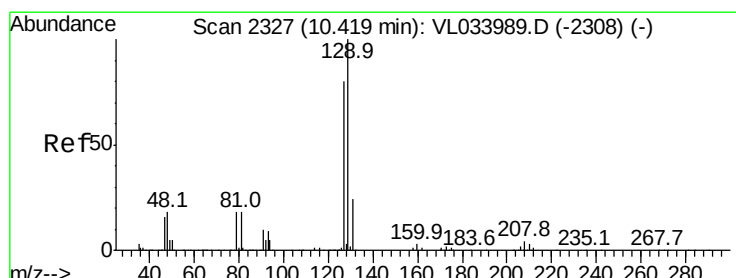
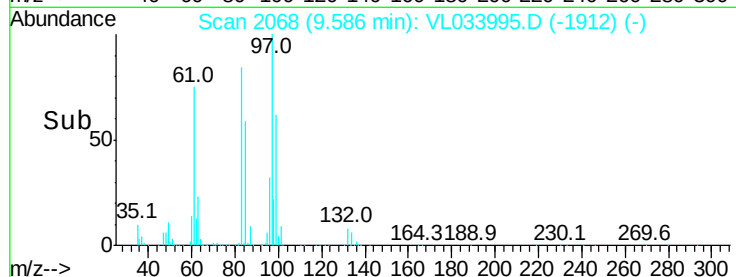
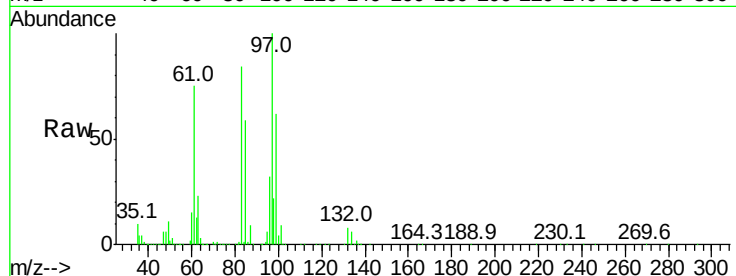
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 83  | 84.1  | 71.1  | 106.7 |
| 85  | 58.9  | 42.6  | 64.0  |
| 99  | 61.9  | 50.3  | 75.5  |

Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 99.00 (98.70 to 99.70): VL0



#48

Dibromochloromethane

Concen: 16.470 ppbv

RT: 10.43 min Scan# 2329

Delta R.T. 0.01 min

Lab File: VL033995.D

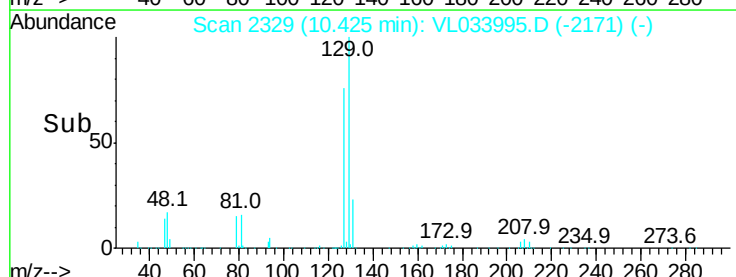
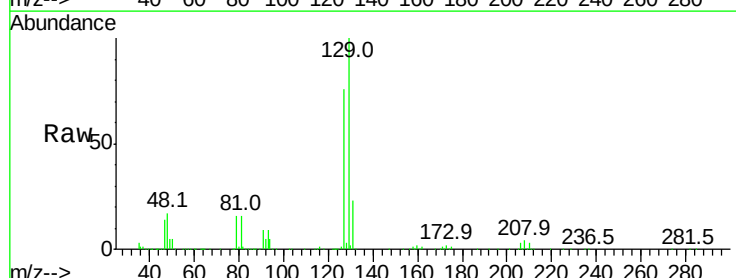
Acq: 2 Jul 2019 17:30

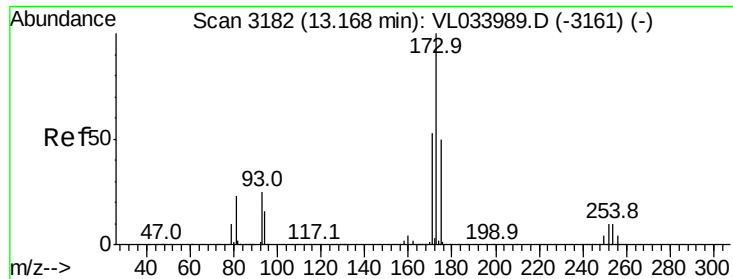
Tgt Ion: 129 Resp: 3094989

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 129 | 100   |       |       |
| 127 | 77.8  | 39.1  | 117.3 |

Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#49

Bromoform

Concen: 16.761 ppbv

RT: 13.17 min Scan# 3184

Delta R.T. 0.01 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

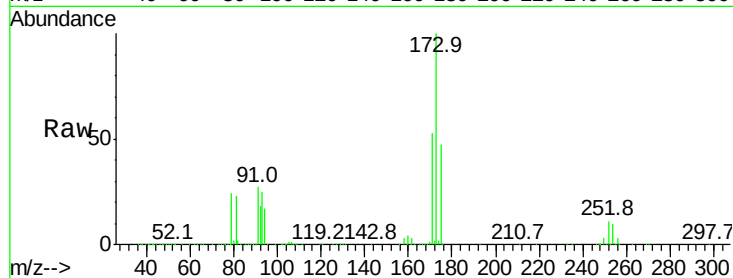
Tgt Ion:173 Resp: 2780425

Ion Ratio Lower Upper

173 100

175 49.4 39.3 58.9

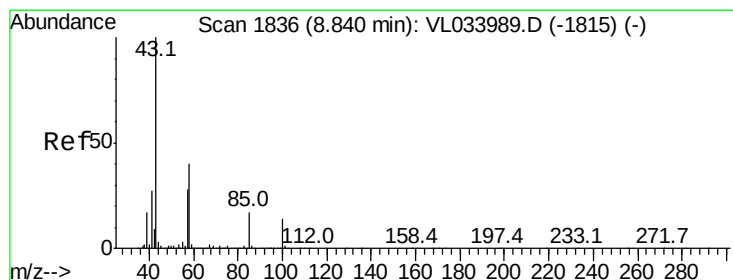
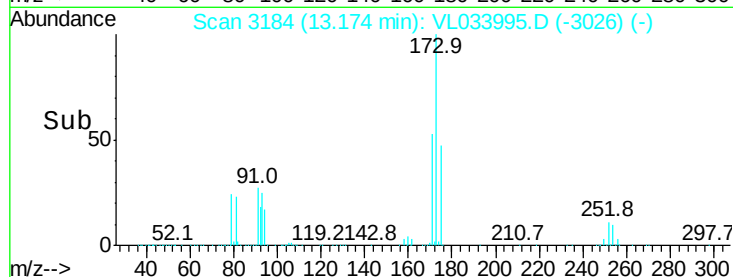
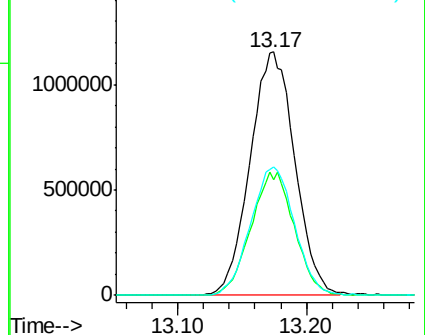
171 52.3 41.4 62.0



Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 15.239 ppbv

RT: 8.84 min Scan# 1836

Delta R.T. 0.00 min

Lab File: VL033995.D

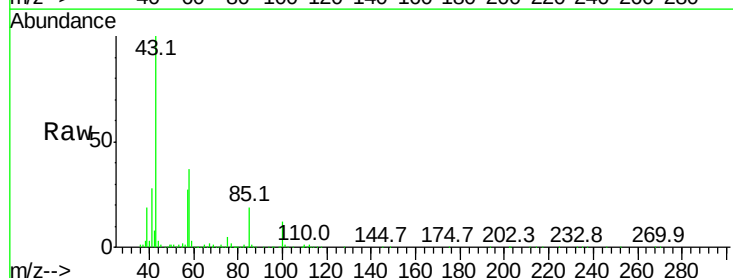
Acq: 2 Jul 2019 17:30

Tgt Ion: 43 Resp: 3814151

Ion Ratio Lower Upper

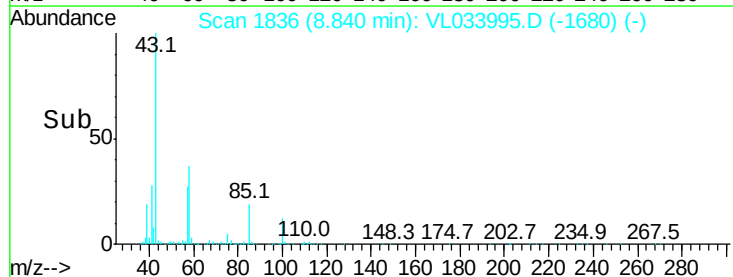
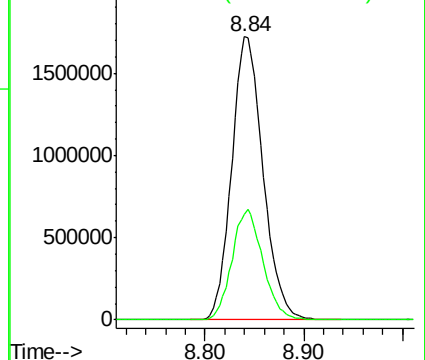
43 100

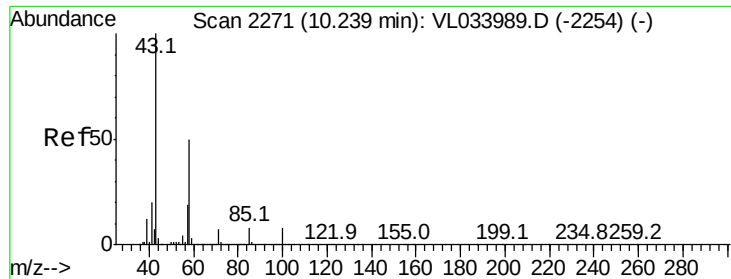
58 38.5 30.3 45.5



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 15.931 ppbv

RT: 10.24 min Scan# 2272

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

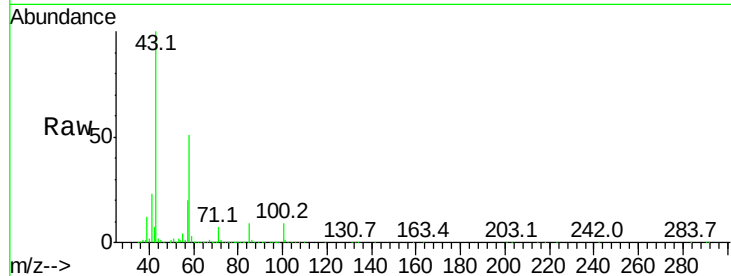
Tgt Ion: 43 Resp: 3113721

Ion Ratio Lower Upper

43 100

58 50.5 41.0 61.4

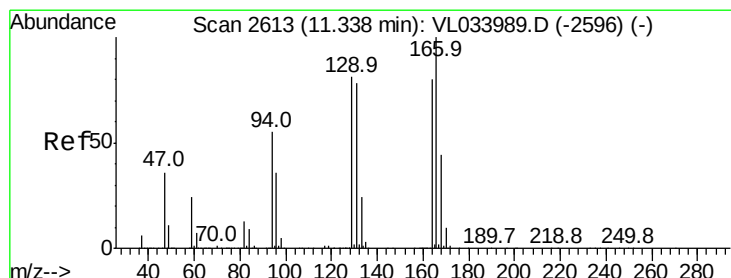
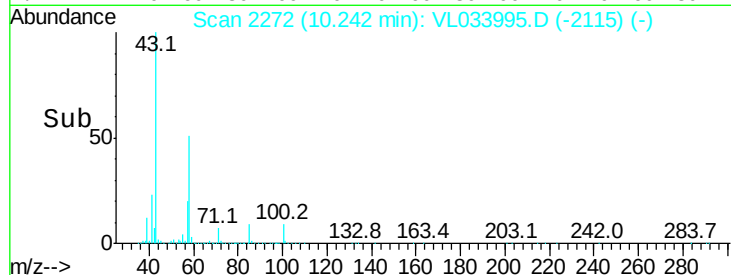
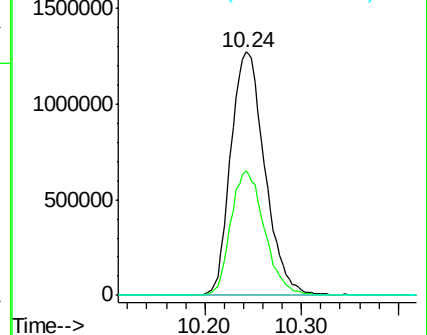
98 0.2 0.2 0.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 98.20 (97.90 to 98.90): VL0



#52

Tetrachloroethene

Concen: 19.350 ppbv

RT: 11.34 min Scan# 2614

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Tgt Ion: 164 Resp: 1547389

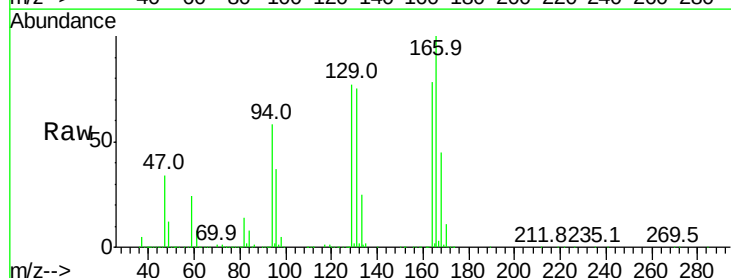
Ion Ratio Lower Upper

164 100

166 127.5 100.2 150.2

129 98.3 81.0 121.6

131 96.0 78.3 117.5

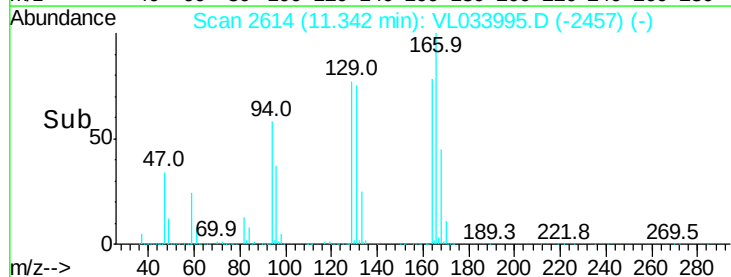
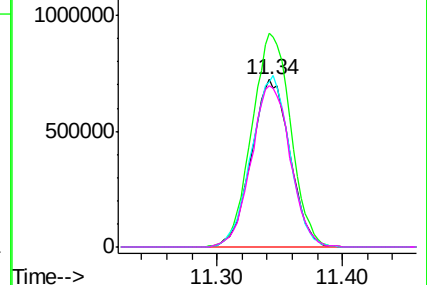


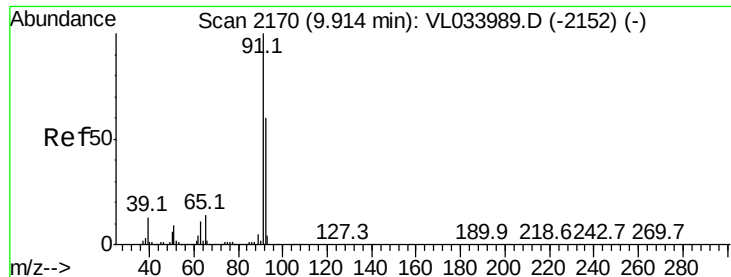
Abundance Ion 163.90 (163.60 to 164.60): V

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: 18.232 ppbv

RT: 9.92 min Scan# 2171

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

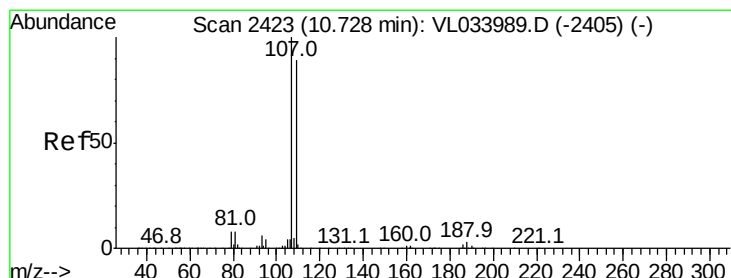
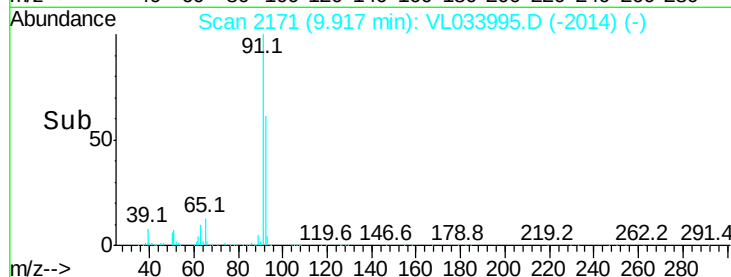
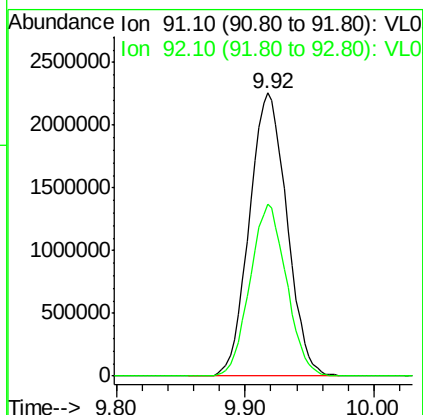
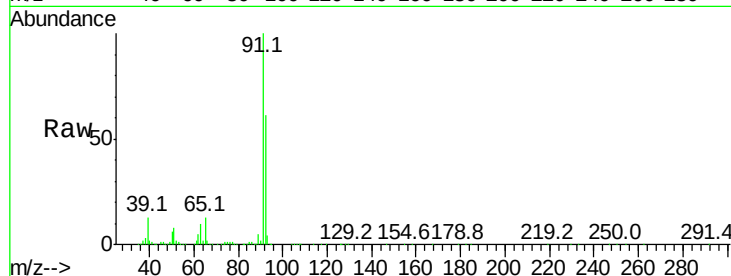
VSTDIC015

Tgt Ion: 91 Resp: 4585412

Ion Ratio Lower Upper

91 100

92 59.2 47.7 71.5



#54

1,2-Dibromoethane

Concen: 16.359 ppbv

RT: 10.73 min Scan# 2425

Delta R.T. 0.01 min

Lab File: VL033995.D

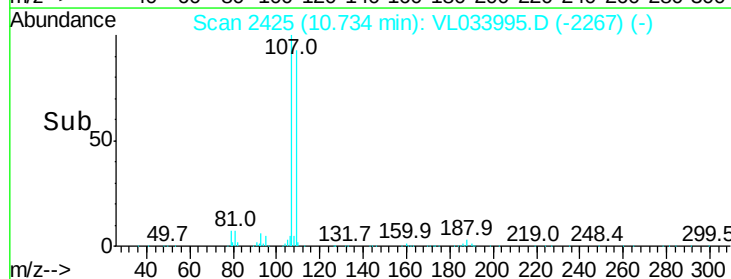
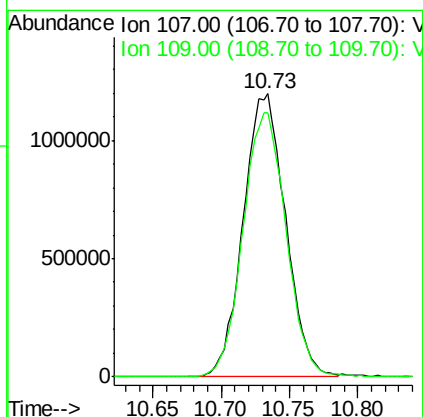
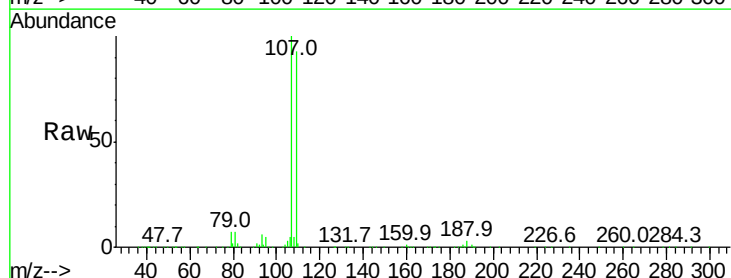
Acq: 2 Jul 2019 17:30

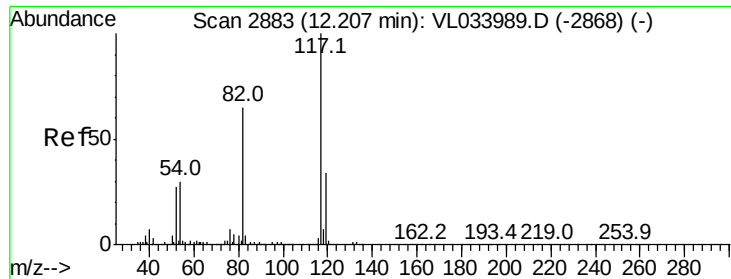
Tgt Ion: 107 Resp: 2578639

Ion Ratio Lower Upper

107 100

109 93.2 71.5 107.3





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.21 min Scan# 2884

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

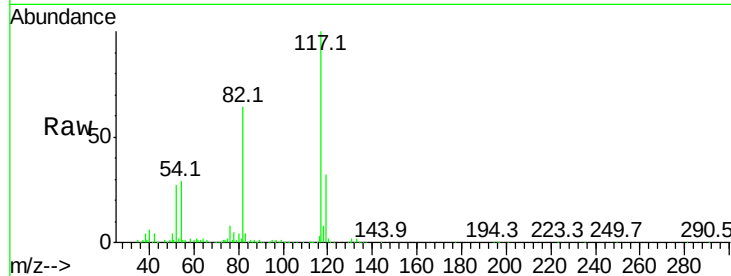
Tgt Ion:117 Resp: 3230775

Ion Ratio Lower Upper

117 100

82 61.9 50.8 76.2

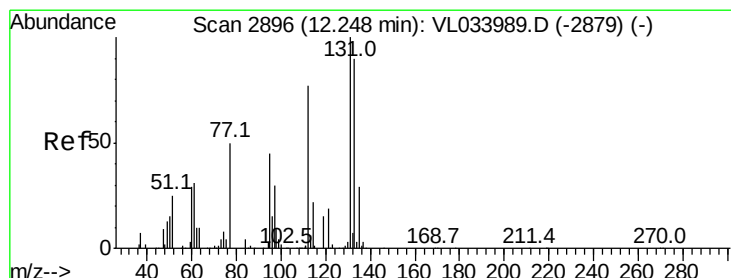
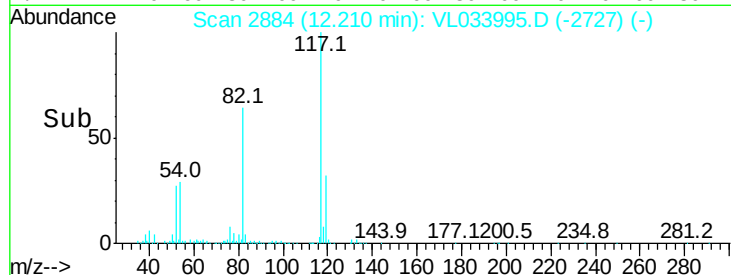
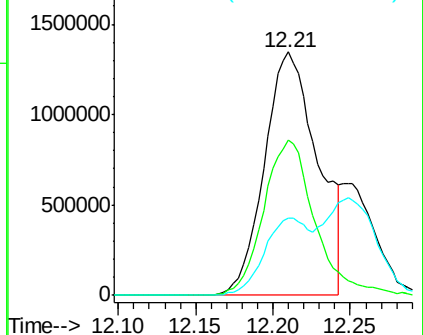
119 0.0 24.0 36.0#



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): V

Ion 119.10 (118.80 to 119.80): V



#56

1,1,1,2-Tetrachloroethane

Concen: 13.769 ppbv

RT: 12.25 min Scan# 2896

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

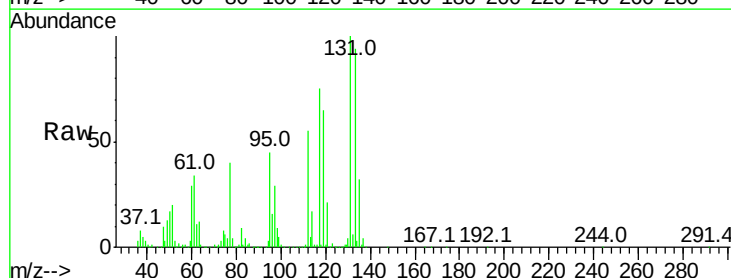
Tgt Ion:131 Resp: 1943255

Ion Ratio Lower Upper

131 100

133 94.9 76.2 114.2

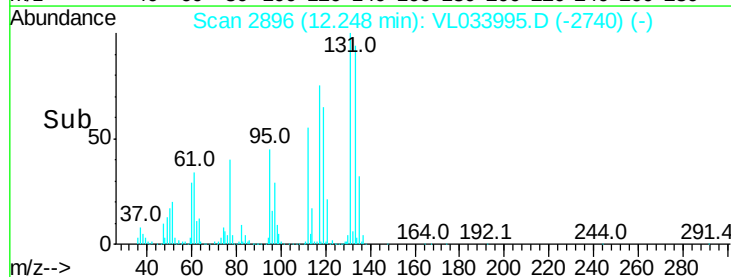
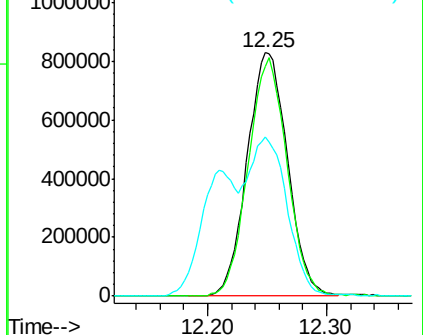
119 111.0 43.1 64.7#



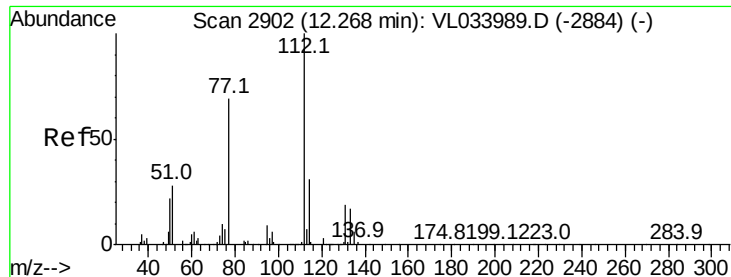
Abundance Ion 131.00 (130.70 to 131.70): V

Ion 133.00 (132.70 to 133.70): V

Ion 119.00 (118.70 to 119.70): V







#57

Chlorobenzene

Concen: 14.287 ppbv

RT: 12.27 min Scan# 2903

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

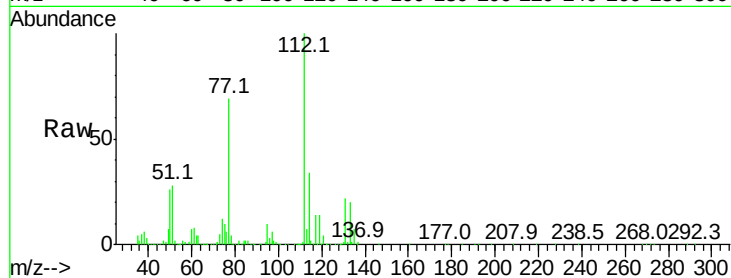
Tgt Ion:112 Resp: 3456974

Ion Ratio Lower Upper

112 100

77 68.9 55.9 83.9

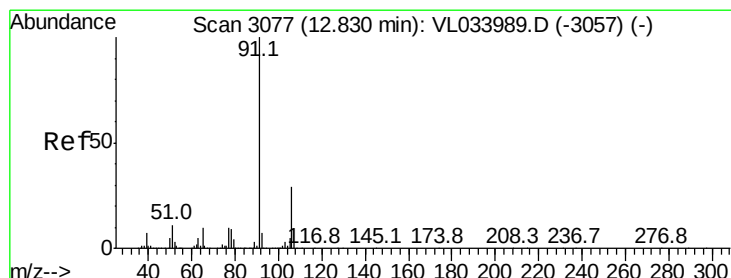
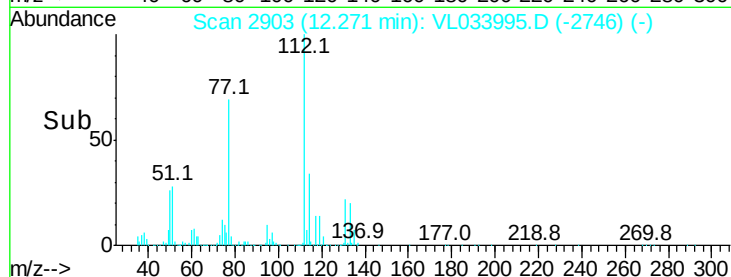
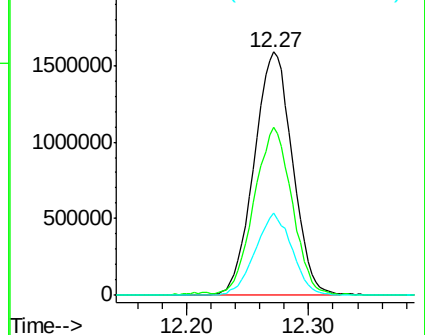
114 33.8 27.6 33.8#



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 16.744 ppbv

RT: 12.84 min Scan# 3079

Delta R.T. 0.01 min

Lab File: VL033995.D

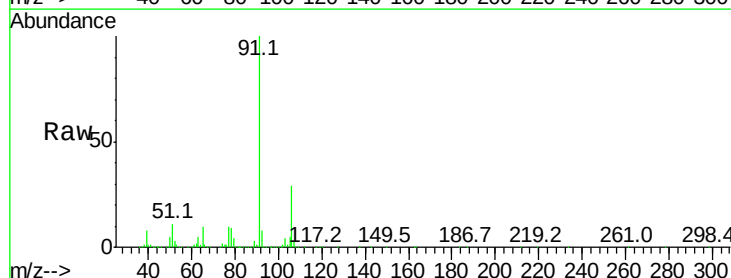
Acq: 2 Jul 2019 17:30

Tgt Ion: 91 Resp: 6098842

Ion Ratio Lower Upper

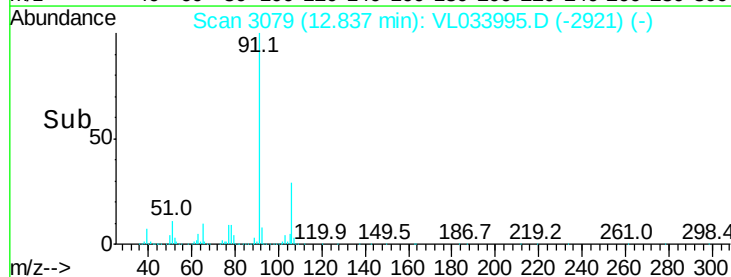
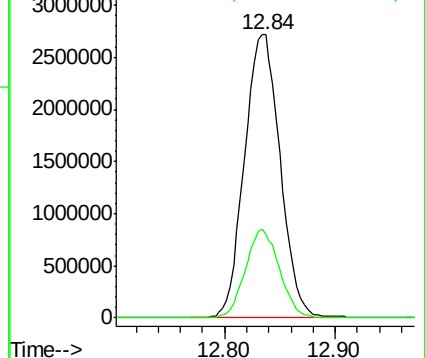
91 100

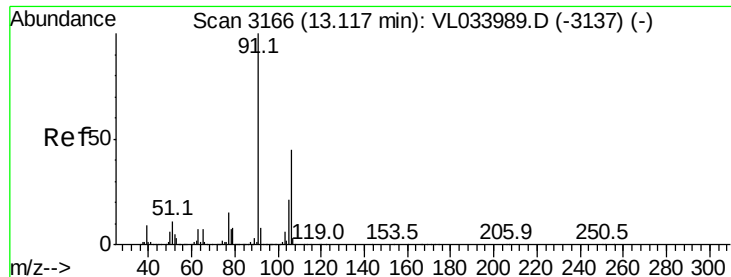
106 29.4 23.3 34.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

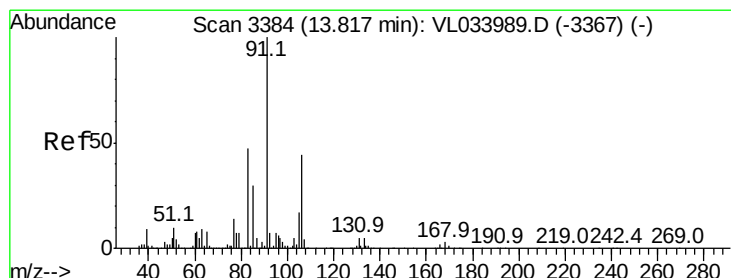
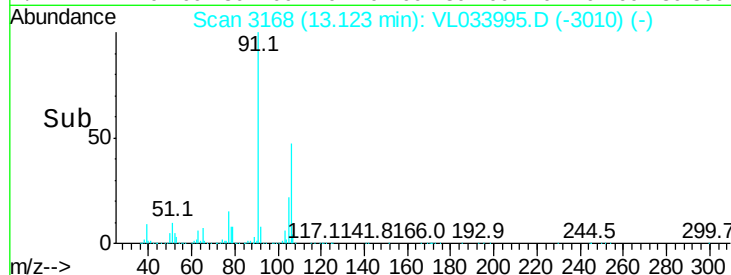
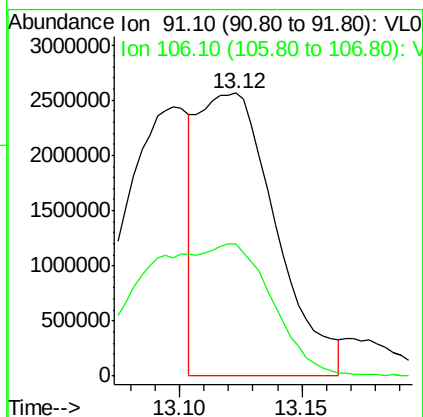
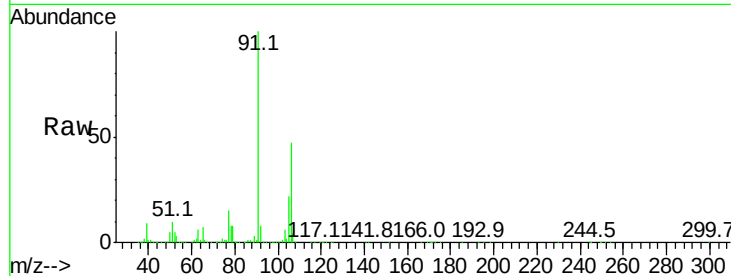




#59  
m/p-Xylene  
Concen: 17.021 ppbv  
RT: 13.12 min Scan# 3168  
Delta R.T. 0.01 min  
Lab File: VL033995.D  
Acq: 2 Jul 2019 17:30

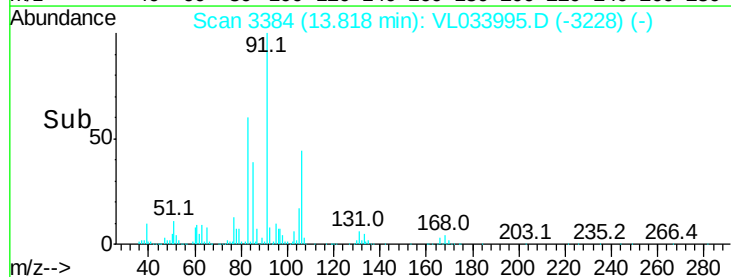
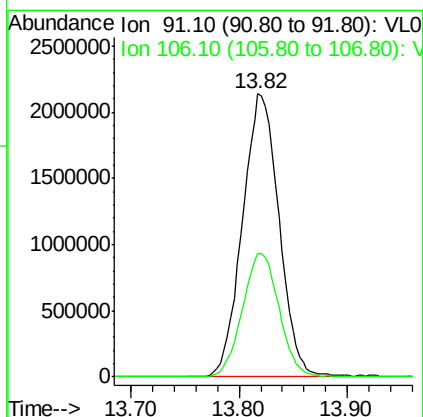
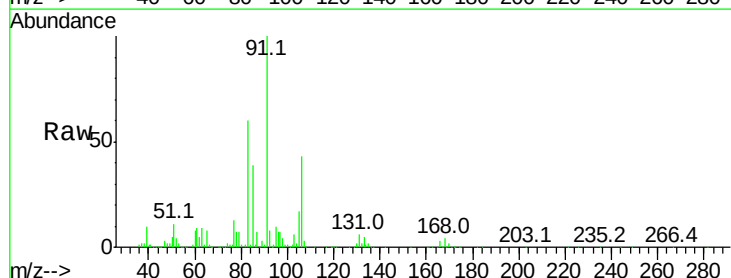
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

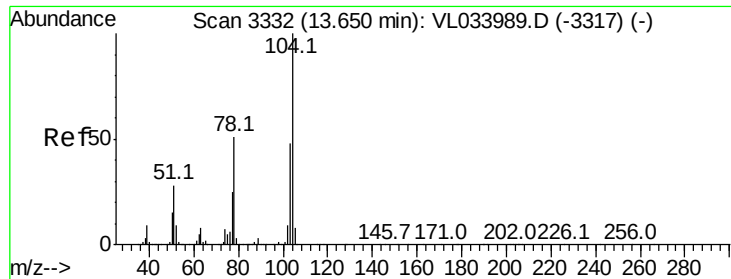
Tgt Ion: 91 Resp: 5638149  
Ion Ratio Lower Upper  
91 100  
106 81.6 35.7 53.5#



#60  
o-Xylene  
Concen: 14.693 ppbv  
RT: 13.82 min Scan# 3384  
Delta R.T. 0.00 min  
Lab File: VL033995.D  
Acq: 2 Jul 2019 17:30

Tgt Ion: 91 Resp: 5025149  
Ion Ratio Lower Upper  
91 100  
106 44.0 21.9 65.7





#61

Styrene

Concen: 17.301 ppbv

RT: 13.66 min Scan# 3334

Delta R.T. 0.01 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

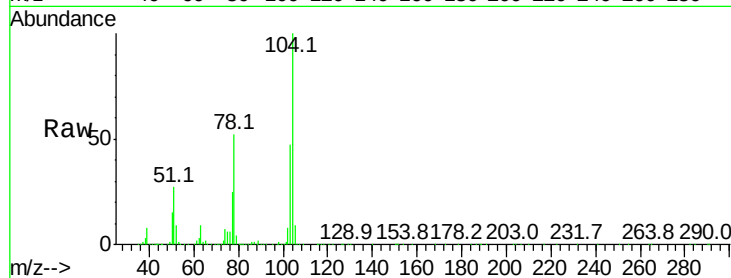
Tgt Ion:104 Resp: 3829013

Ion Ratio Lower Upper

104 100

78 54.4 43.9 65.9

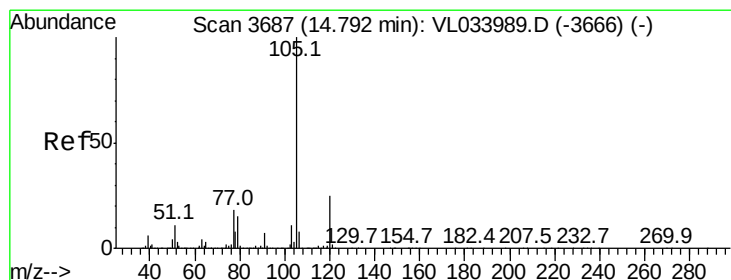
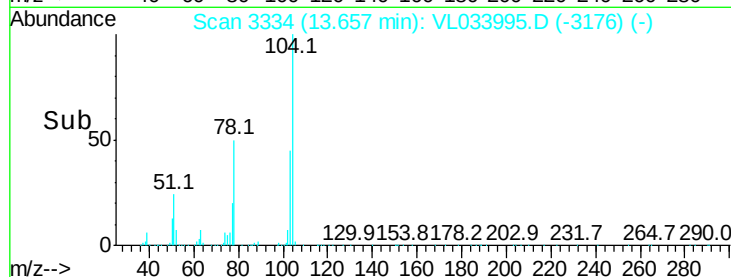
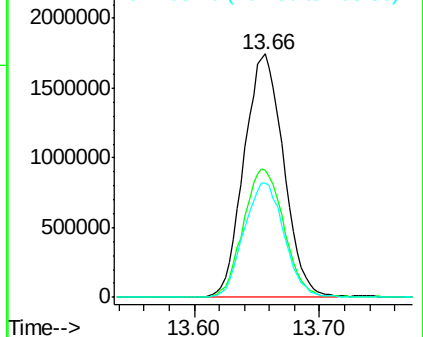
103 47.9 38.1 57.1



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 14.761 ppbv

RT: 14.79 min Scan# 3688

Delta R.T. 0.00 min

Lab File: VL033995.D

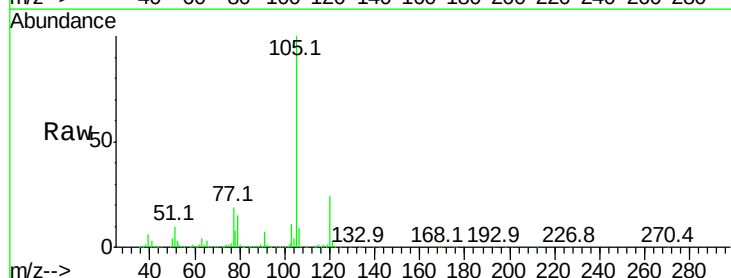
Acq: 2 Jul 2019 17:30

Tgt Ion:105 Resp: 6803837

Ion Ratio Lower Upper

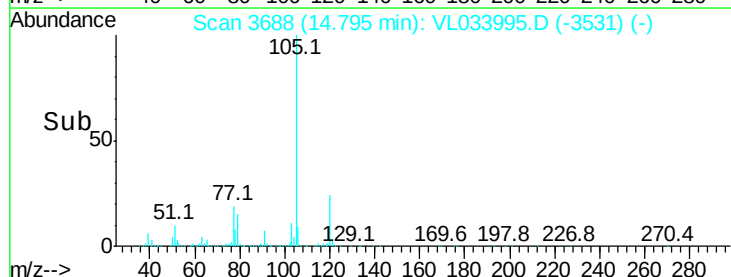
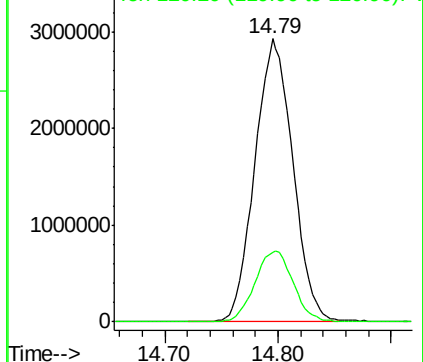
105 100

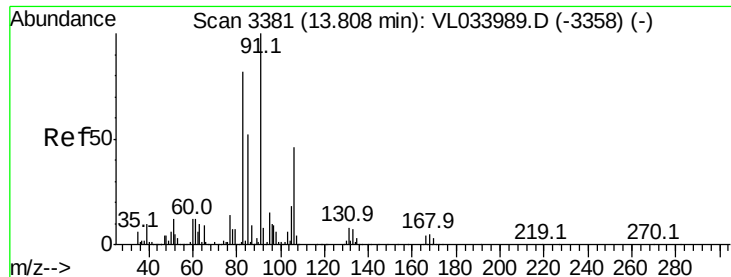
120 25.3 20.4 30.6



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#63

1,1,2,2-Tetrachloroethane

Concen: 13.586 ppbv

RT: 13.81 min Scan# 3381

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

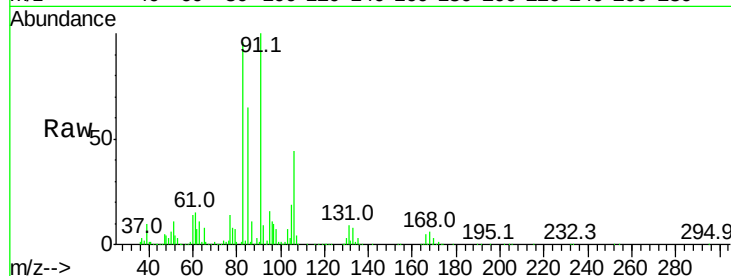
Tgt Ion: 83 Resp: 3497420

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 83  | 100   |       |       |
| 131 | 9.7   | 5.0   | 14.9  |
| 85  | 65.4  | 32.8  | 98.3  |

83 100

131 9.7 5.0 14.9

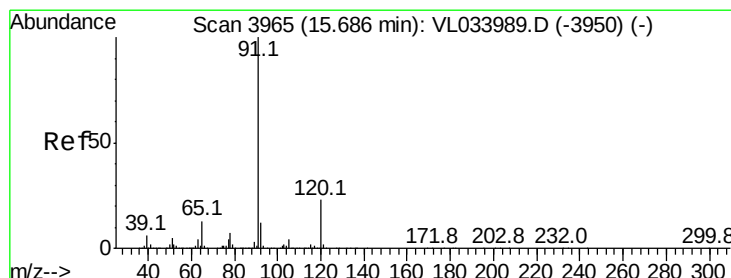
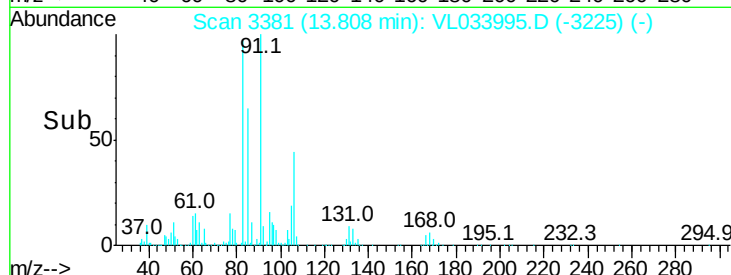
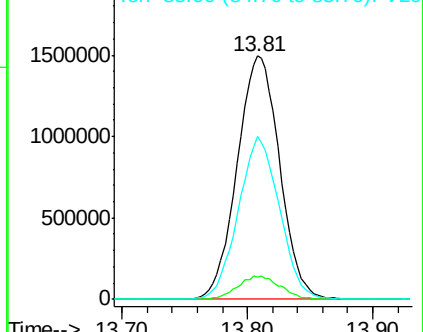
85 65.4 32.8 98.3



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 131.00 (130.70 to 131.70): VL0

Ion 85.00 (84.70 to 85.70): VL0



#64

n-propylbenzene

Concen: 14.845 ppbv

RT: 15.70 min Scan# 3968

Delta R.T. 0.01 min

Lab File: VL033995.D

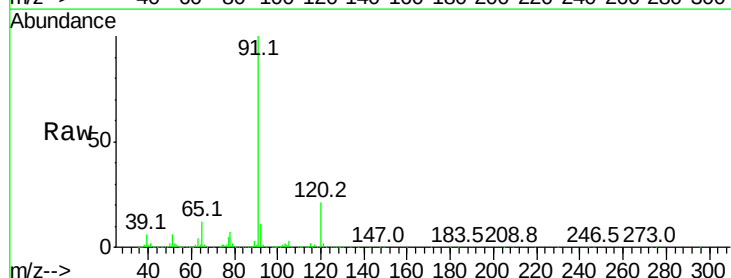
Acq: 2 Jul 2019 17:30

Tgt Ion: 120 Resp: 1752278

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 120 | 100   |       |       |
| 91  | 476.9 | 386.6 | 579.8 |

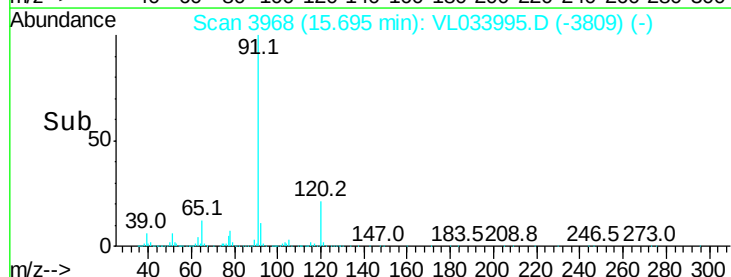
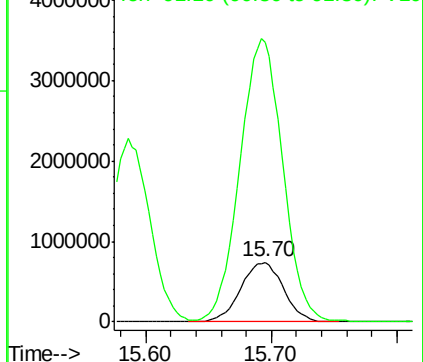
120 100

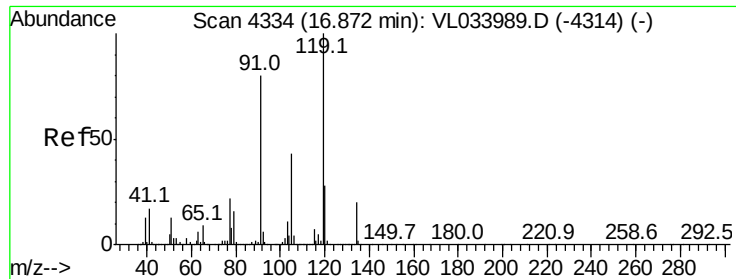
91 476.9 386.6 579.8



Abundance Ion 120.20 (119.90 to 120.90): VL0

Ion 91.10 (90.80 to 91.80): VL0

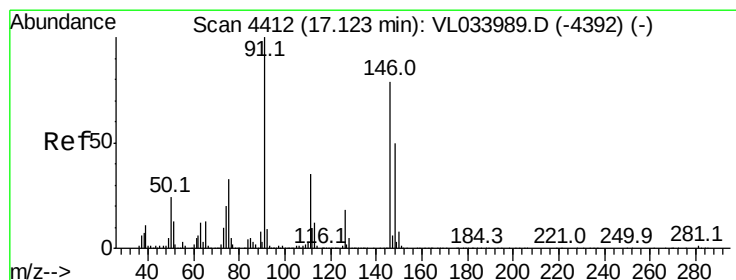
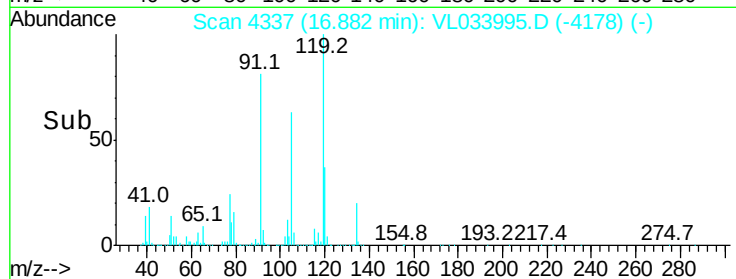
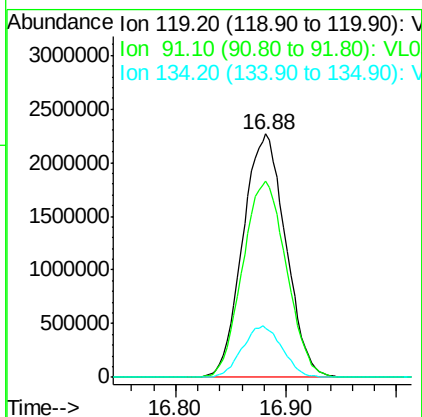
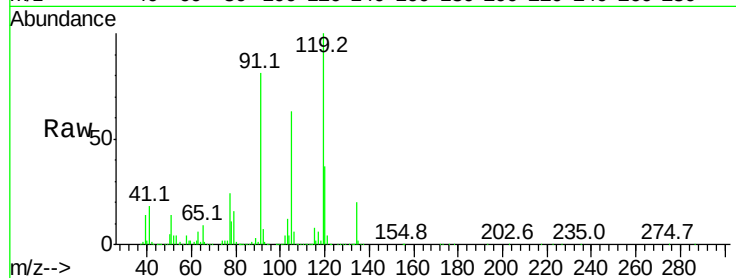




#65  
 tert-Butylbenzene  
 Concen: 14.295 ppbv  
 RT: 16.88 min Scan# 4337  
 Delta R.T. 0.01 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

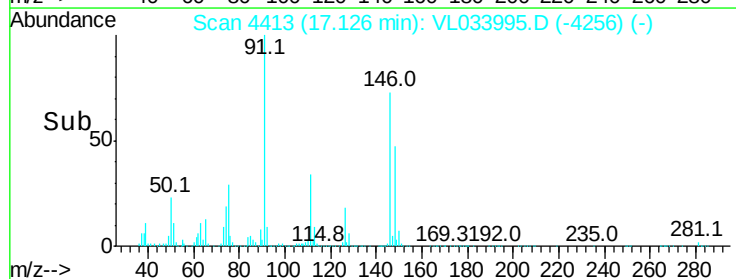
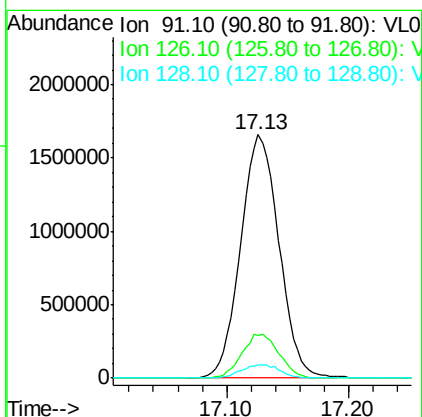
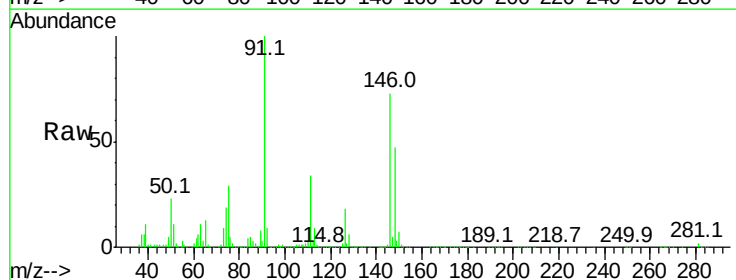
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

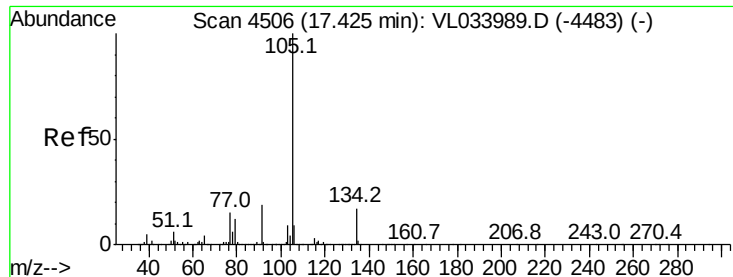
Tgt Ion: 119 Resp: 6097073  
 Ion Ratio Lower Upper  
 119 100  
 91 82.4 67.0 100.6  
 134 19.7 15.8 23.6



#66  
 Benzyl Chloride  
 Concen: 16.614 ppbv  
 RT: 17.13 min Scan# 4413  
 Delta R.T. 0.00 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

Tgt Ion: 91 Resp: 3590894  
 Ion Ratio Lower Upper  
 91 100  
 126 17.7 13.9 20.9  
 128 5.7 4.6 7.0





#67

sec-Butylbenzene

Concen: 14.183 ppbv

RT: 17.43 min Scan# 4508

Delta R.T. 0.01 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

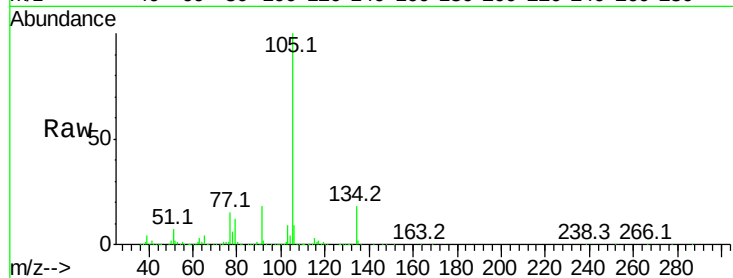
VSTDIC015

Tgt Ion:105 Resp: 8486315

Ion Ratio Lower Upper

105 100

134 18.6 14.7 22.1



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

17.43

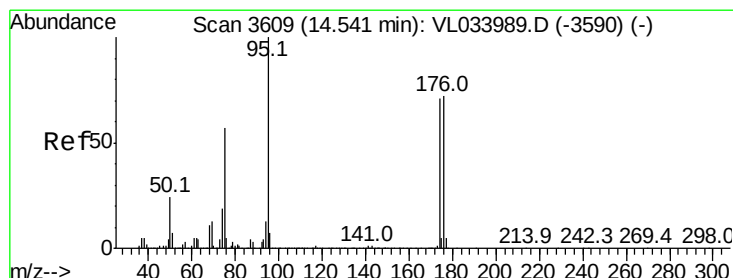
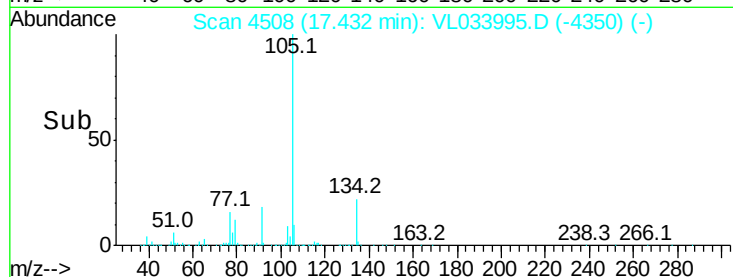
3000000

2000000

1000000

0

Time--> 17.30 17.40 17.50



#68

1-Bromo-4-Fluorobenzene

Concen: 8.838 ppbv

RT: 14.55 min Scan# 3612

Delta R.T. 0.01 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

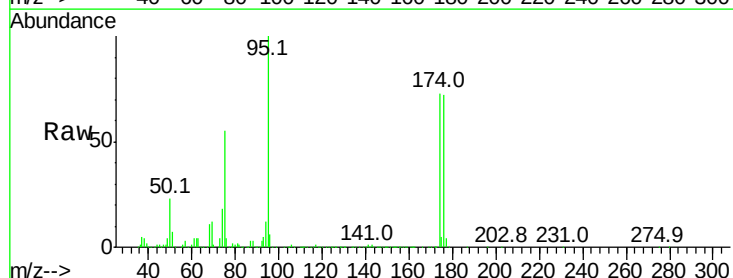
Tgt Ion: 95 Resp: 2345335

Ion Ratio Lower Upper

95 100

174 74.2 60.5 90.7

175 5.3 4.0 6.0



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

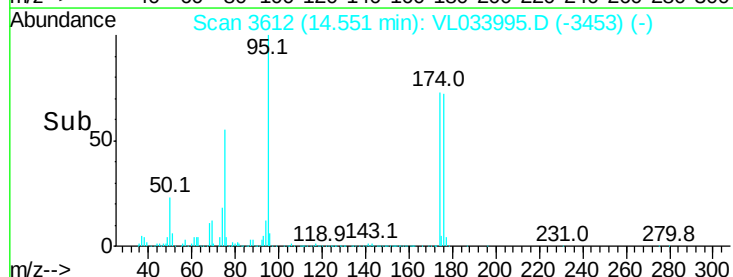
14.55

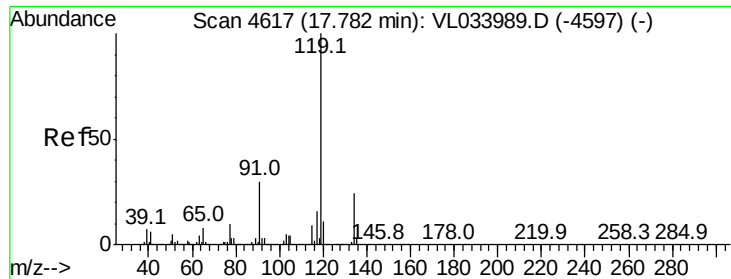
1000000

500000

0

Time--> 14.50 14.60

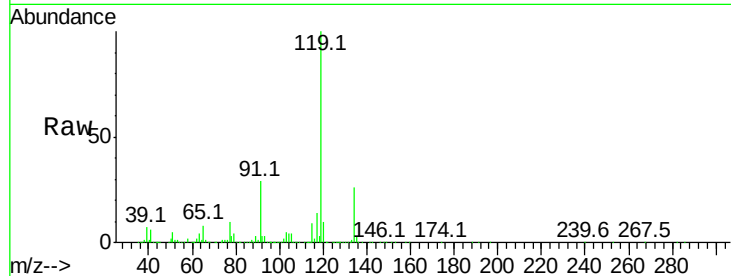




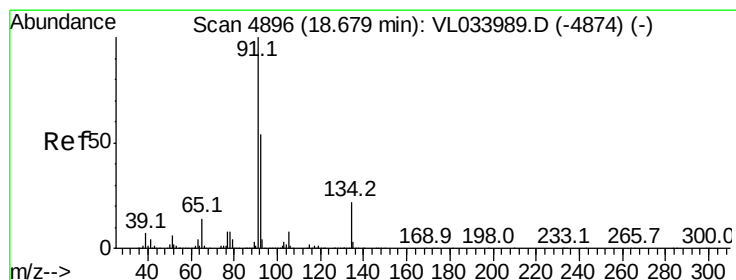
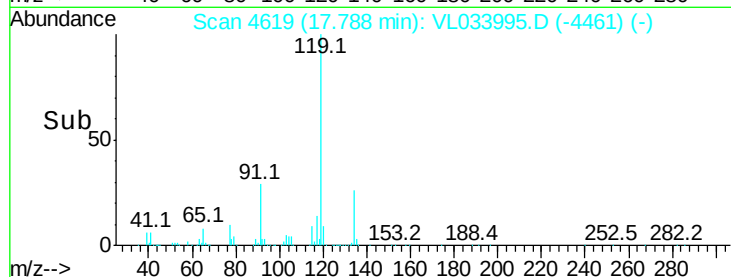
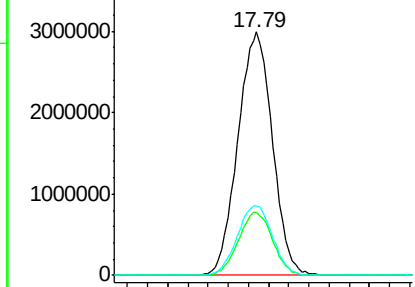
#69  
p-Isopropyltoluene  
Concen: 14.226 ppbv  
RT: 17.79 min Scan# 4619  
Delta R.T. 0.01 min  
Lab File: VL033995.D  
Acq: 2 Jul 2019 17:30

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Tgt Ion:119 Resp: 7082284  
Ion Ratio Lower Upper  
119 100  
134 25.8 20.1 30.1  
91 29.3 23.6 35.4

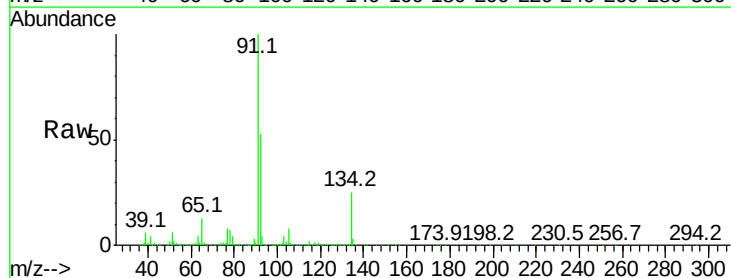


Abundance Ion 119.10 (118.80 to 119.80): V  
Ion 134.20 (133.90 to 134.90): V  
Ion 91.10 (90.80 to 91.80): V

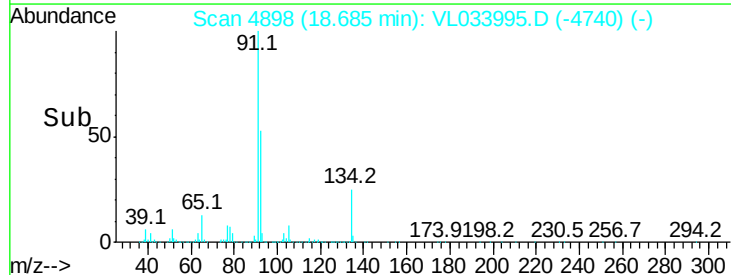
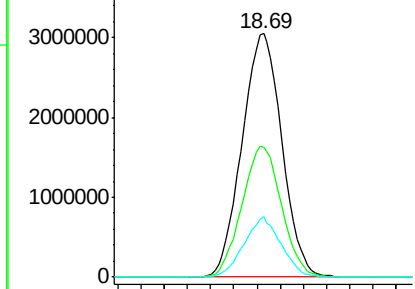


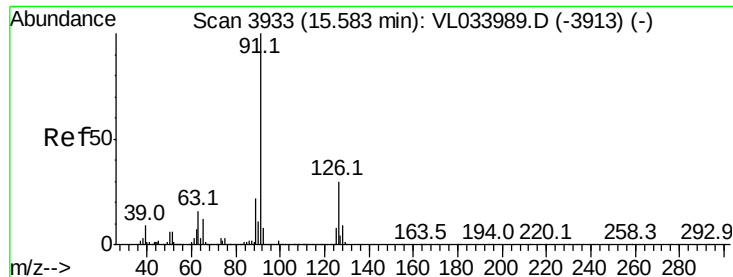
#70  
n-Butylbenzene  
Concen: 13.349 ppbv  
RT: 18.69 min Scan# 4898  
Delta R.T. 0.01 min  
Lab File: VL033995.D  
Acq: 2 Jul 2019 17:30

Tgt Ion: 91 Resp: 7278699  
Ion Ratio Lower Upper  
91 100  
92 53.5 42.0 63.0  
134 22.9 17.9 26.9



Abundance Ion 91.10 (90.80 to 91.80): VL0  
Ion 92.10 (91.80 to 92.80): VL0  
Ion 134.20 (133.90 to 134.90): V

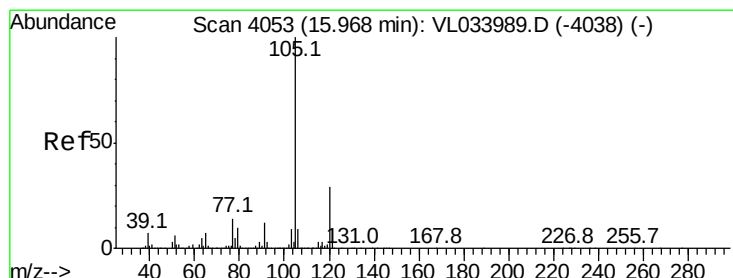
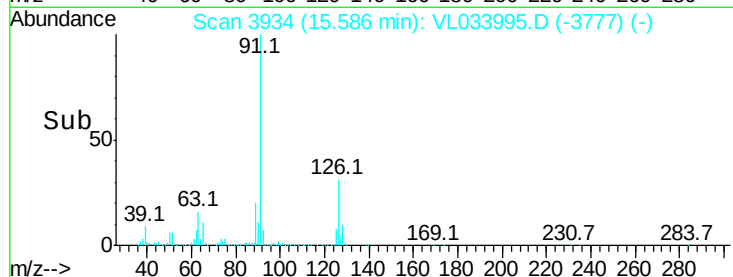
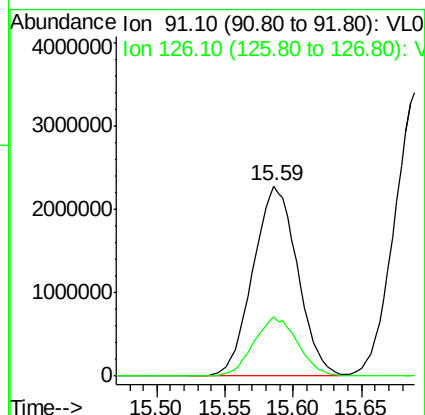
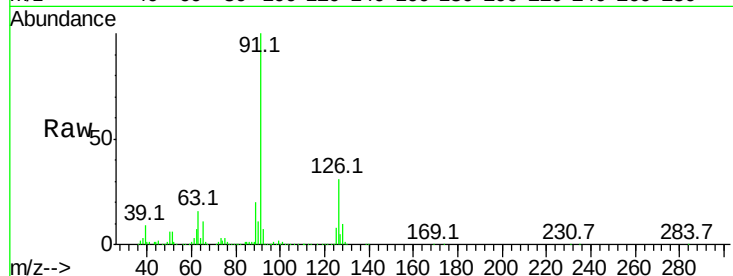




#71  
2-Chlorotoluene  
Concen: 15.184 ppbv  
RT: 15.59 min Scan# 3934  
Delta R.T. 0.00 min  
Lab File: VL033995.D  
Acq: 2 Jul 2019 17:30

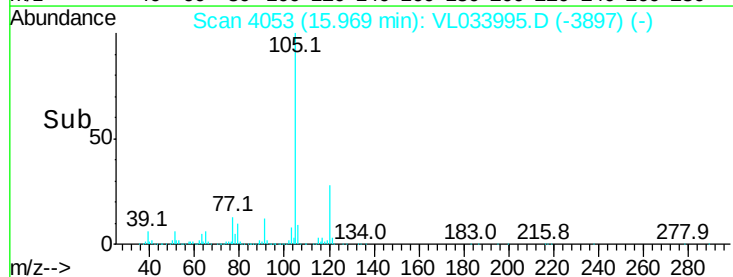
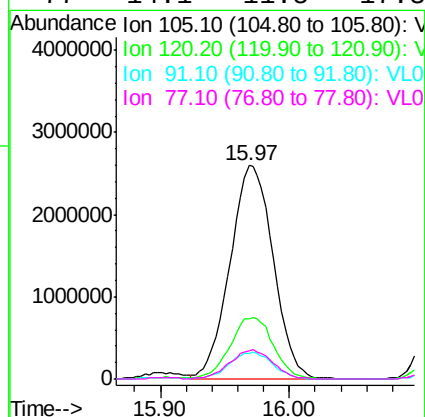
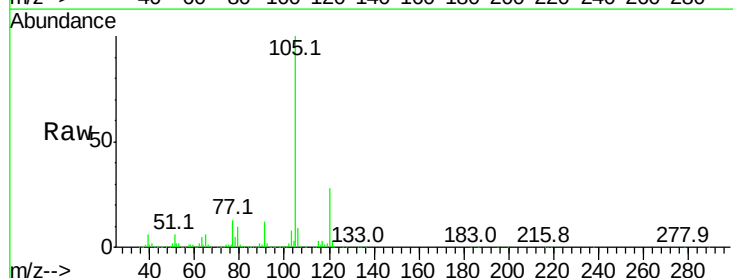
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC015

Tgt Ion: 91 Resp: 5156040  
Ion Ratio Lower Upper  
91 100  
126 30.6 12.3 49.3

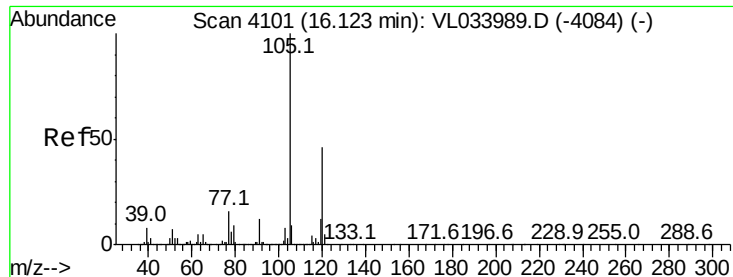


#72  
4-Ethyltoluene  
Concen: 15.451 ppbv  
RT: 15.97 min Scan# 4053  
Delta R.T. 0.00 min  
Lab File: VL033995.D  
Acq: 2 Jul 2019 17:30

Tgt Ion: 105 Resp: 6013428  
Ion Ratio Lower Upper  
105 100  
120 29.8 24.1 36.1  
91 12.7 10.6 16.0  
77 14.1 11.5 17.3







#73

1,3,5-Trimethylbenzene

Concen: 14.754 ppbv

RT: 16.13 min Scan# 4102

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

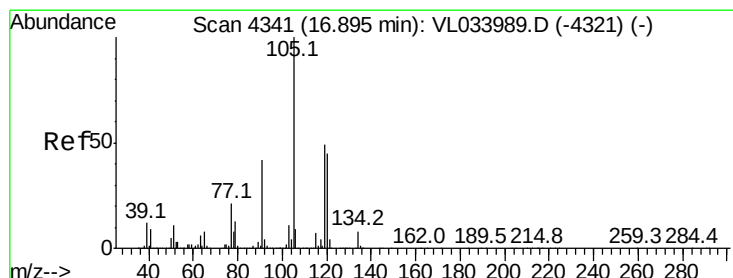
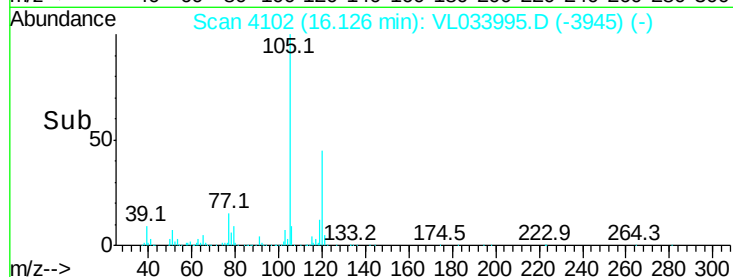
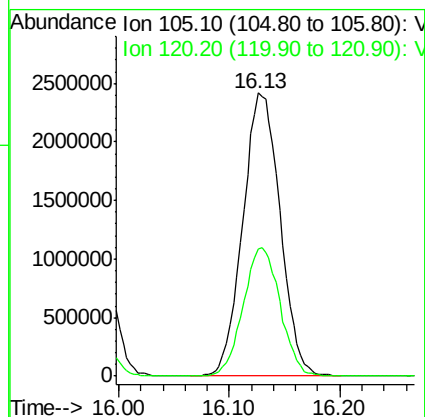
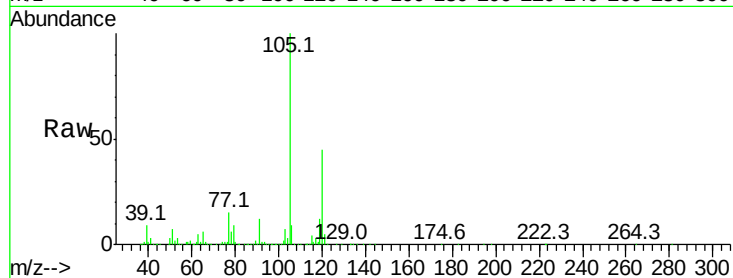
VSTDIC015

Tgt Ion:105 Resp: 5656149

Ion Ratio Lower Upper

105 100

120 45.1 36.4 54.6



#74

1,2,4-Trimethylbenzene

Concen: 13.420 ppbv

RT: 16.90 min Scan# 4342

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Tgt Ion:105 Resp: 5929758

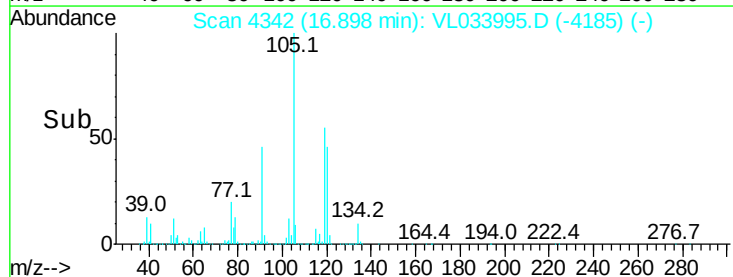
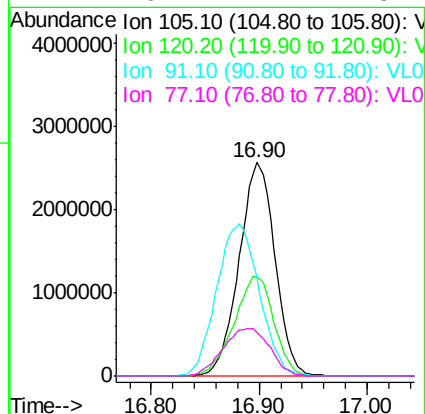
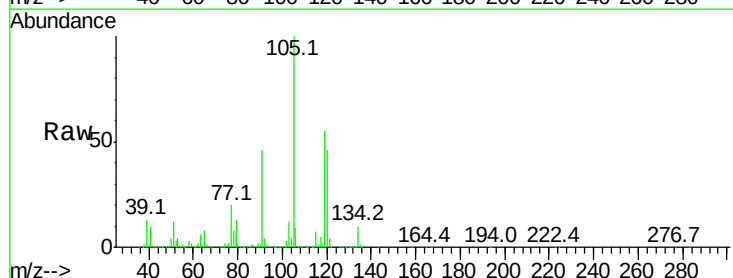
Ion Ratio Lower Upper

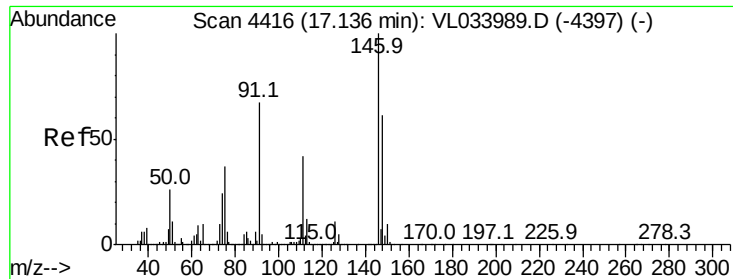
105 100

120 46.2 36.2 54.2

91 46.3 34.3 51.5

77 20.2 17.1 25.7





#75

1,3-Dichlorobenzene

Concen: 12.888 ppbv

RT: 17.14 min Scan# 4416

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

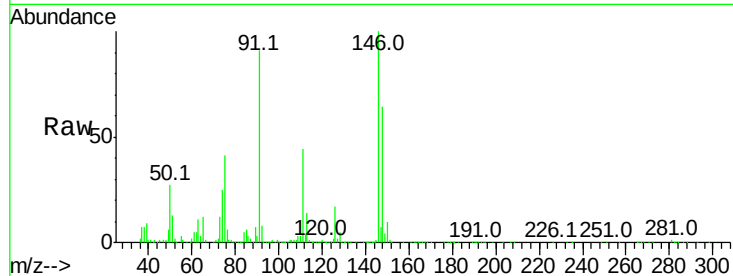
Tgt Ion:146 Resp: 3566142

Ion Ratio Lower Upper

146 100

111 43.9 22.3 66.9

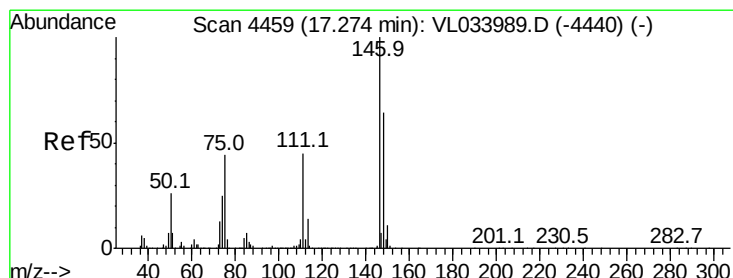
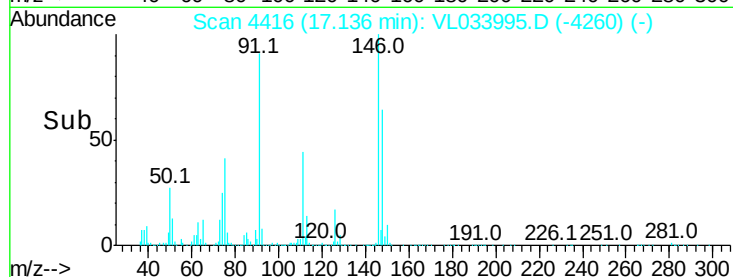
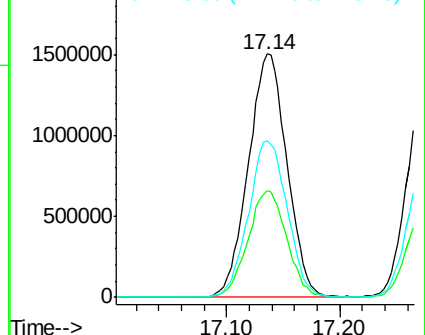
148 64.6 32.0 96.2



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#76

1,4-Dichlorobenzene

Concen: 14.018 ppbv

RT: 17.28 min Scan# 4460

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

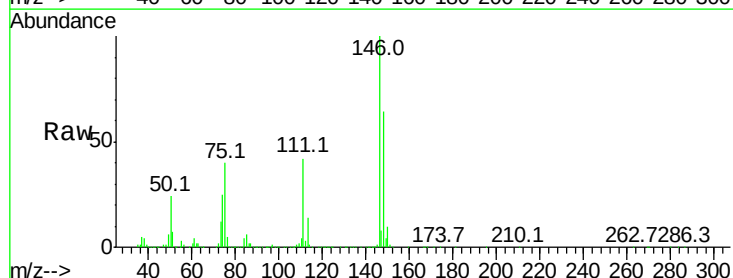
Tgt Ion:146 Resp: 3561564

Ion Ratio Lower Upper

146 100

111 42.4 21.9 65.5

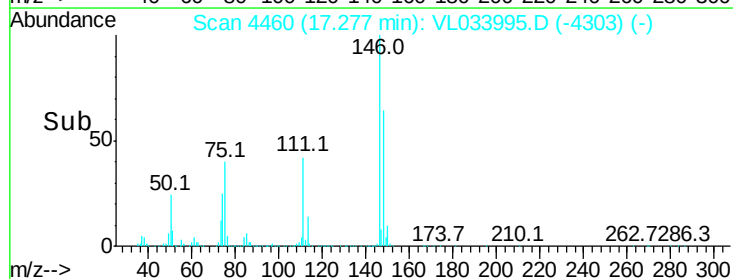
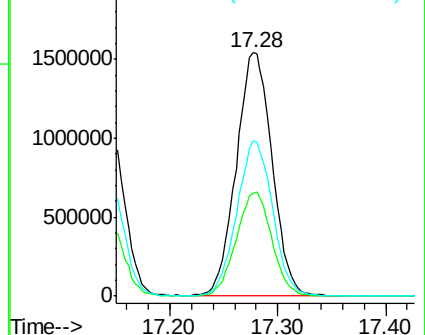
148 63.9 32.5 97.5

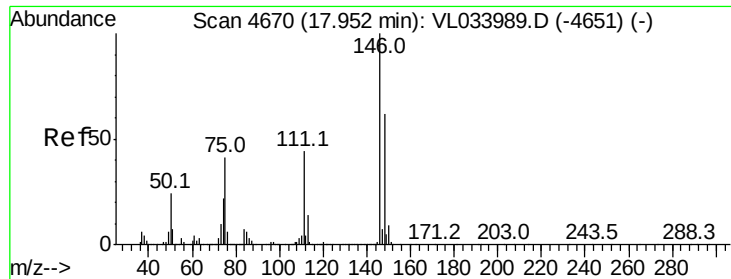


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#77

1,2-Dichlorobenzene

Concen: 13.262 ppbv

RT: 17.96 min Scan# 4672

Delta R.T. 0.01 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

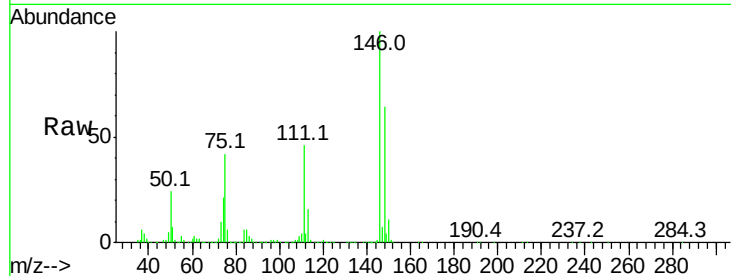
Tgt Ion:146 Resp: 3386435

Ion Ratio Lower Upper

146 100

111 45.8 22.7 68.1

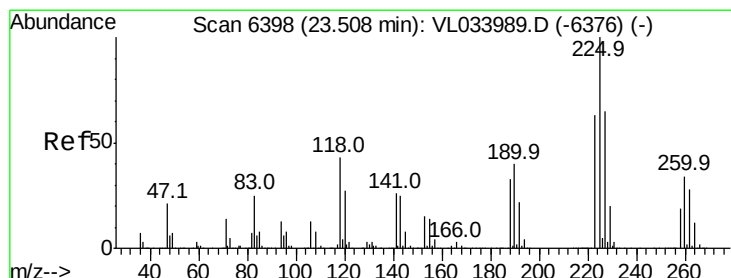
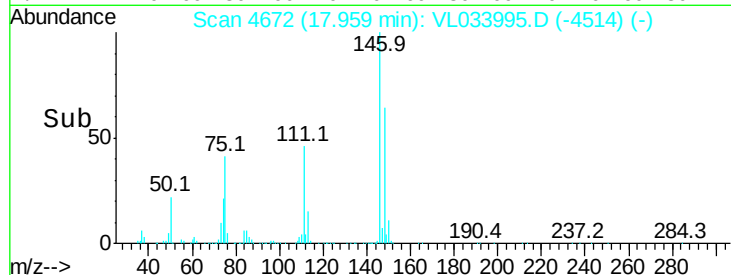
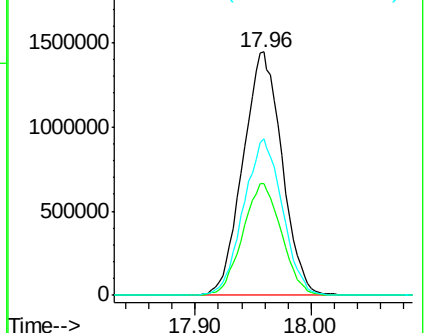
148 64.0 32.1 96.3



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#78

Hexachloro-1,3-Butadiene

Concen: 12.589 ppbv

RT: 23.51 min Scan# 6399

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

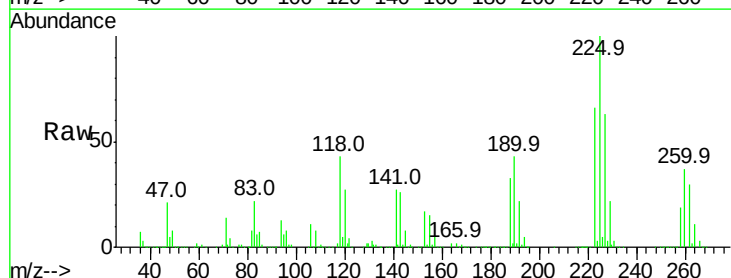
Tgt Ion:225 Resp: 2510755

Ion Ratio Lower Upper

225 100

223 63.8 51.5 77.3

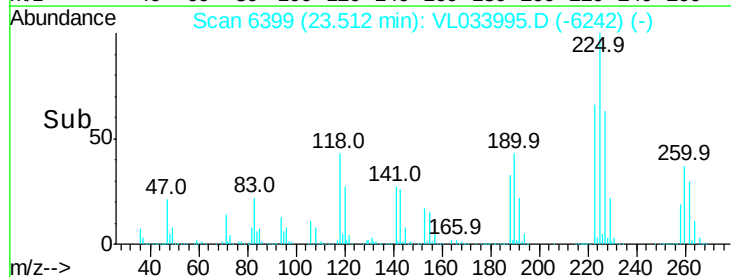
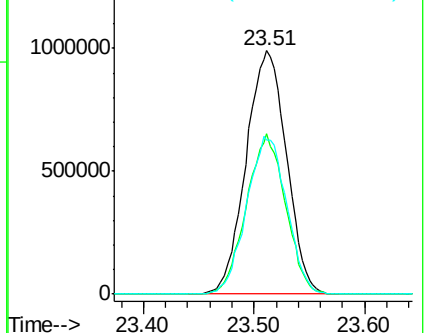
227 64.3 52.1 78.1

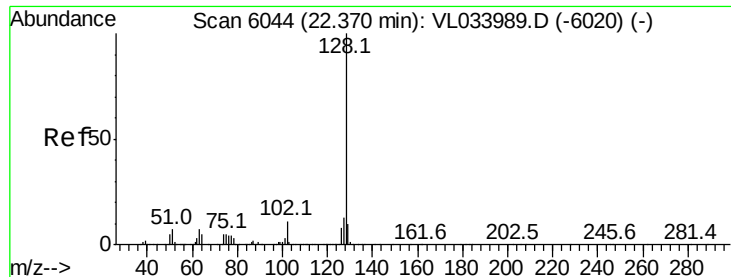


Abundance Ion 224.90 (224.60 to 225.60): V

Ion 222.90 (222.60 to 223.60): V

Ion 226.90 (226.60 to 227.60): V





#79

Naphthalene

Concen: 16.020 ppbv

RT: 22.37 min Scan# 6044

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC015

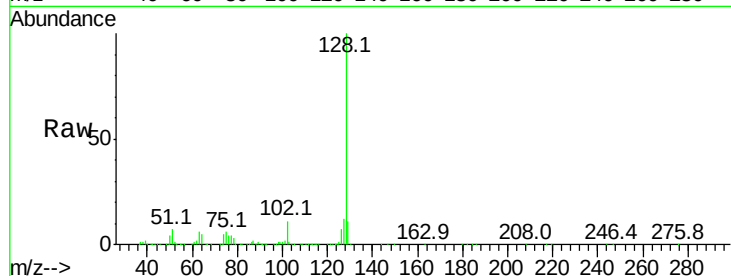
Tgt Ion:128 Resp: 5657994

Ion Ratio Lower Upper

128 100

127 12.5 10.6 15.8

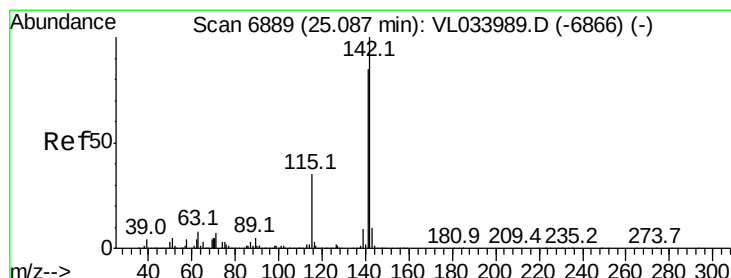
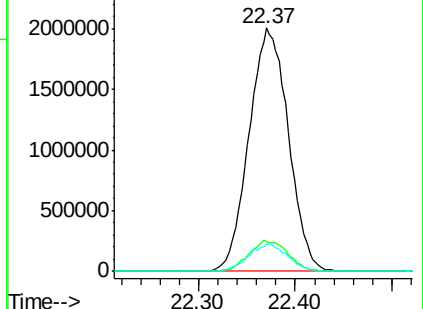
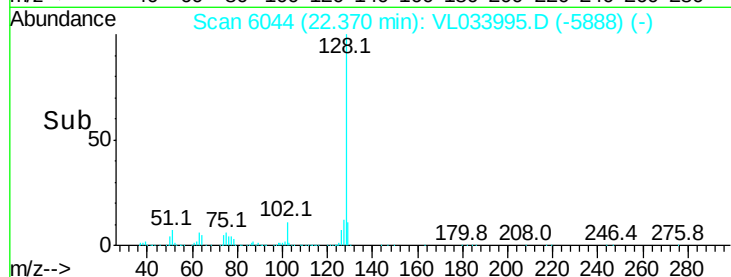
129 11.0 8.3 12.5



Abundance Ion 128.10 (127.80 to 128.80): V

Ion 127.10 (126.80 to 127.80): V

Ion 129.10 (128.80 to 129.80): V



#80

Naphthalene, 2-methyl-

Concen: 15.907 ppbv

RT: 25.09 min Scan# 6890

Delta R.T. 0.00 min

Lab File: VL033995.D

Acq: 2 Jul 2019 17:30

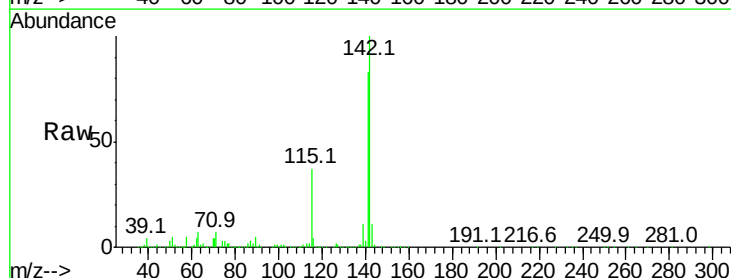
Tgt Ion:142 Resp: 2241511

Ion Ratio Lower Upper

142 100

141 84.0 68.2 102.2

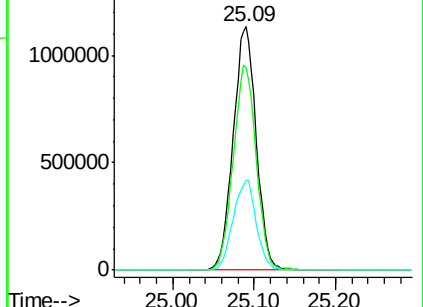
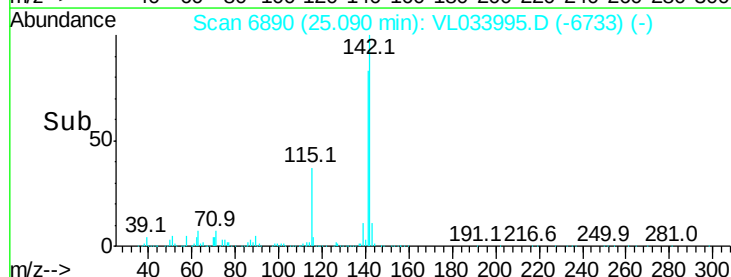
115 37.1 29.9 44.9

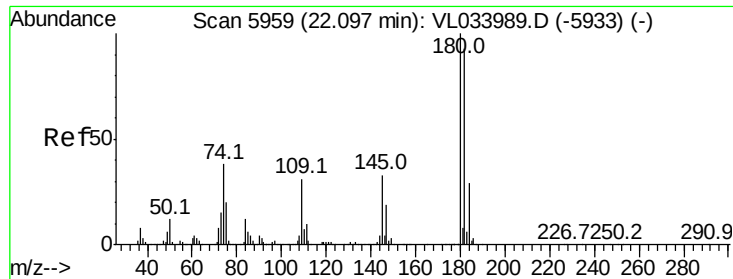


Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

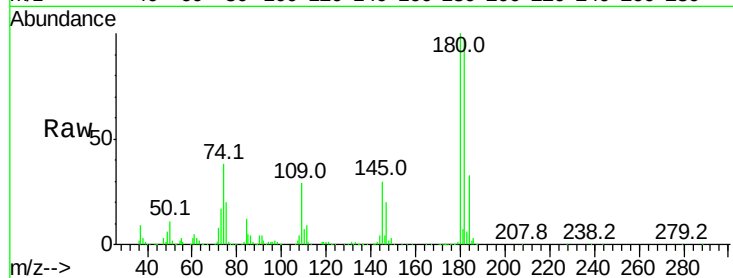




#81  
 1,2,4-Trichlorobenzene  
 Concen: 14.898 ppbv  
 RT: 22.10 min Scan# 5959  
 Delta R.T. 0.00 min  
 Lab File: VL033995.D  
 Acq: 2 Jul 2019 17:30

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

Tgt Ion:180 Resp: 3321707  
 Ion Ratio Lower Upper  
 180 100  
 182 95.6 76.6 114.8  
 184 31.1 24.6 36.8



Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V

