

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL091019\  
 Data File : VL034140.D  
 Acq On : 10 Sep 2019 12:10  
 Operator : SY/AP  
 Sample : VL0910ABS01  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

Manual Integrations  
 APPROVED

MMDadoda  
 9/12/2019 5:16:45 AM

Quant Time: Sep 11 02:04:20 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL090519AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Sep 0  
 QLast Update : Thu Sep 05 10:21:45 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.70  | 49   | 1011219  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.23  | 114  | 1849324  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.17 | 117  | 2089811m | 10.00 | ppbv  | 0.00     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.51  | 95    | 1567752  | 9.18     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 91.80% |

| Target Compounds               |      |     |         |       | Ovalue    |
|--------------------------------|------|-----|---------|-------|-----------|
| 2) Dichlorodifluoromethane     | 3.04 | 85  | 1554664 | 9.321 | ppbv 98   |
| 3) Chlorodifluoromethane       | 2.98 | 51  | 1127037 | 9.999 | ppbv 100  |
| 4) Chloromethane               | 3.13 | 50  | 622403  | 8.832 | ppbv 99   |
| 5) Vinyl Chloride              | 3.25 | 62  | 560009  | 8.724 | ppbv 96   |
| 6) Bromomethane                | 3.47 | 94  | 289448  | 9.137 | ppbv 99   |
| 7) Chloroethane                | 3.56 | 64  | 204644  | 9.357 | ppbv 99   |
| 8) Dichlorotetrafluoroethane   | 3.18 | 85  | 1189228 | 8.858 | ppbv 98   |
| 9) Propene                     | 3.00 | 41  | 553752  | 8.780 | ppbv 98   |
| 10) Heptane                    | 8.18 | 43  | 1471176 | 8.989 | ppbv 100  |
| 11) Trichlorofluoromethane     | 3.96 | 101 | 1225151 | 9.007 | ppbv 97   |
| 12) 1,1,2-Trichlorotrifluoroet | 4.50 | 101 | 815573  | 8.962 | ppbv 99   |
| 13) Ethanol                    | 3.61 | 45  | 108154  | 8.754 | ppbv 98   |
| 14) Bromoethene                | 3.74 | 108 | 347446  | 8.819 | ppbv 99   |
| 15) Acetone                    | 3.85 | 43  | 1039321 | 8.528 | ppbv 100  |
| 16) 1,3-Butadiene              | 3.32 | 39  | 560391  | 9.080 | ppbv 100  |
| 17) tert-Butyl alcohol         | 4.31 | 59  | 758883  | 8.578 | ppbv 99   |
| 18) 1,1-Dichloroethene         | 4.30 | 96  | 373117  | 8.974 | ppbv 93   |
| 19) Isopropyl Alcohol          | 3.98 | 45  | 671269  | 8.160 | ppbv 100  |
| 20) Methylene Chloride         | 4.36 | 84  | 332783  | 8.259 | ppbv 97   |
| 21) Allyl Chloride             | 4.43 | 41  | 733202  | 9.126 | ppbv 99   |
| 22) trans-1,2-Dichloroethene   | 4.91 | 96  | 368886  | 8.864 | ppbv 99   |
| 23) Vinyl Acetate              | 5.10 | 43  | 1895729 | 9.168 | ppbv 98   |
| 24) 1,1-Dichloroethane         | 5.04 | 63  | 1234279 | 8.994 | ppbv 99   |
| 25) Ethyl Acetate              | 5.71 | 43  | 2211378 | 8.266 | ppbv 99   |
| 26) Hexane                     | 5.72 | 57  | 971687  | 8.170 | ppbv 97   |
| 27) Carbon Disulfide           | 4.56 | 76  | 1010291 | 9.412 | ppbv 98   |
| 28) Methyl tert-Butyl Ether    | 5.06 | 73  | 1552759 | 8.910 | ppbv 99   |
| 29) Chloroform                 | 5.79 | 83  | 1424257 | 8.878 | ppbv 98   |
| 30) Cyclohexane                | 7.19 | 84  | 763887  | 8.884 | ppbv 96   |
| 31) cis-1,2-Dichloroethene     | 5.58 | 61  | 1042334 | 9.151 | ppbv 96   |
| 32) 1,1,1-Trichloroethane      | 6.56 | 97  | 1351863 | 8.919 | ppbv 98   |
| 34) 2-Butanone                 | 5.28 | 43  | 1617915 | 9.100 | ppbv 99   |
| 35) Carbon Tetrachloride       | 7.07 | 117 | 1291036 | 8.954 | ppbv 99   |
| 36) Benzene                    | 6.94 | 78  | 1866878 | 8.832 | ppbv 96   |
| 37) 1,2-Dichloroethane         | 6.35 | 62  | 1212348 | 9.349 | ppbv 98   |
| 38) Trichloroethene            | 7.89 | 130 | 598931  | 7.593 | ppbv 94   |
| 39) 1,2-Dichloropropane        | 7.67 | 63  | 820918  | 9.075 | ppbv 92   |
| 40) 1,4-Dioxane                | 7.89 | 88  | 249643  | 7.509 | ppbv # 99 |
| 41) Tetrahydrofuran            | 6.09 | 42  | 987292  | 9.263 | ppbv 98   |
| 42) Bromodichloromethane       | 7.85 | 83  | 1557682 | 9.217 | ppbv 98   |
| 43) Methyl Methacrylate        | 8.07 | 69  | 807053  | 9.268 | ppbv 95   |

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 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

Manual Integrations  
 APPROVED

MMDadoda  
 9/12/2019 5:16:45 AM

Quant Time: Sep 11 02:04:20 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL090519AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Sep 0  
 QLast Update : Thu Sep 05 10:21:45 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.93  | 57   | 3378973  | 8.670  | ppbv   | 100      |
| 45) t-1,3-Dichloropropene     | 9.35  | 75   | 984545   | 9.619  | ppbv   | 99       |
| 46) cis-1,3-Dichloropropene   | 8.77  | 75   | 1149394  | 9.231  | ppbv   | 96       |
| 47) 1,1,2-Trichloroethane     | 9.55  | 97   | 743739   | 9.024  | ppbv   | 97       |
| 48) Dibromochloromethane      | 10.38 | 129  | 1181309  | 9.606  | ppbv   | 99       |
| 49) Bromoform                 | 13.13 | 173  | 998729   | 9.263  | ppbv   | 98       |
| 50) 4-Methyl-2-Pentanone      | 8.80  | 43   | 2403362  | 8.859  | ppbv   | 98       |
| 51) 2-Hexanone                | 10.20 | 43   | 2054424  | 8.766  | ppbv # | 99       |
| 52) Tetrachloroethene         | 11.30 | 164  | 591987   | 7.942  | ppbv   | 98       |
| 53) Toluene                   | 9.88  | 91   | 2094574  | 8.959  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.69 | 107  | 1132871  | 9.227  | ppbv   | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 12.21 | 131  | 773244   | 8.627  | ppbv # | 60       |
| 57) Chlorobenzene             | 12.23 | 112  | 1445345  | 8.040  | ppbv   | 99       |
| 58) Ethyl Benzene             | 12.80 | 91   | 2832130  | 8.264  | ppbv   | 98       |
| 59) m/p-Xylene                | 13.08 | 91   | 4516391m | 16.156 | ppbv   |          |
| 60) o-Xylene                  | 13.78 | 91   | 2258194  | 8.111  | ppbv   | 98       |
| 61) Styrene                   | 13.62 | 104  | 1686246  | 8.097  | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.75 | 105  | 2994152  | 8.265  | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.76 | 83   | 1644157  | 7.246  | ppbv   | 99       |
| 64) n-propylbenzene           | 15.65 | 120  | 779767   | 8.592  | ppbv   | 97       |
| 65) tert-Butylbenzene         | 16.84 | 119  | 2497845  | 7.989  | ppbv   | 99       |
| 66) Benzyl Chloride           | 17.09 | 91   | 1032251  | 8.955  | ppbv   | 97       |
| 67) sec-Butylbenzene          | 17.39 | 105  | 3675234  | 8.175  | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.74 | 119  | 2958273  | 8.224  | ppbv   | 100      |
| 70) n-Butylbenzene            | 18.64 | 91   | 3389718  | 8.282  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.55 | 91   | 2472047  | 8.353  | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.93 | 105  | 2606039  | 8.296  | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.09 | 105  | 2500813  | 8.191  | ppbv   | 98       |
| 74) 1,2,4-Trimethylbenzene    | 16.86 | 105  | 2463297  | 7.835  | ppbv   | 96       |
| 75) 1,3-Dichlorobenzene       | 17.09 | 146  | 1314090  | 7.889  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.24 | 146  | 1356681  | 7.771  | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.92 | 146  | 1362285  | 7.988  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 23.47 | 225  | 1065101  | 9.154  | ppbv   | 100      |
| 79) Naphthalene               | 22.32 | 128  | 2404944  | 8.461  | ppbv   | 98       |
| 80) Naphthalene, 2-methyl-    | 25.06 | 142  | 883594   | 8.956  | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 22.05 | 180  | 1211209  | 7.832  | ppbv   | 99       |

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

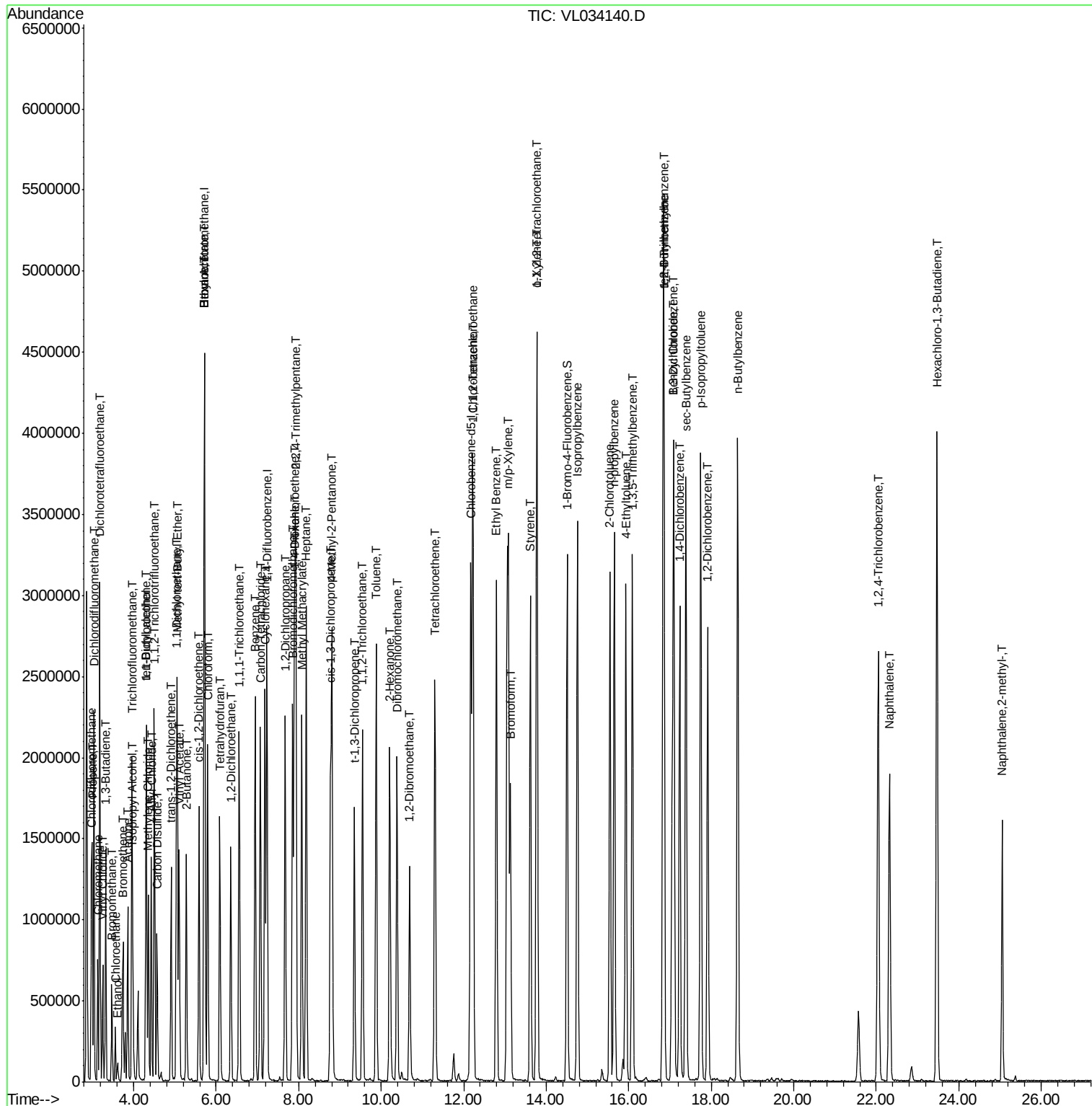
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL091019\  
Data File : VL034140.D  
Acq On : 10 Sep 2019 12:10  
Operator : SY/AP  
Sample : VL0910ABS01  
Misc : 400ml/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

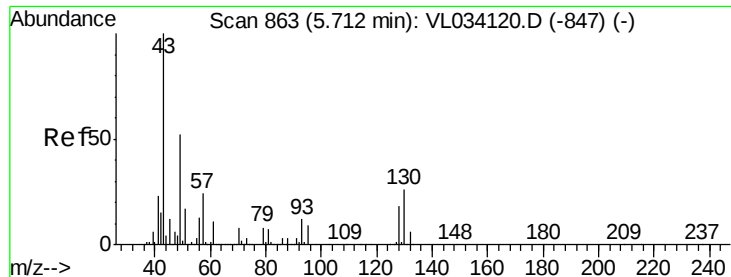
Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

Manual Integrations  
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9/12/2019 5:16:45 AM

Quant Time: Sep 11 02:04:20 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL090519AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Sep  
QLast Update : Thu Sep 05 10:21:45 2019  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.70 min Scan# 907

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion: 49 Resp: 1011219

Ion Ratio Lower Upper

49 100

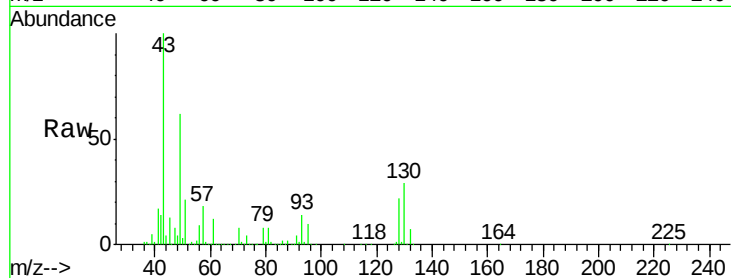
128 35.5 18.4 55.0

130 45.0 23.5 70.6

Manual Integrations  
APPROVED

MMDadoda

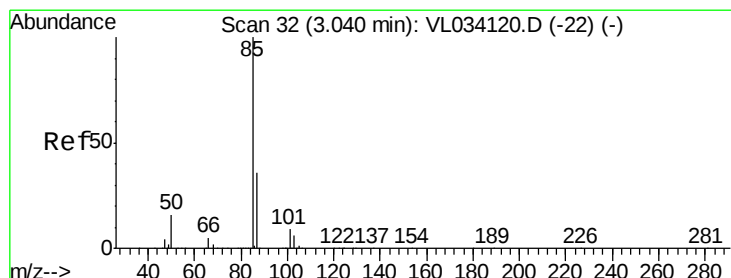
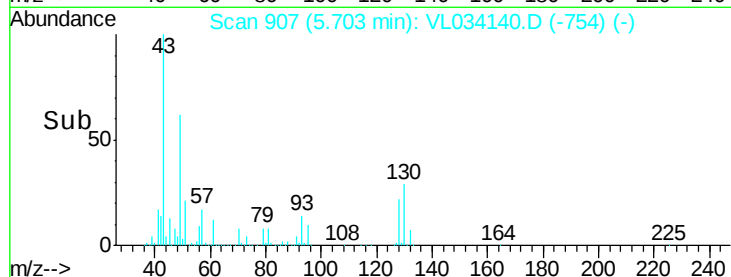
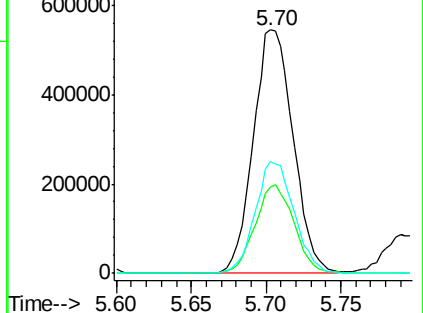
9/12/2019 5:16:45 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 9.321 ppbv

RT: 3.04 min Scan# 78

Delta R.T. -0.00 min

Lab File: VL034140.D

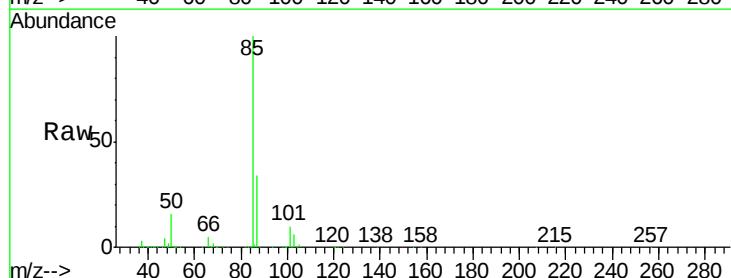
Acq: 10 Sep 2019 12:10

Tgt Ion: 85 Resp: 1554664

Ion Ratio Lower Upper

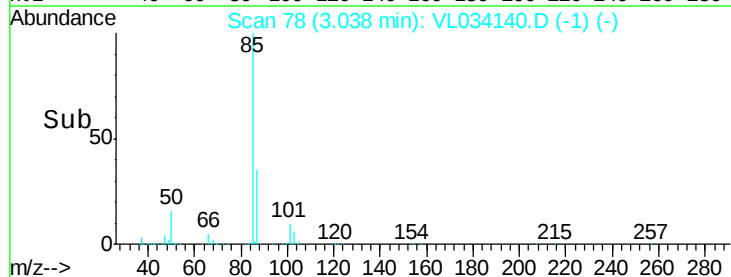
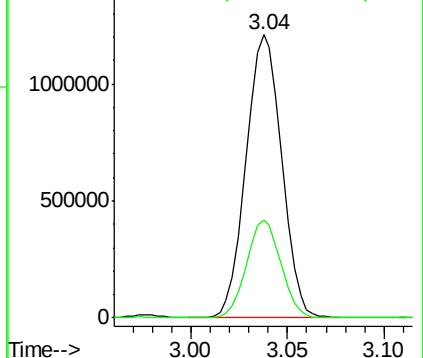
85 100

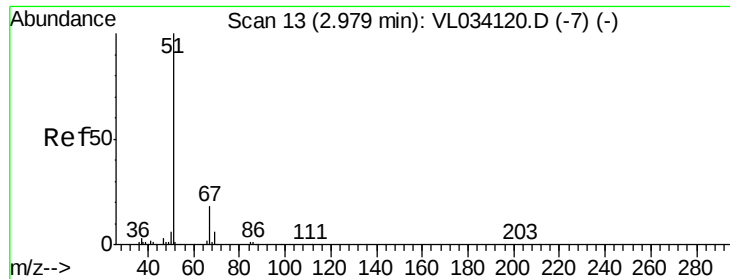
87 34.5 28.6 43.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

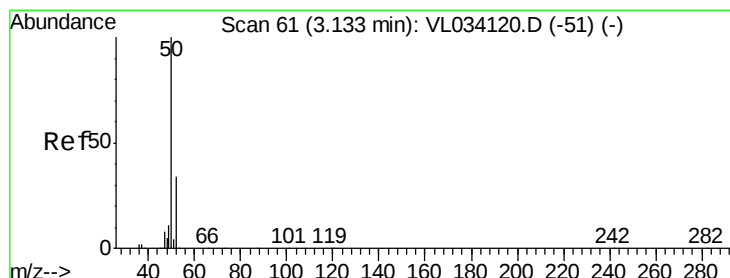
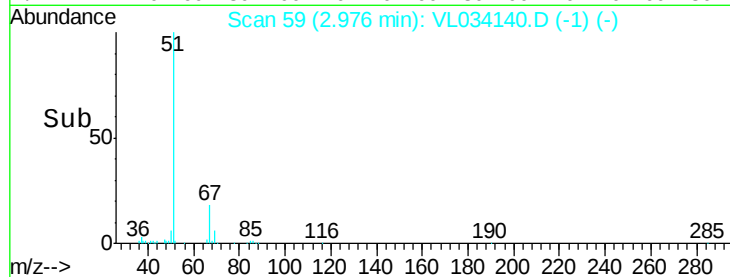
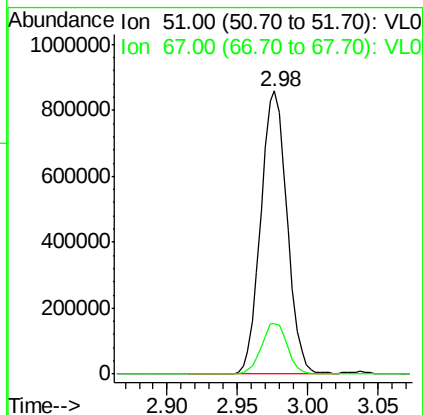
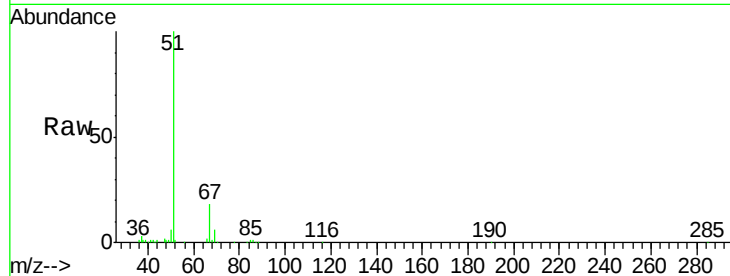
Chlorodifluoromethane  
 Concen: 9.999 ppbv  
 RT: 2.98 min Scan# 59  
 Delta R.T. -0.00 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

| Tot Ion | 51    | Resp  | 1127037 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 51      | 100   |       |         |
| 67      | 17.9  | 14.2  | 21.4    |

Manual Integrations  
 APPROVED

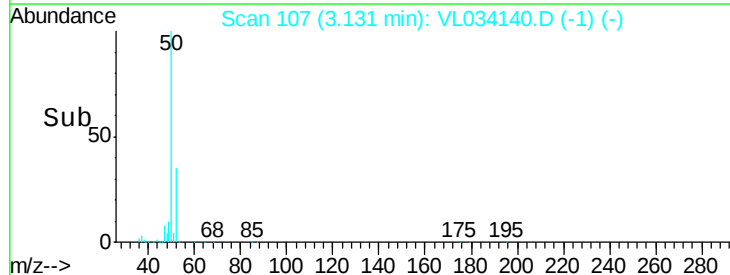
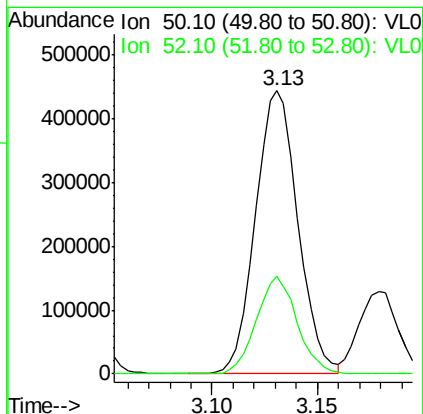
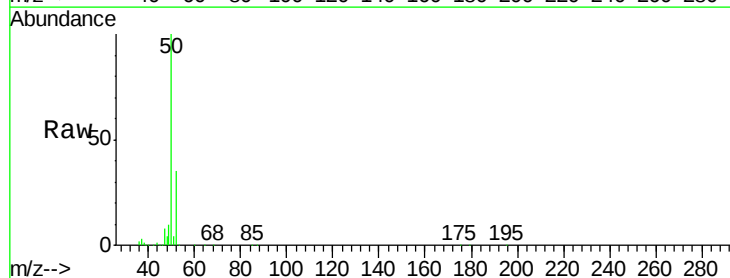
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 9/12/2019 5:16:45 AM

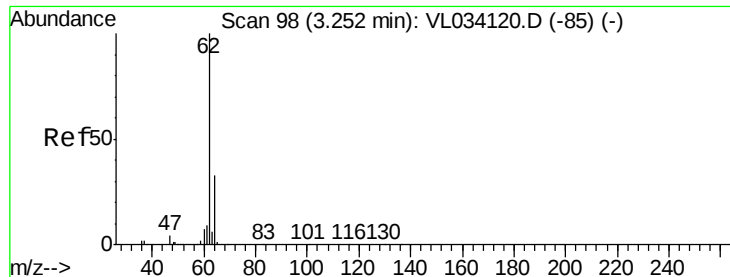


#4

Chloromethane  
 Concen: 8.832 ppbv  
 RT: 3.13 min Scan# 107  
 Delta R.T. -0.00 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

| Tgt Ion | 50    | Resp  | 622403 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 50      | 100   |       |        |
| 52      | 34.6  | 27.4  | 41.2   |





#5

Vinyl Chloride

Concen: 8.724 ppbv

RT: 3.25 min Scan# 144

Delta R.T. -0.00 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion: 62 Resp: 560009

Ion Ratio Lower Upper

62 100

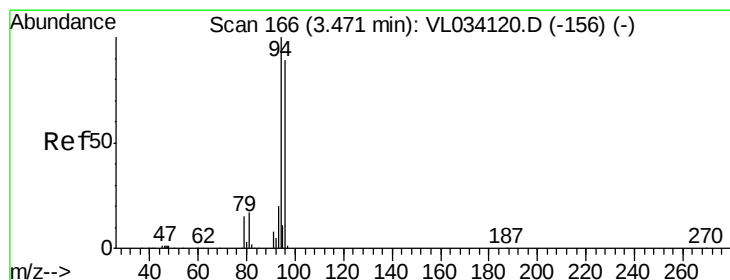
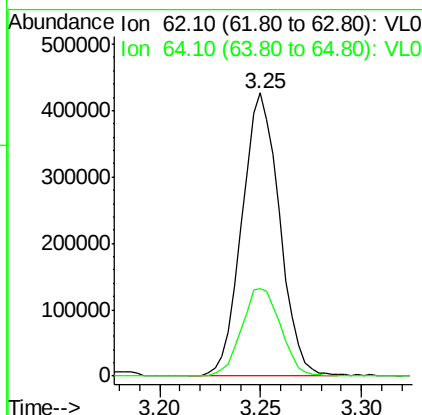
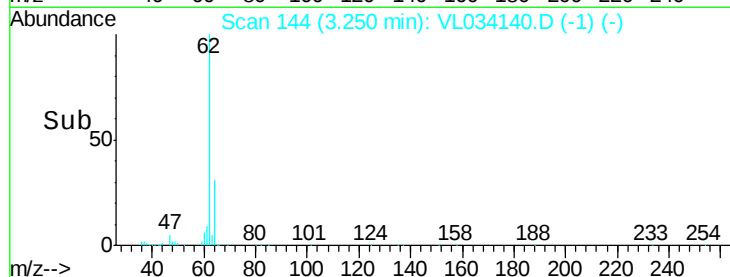
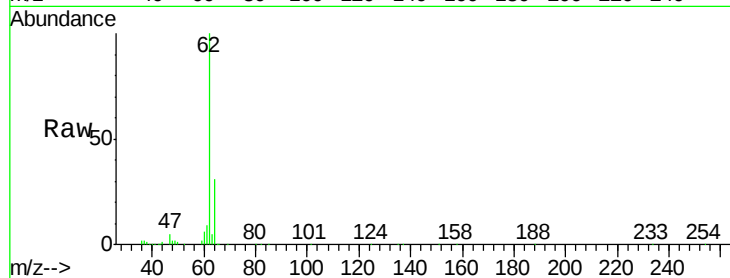
64 31.0 26.6 39.8

Manual Integrations

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9/12/2019 5:16:45 AM



#6

Bromomethane

Concen: 9.137 ppbv

RT: 3.47 min Scan# 212

Delta R.T. -0.00 min

Lab File: VL034140.D

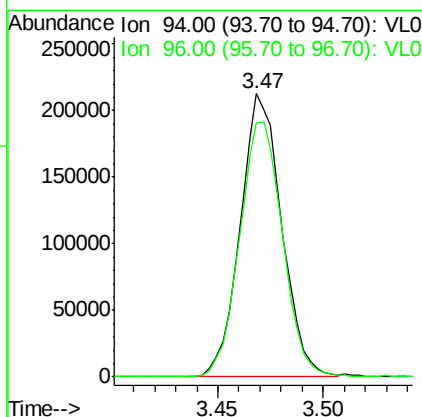
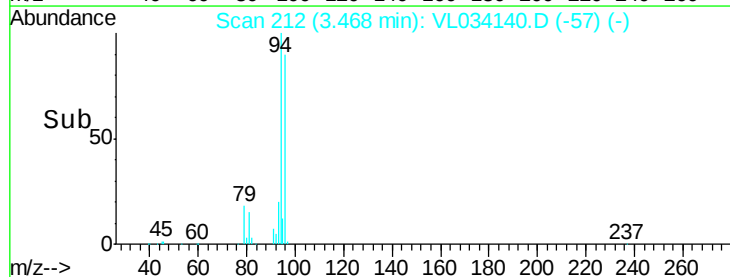
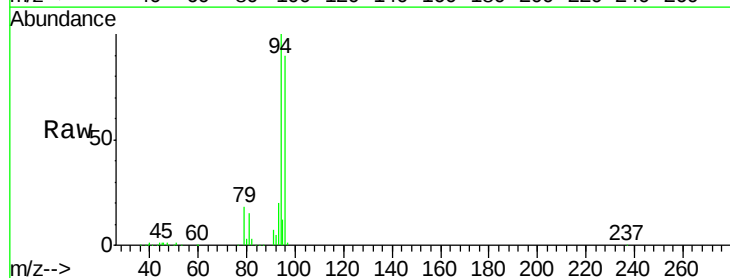
Acq: 10 Sep 2019 12:10

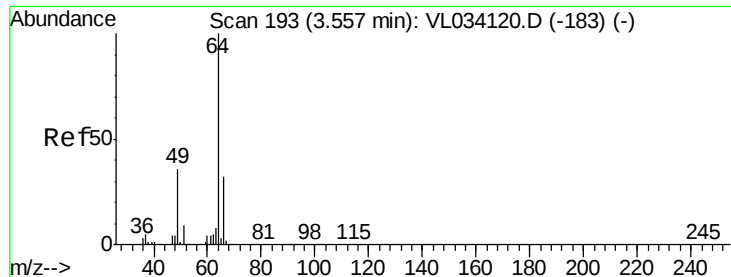
Tgt Ion: 94 Resp: 289448

Ion Ratio Lower Upper

94 100

96 89.8 71.4 107.0





#7

Chloroethane

Concen: 9.357 ppbv

RT: 3.56 min Scan# 239

Delta R.T. -0.00 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion: 64 Resp: 204644

Ion Ratio Lower Upper

64 100

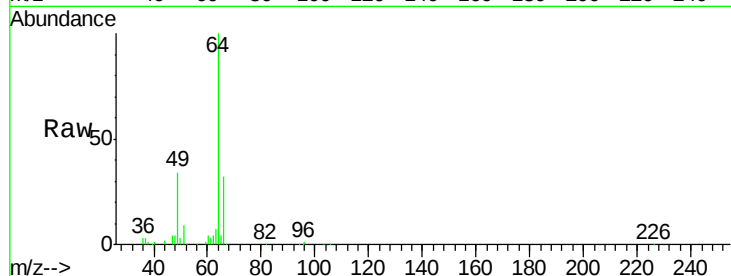
66 32.3 25.4 38.2

Manual Integrations

APPROVED

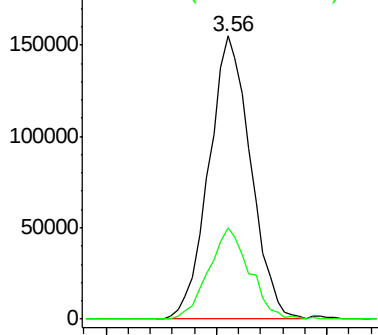
MMDadoda

9/12/2019 5:16:45 AM

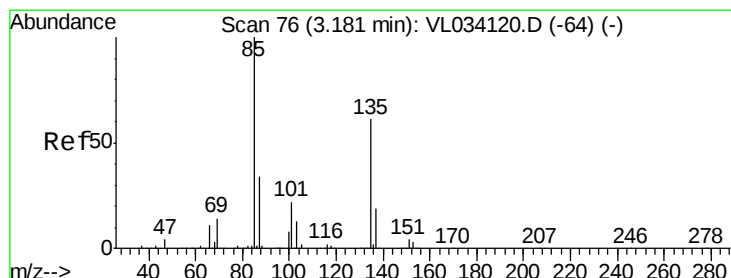
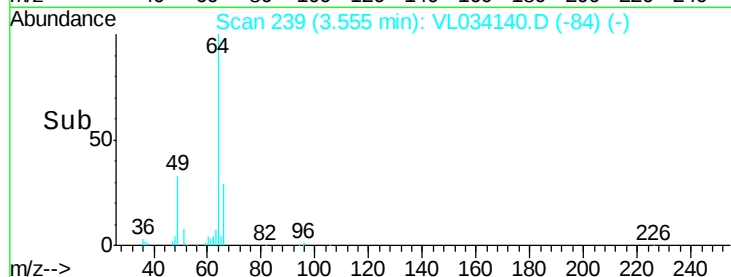


Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



Time-->



#8

Dichlorotetrafluoroethane

Concen: 8.858 ppbv

RT: 3.18 min Scan# 122

Delta R.T. -0.00 min

Lab File: VL034140.D

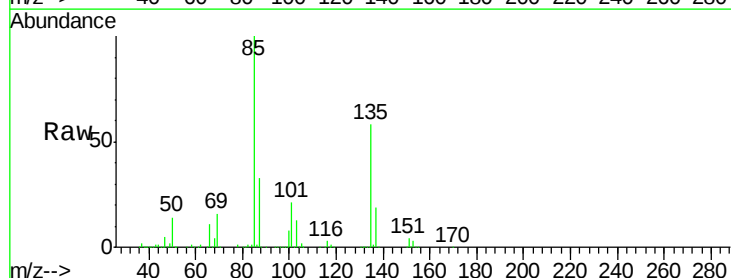
Acq: 10 Sep 2019 12:10

Tgt Ion: 85 Resp: 1189228

Ion Ratio Lower Upper

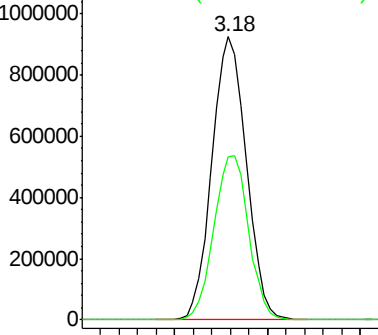
85 100

135 58.6 48.0 72.0

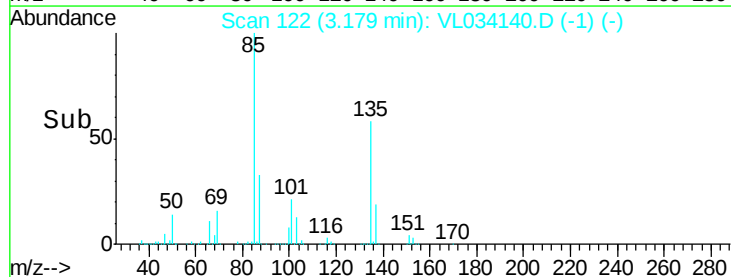


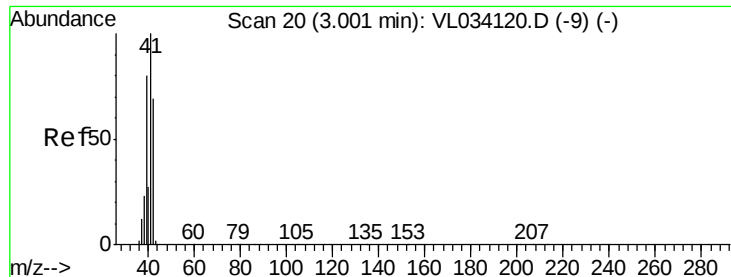
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V



Time-->





#9

Propene

Concen: 8.780 ppbv

RT: 3.00 min Scan# 66

Delta R.T. -0.00 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion: 41 Resp: 553752

Ion Ratio Lower Upper

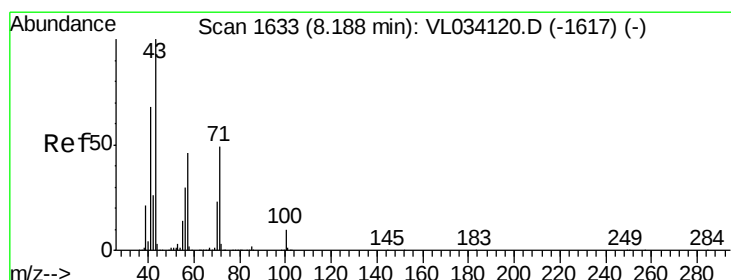
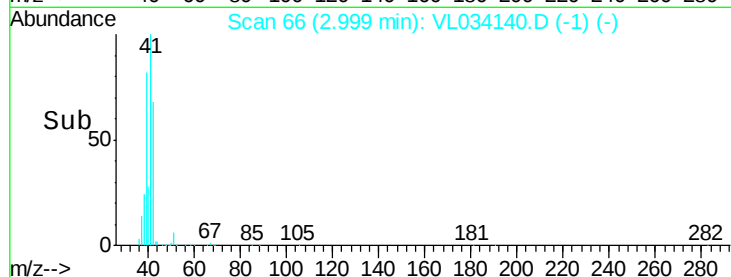
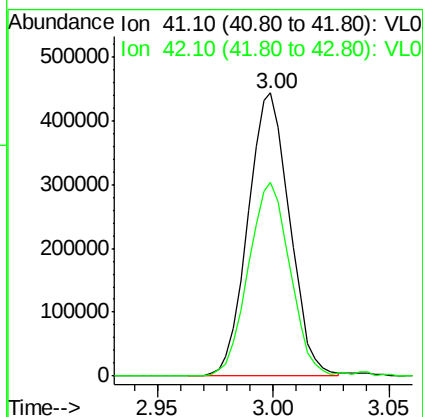
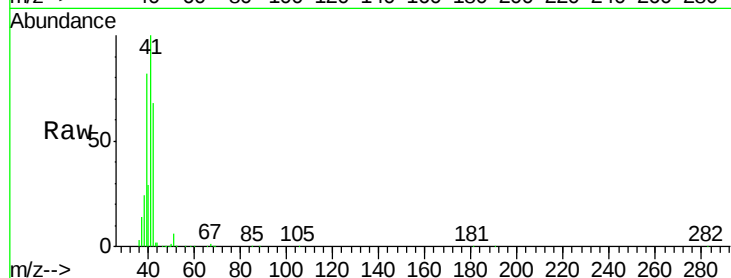
41 100

42 70.0 54.6 81.8

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#10

Heptane

Concen: 8.989 ppbv

RT: 8.18 min Scan# 1677

Delta R.T. -0.01 min

Lab File: VL034140.D

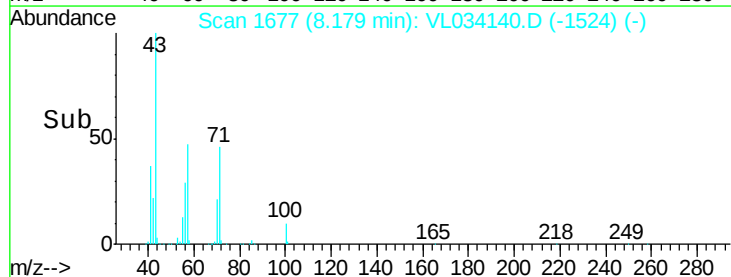
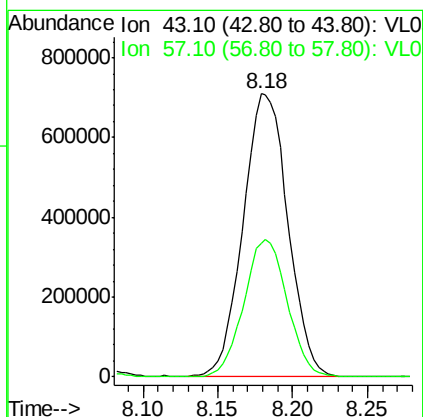
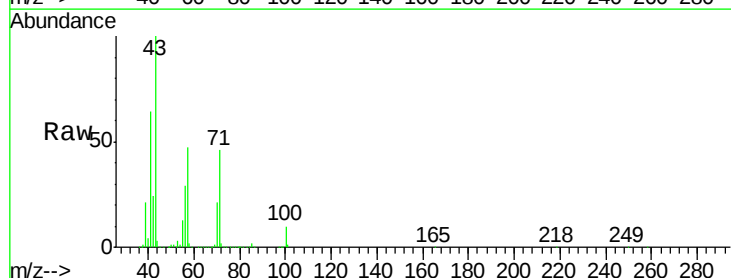
Acq: 10 Sep 2019 12:10

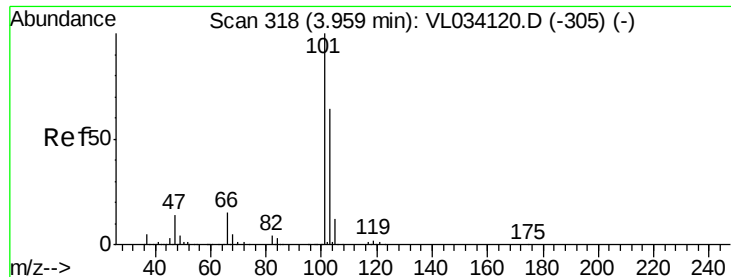
Tgt Ion: 43 Resp: 1471176

Ion Ratio Lower Upper

43 100

57 47.5 38.1 57.1





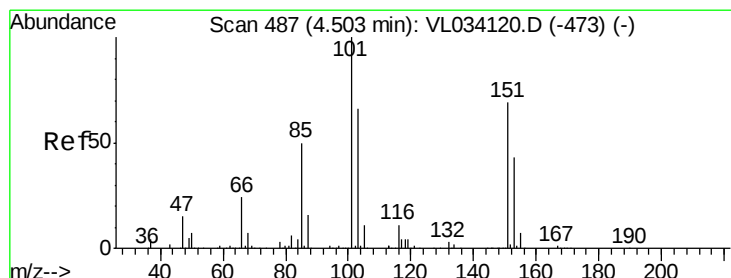
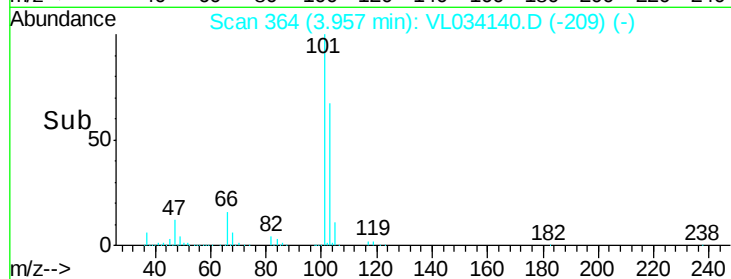
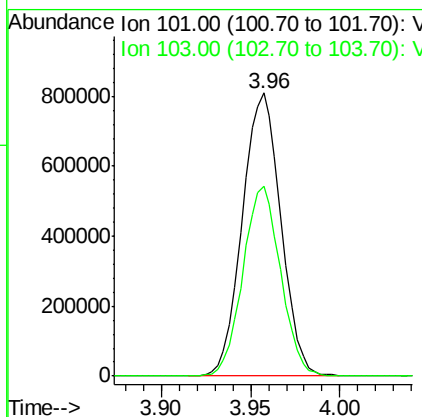
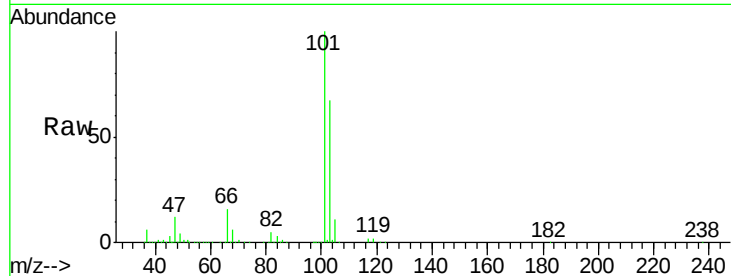
#11  
 Trichlorofluoromethane  
 Concen: 9.007 ppbv  
 RT: 3.96 min Scan# 364  
 Delta R.T. -0.00 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

Tot Ion:101 Resp: 1225151  
 Ion Ratio Lower Upper  
 101 100  
 103 67.0 51.4 77.2

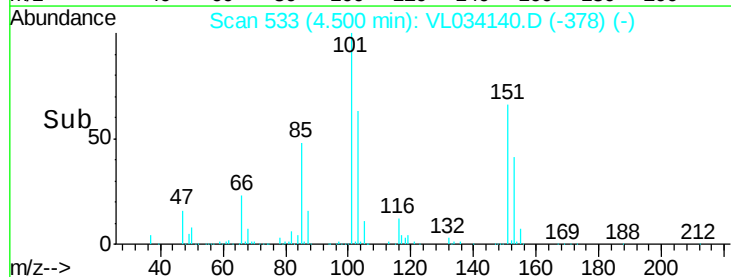
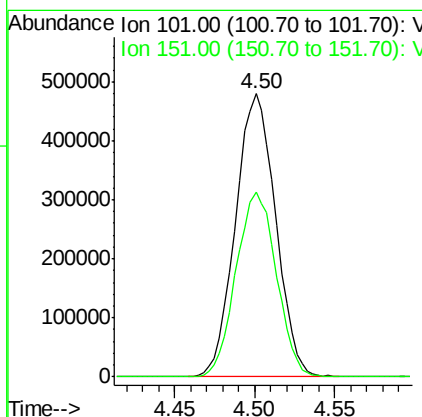
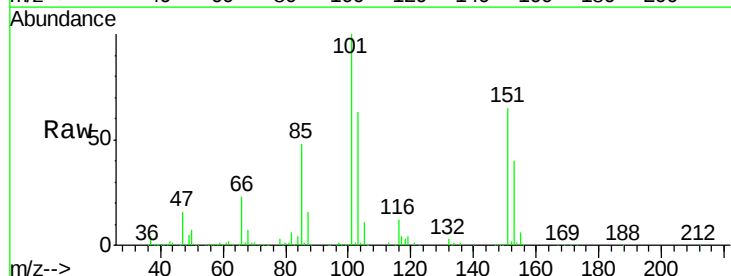
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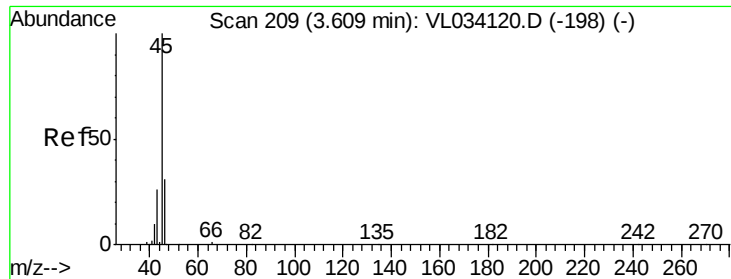
MMDadoda  
 9/12/2019 5:16:45 AM



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 8.962 ppbv  
 RT: 4.50 min Scan# 533  
 Delta R.T. -0.00 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Tgt Ion:101 Resp: 815573  
 Ion Ratio Lower Upper  
 101 100  
 151 65.8 53.0 79.6





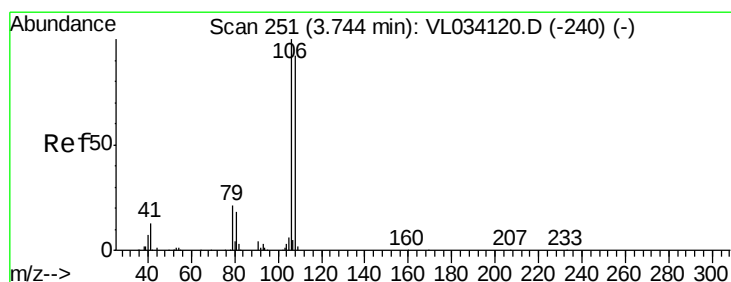
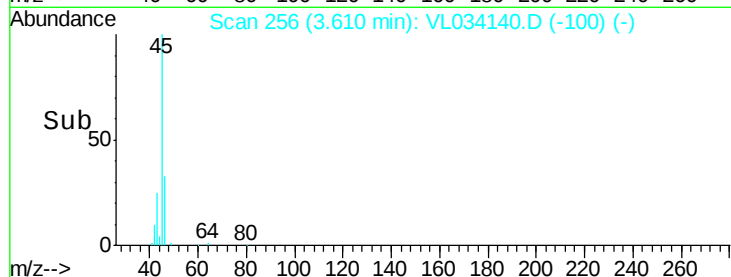
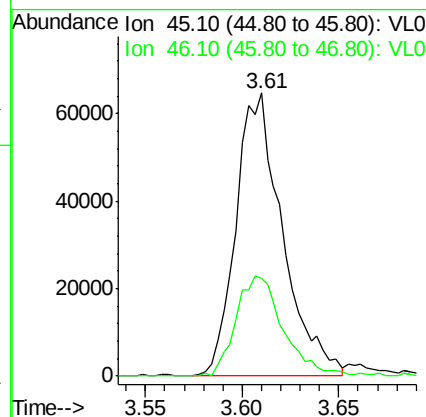
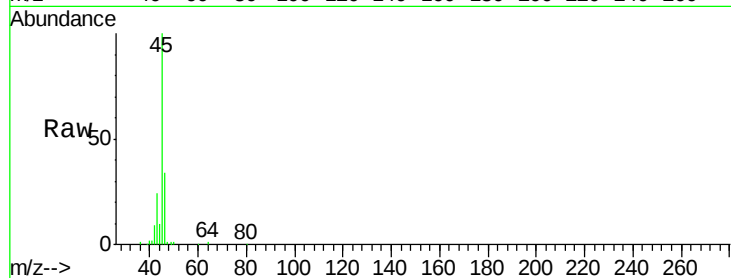
#13  
Ethanol  
Concen: 8.754 ppbv  
RT: 3.61 min Scan# 256  
Delta R.T. 0.00 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 45      | 100   |       |       |
| 46      | 36.3  | 15.0  | 60.0  |

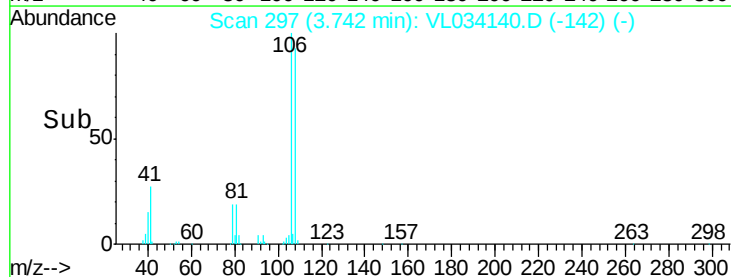
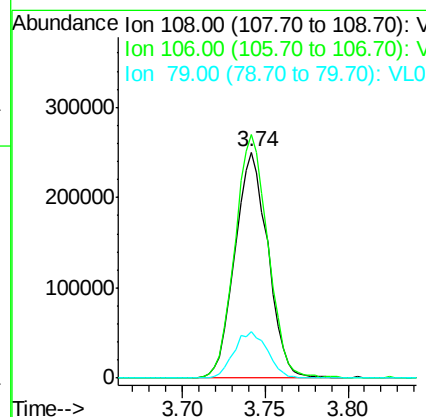
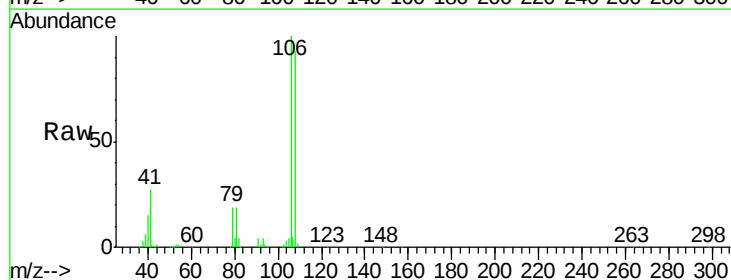
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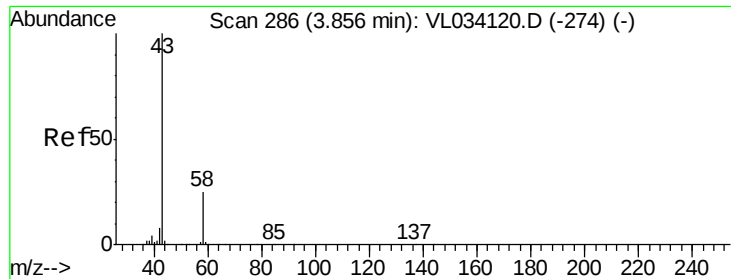
MMDadoda  
9/12/2019 5:16:45 AM



#14  
Bromoethene  
Concen: 8.819 ppbv  
RT: 3.74 min Scan# 297  
Delta R.T. -0.00 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 108     | 100   |       |       |
| 106     | 108.5 | 87.2  | 130.8 |
| 79      | 21.2  | 16.5  | 24.7  |





#15

Acetone

Concen: 8.528 ppbv

RT: 3.85 min Scan# 332

Delta R.T. -0.00 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion: 43 Resp: 1039321

Ion Ratio Lower Upper

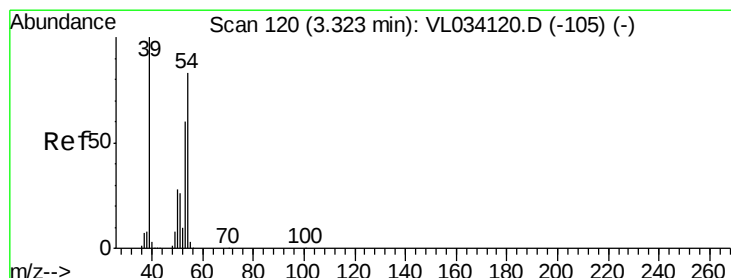
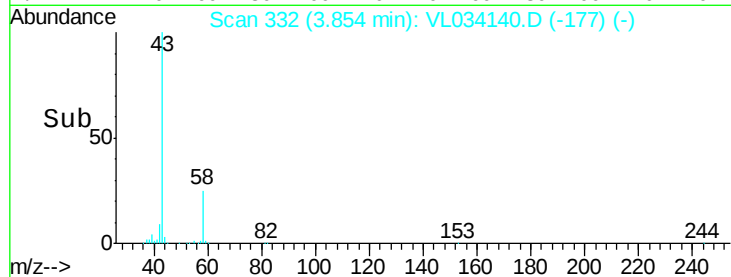
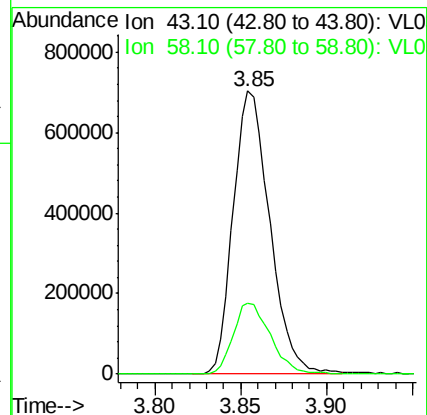
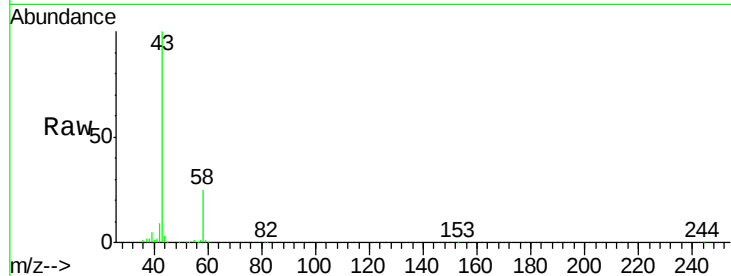
43 100

58 25.6 20.6 30.8

Manual Integrations  
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#16

1,3-Butadiene

Concen: 9.080 ppbv

RT: 3.32 min Scan# 166

Delta R.T. -0.00 min

Lab File: VL034140.D

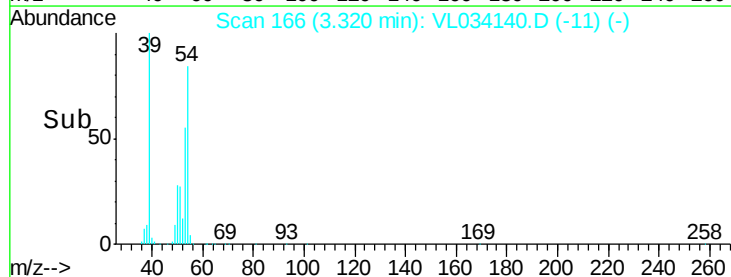
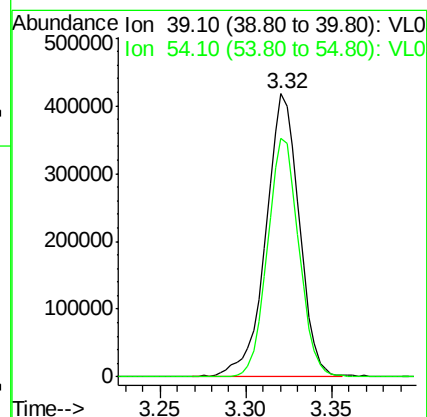
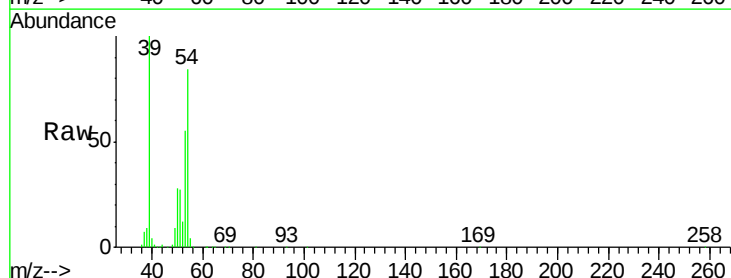
Acq: 10 Sep 2019 12:10

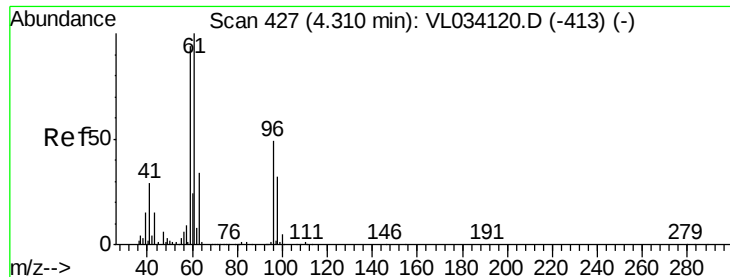
Tgt Ion: 39 Resp: 560391

Ion Ratio Lower Upper

39 100

54 79.8 63.5 95.3





#17

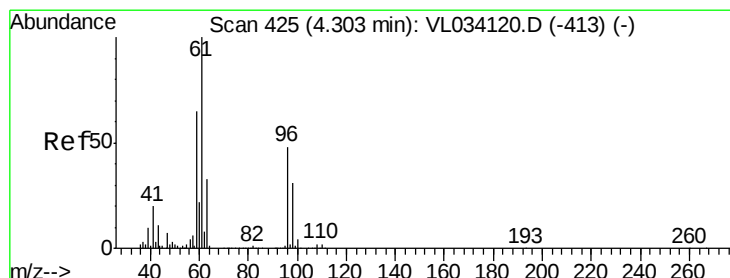
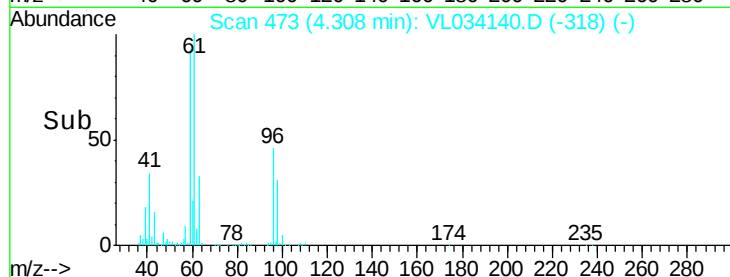
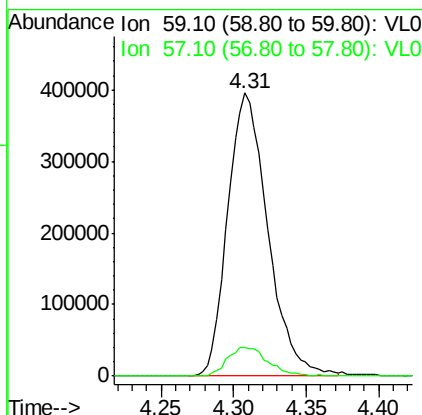
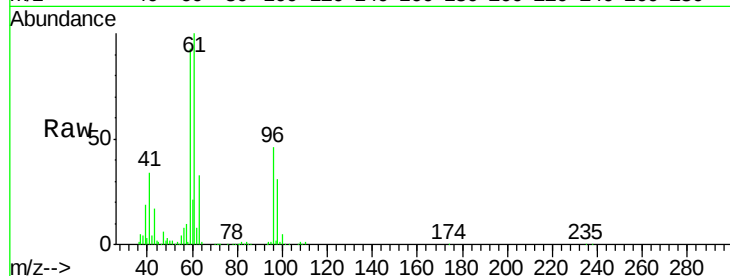
tert-Butyl alcohol  
 Concen: 8.578 ppbv  
 RT: 4.31 min Scan# 473  
 Delta R.T. -0.00 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

| Tot Ion | 59    | Resp  | 758883 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 59      | 100   |       |        |
| 57      | 10.3  | 8.6   | 12.8   |

Manual Integrations  
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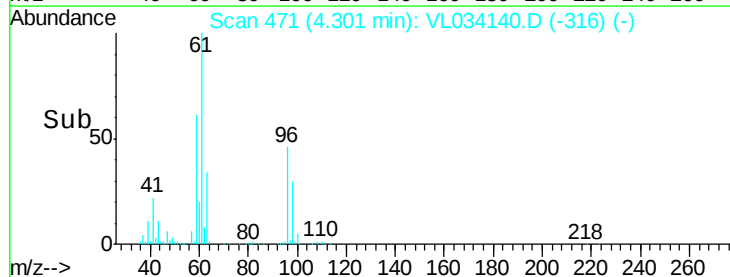
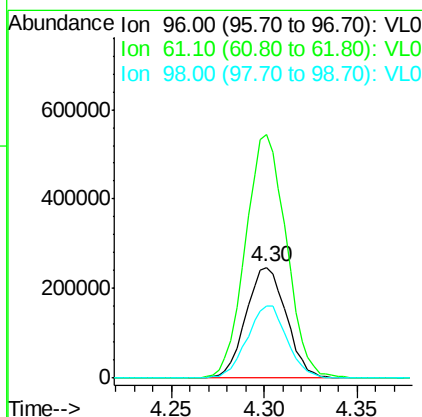
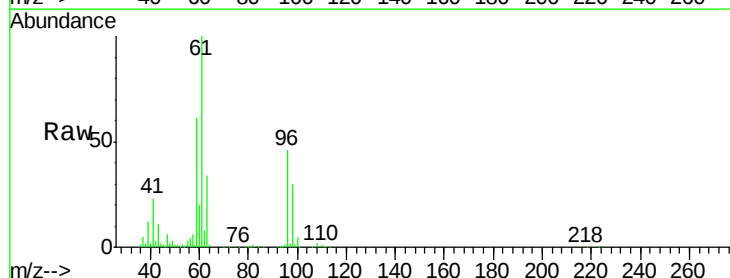
MMDadoda  
 9/12/2019 5:16:45 AM

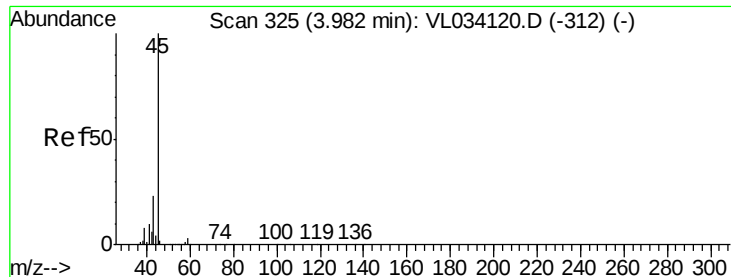


#18

1,1-Dichloroethene  
 Concen: 8.974 ppbv  
 RT: 4.30 min Scan# 471  
 Delta R.T. -0.00 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

| Tgt Ion | 96    | Resp  | 373117 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 96      | 100   |       |        |
| 61      | 219.7 | 165.8 | 248.8  |
| 98      | 65.5  | 50.8  | 76.2   |





#19

Isopropyl Alcohol

Concen: 8.160 ppbv

RT: 3.98 min Scan# 371

Delta R.T. -0.00 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Tot Ion: 45 Resp: 671269

Ion Ratio Lower Upper

45 100

58 1.5 1.0 1.6

Instrument :

MSVOA\_L

ClientSampleId :

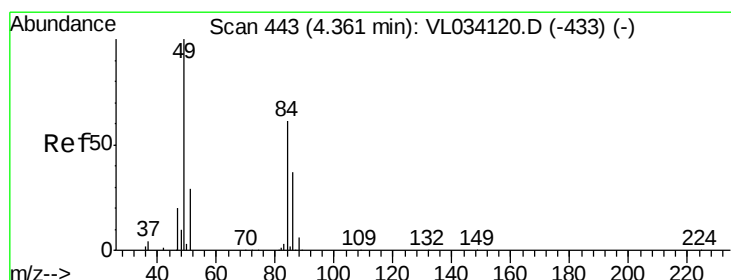
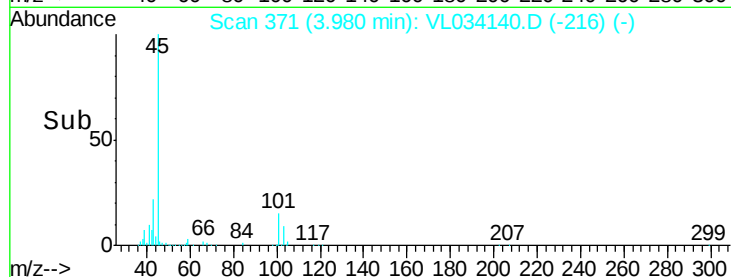
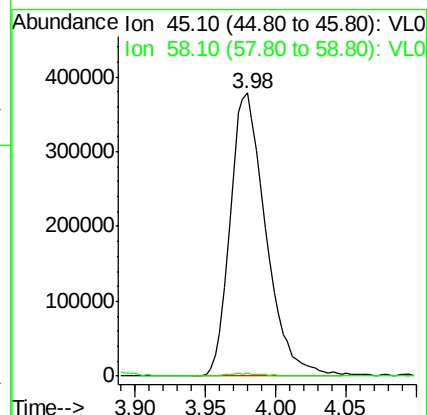
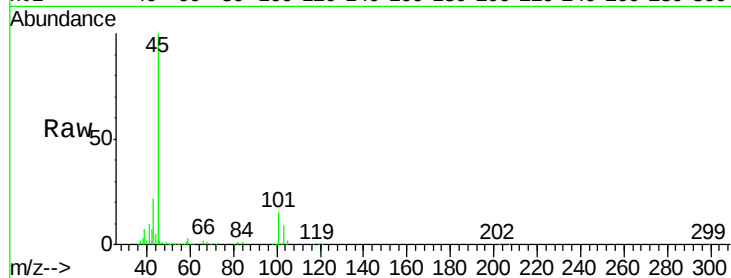
VL0910ABS01

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#20

Methylene Chloride

Concen: 8.259 ppbv

RT: 4.36 min Scan# 489

Delta R.T. -0.00 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Tgt Ion: 84 Resp: 332783

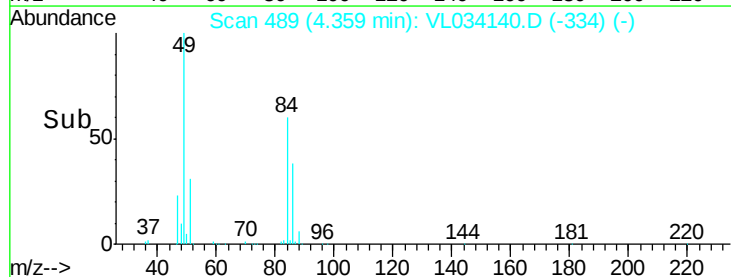
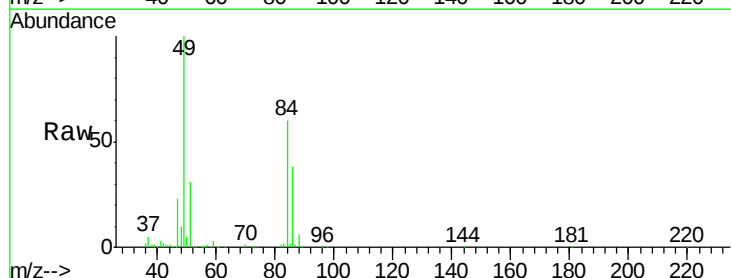
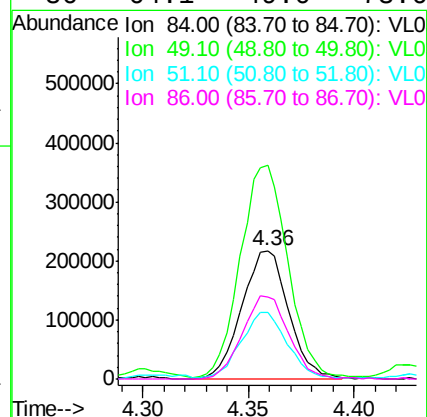
Ion Ratio Lower Upper

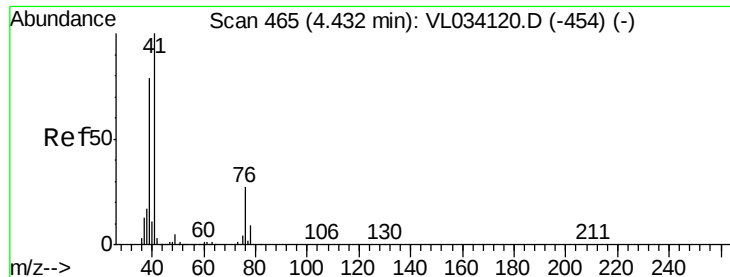
84 100

49 165.7 131.0 196.6

51 50.9 38.1 57.1

86 64.1 49.0 73.6





#21

Allvl Chloride

Concen: 9.126 ppbv

RT: 4.43 min Scan# 510

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

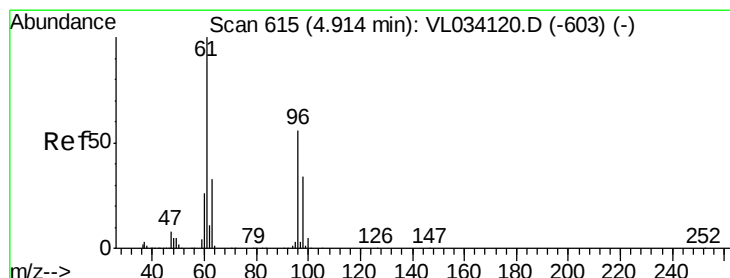
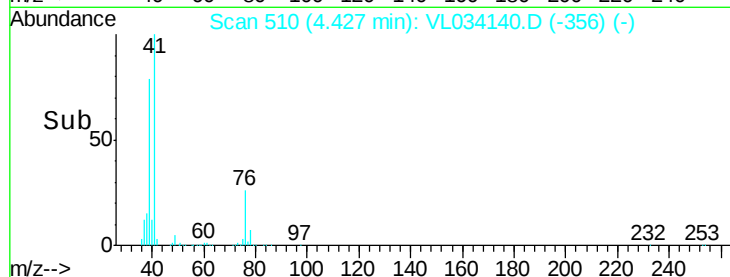
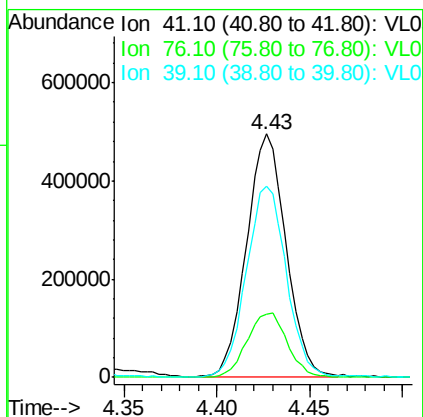
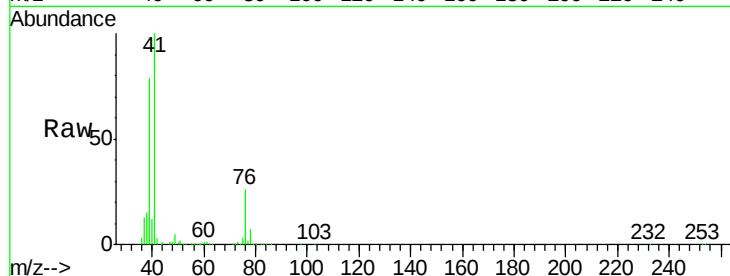
ClientSampleId :

VL0910ABS01

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 41    | Resp: | 733202 |
| Ion      | Ratio | Lower | Upper  |
| 41       | 100   |       |        |
| 76       | 27.2  | 21.6  | 32.4   |
| 39       | 80.6  | 65.0  | 97.4   |

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#22

trans-1,2-Dichloroethene

Concen: 8.864 ppbv

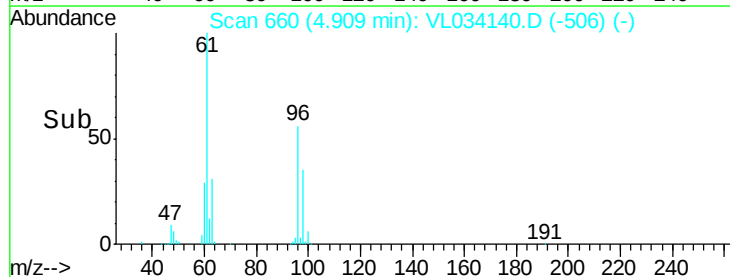
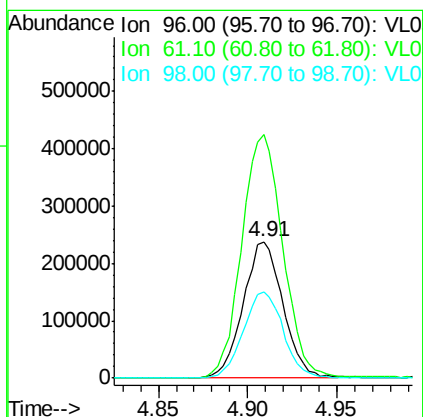
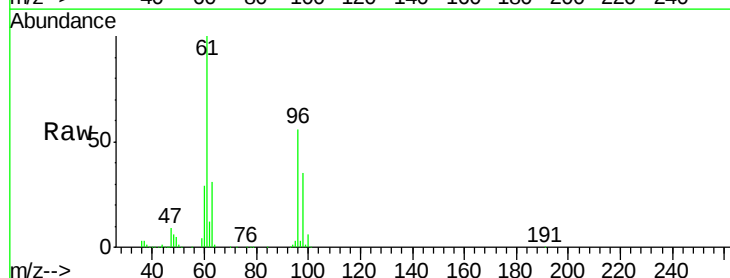
RT: 4.91 min Scan# 660

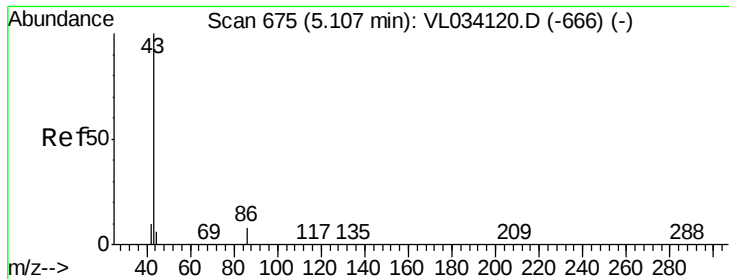
Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 96    | Resp: | 368886 |
| Ion      | Ratio | Lower | Upper  |
| 96       | 100   |       |        |
| 61       | 178.5 | 143.1 | 214.7  |
| 98       | 62.8  | 49.0  | 73.4   |





#23

Vinyl Acetate

Concen: 9.168 ppbv

RT: 5.10 min Scan# 720

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion: 43 Resp: 1895729

Ion Ratio Lower Upper

43 100

86 6.0 5.5 8.3

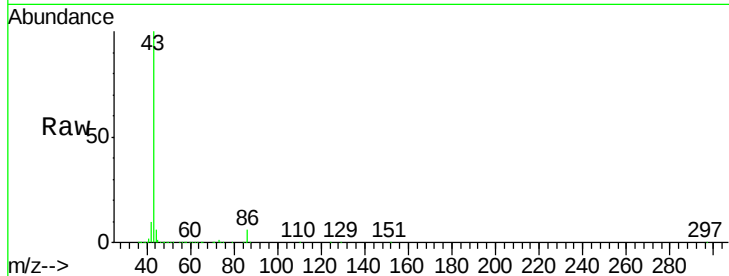
42 9.6 8.2 12.4

44 5.3 4.3 6.5

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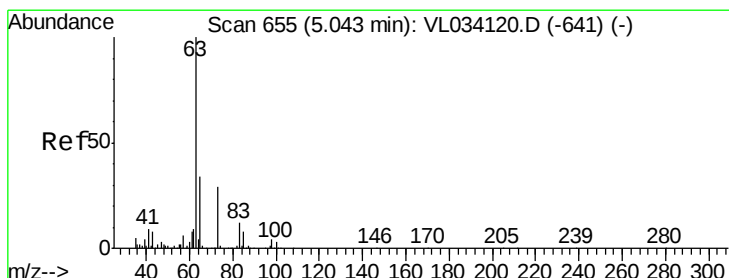
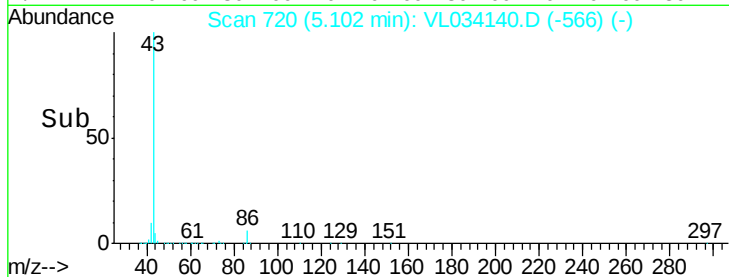
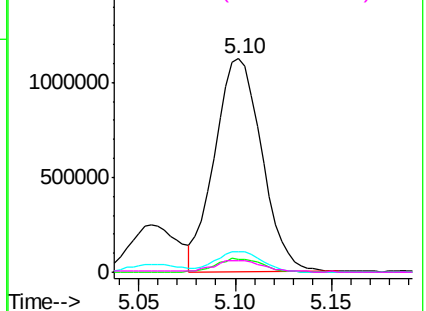


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 8.994 ppbv

RT: 5.04 min Scan# 700

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

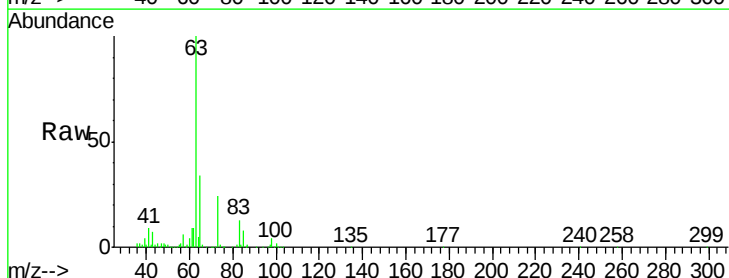
Tgt Ion: 63 Resp: 1234279

Ion Ratio Lower Upper

63 100

98 3.6 2.1 6.2

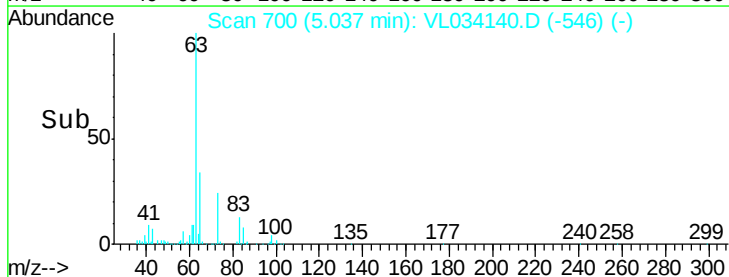
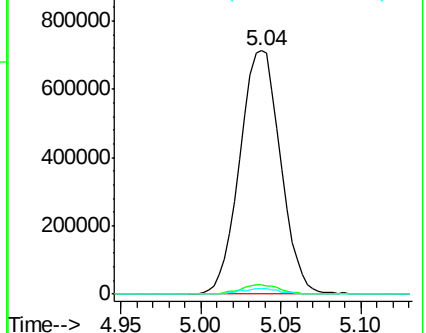
100 2.5 1.4 4.0

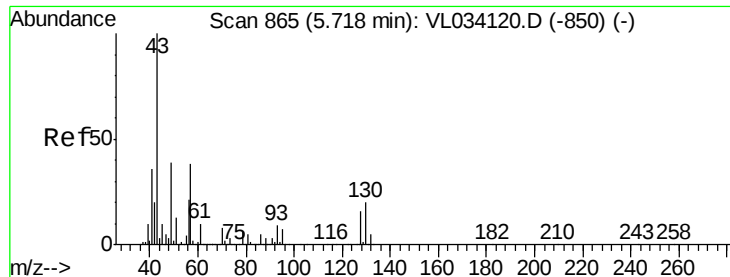


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0





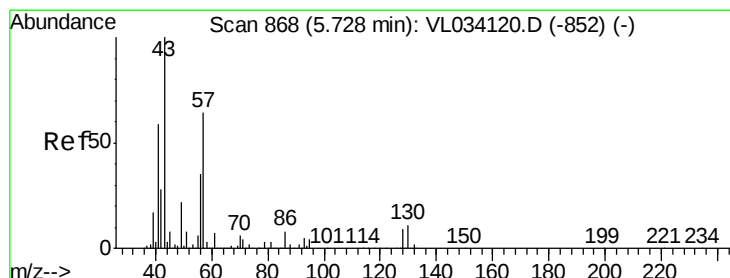
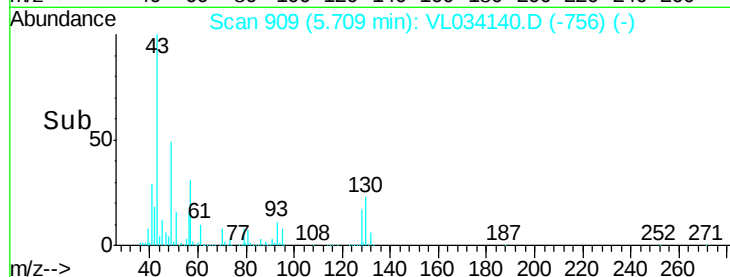
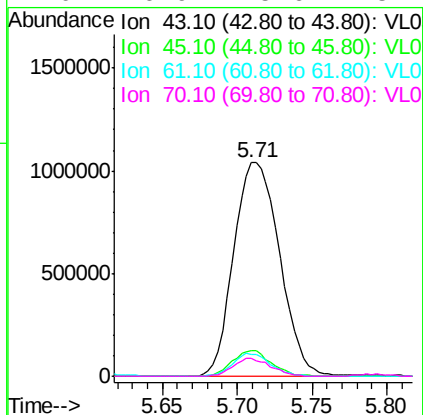
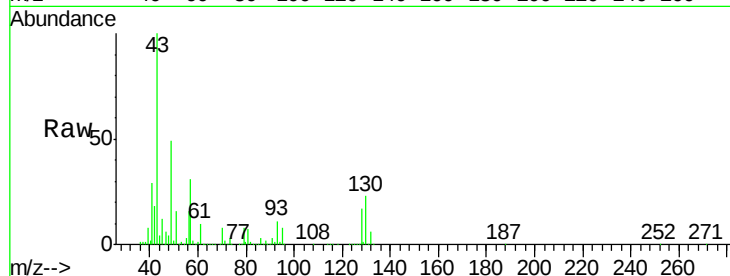
#25  
Ethyl Acetate  
Concen: 8.266 ppbv  
RT: 5.71 min Scan# 909  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

| Tot Ion | 43    | Resp  | 2211378 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 43      | 100   |       |         |
| 45      | 10.4  | 8.2   | 12.4    |
| 61      | 8.9   | 7.4   | 11.2    |
| 70      | 6.9   | 5.6   | 8.4     |

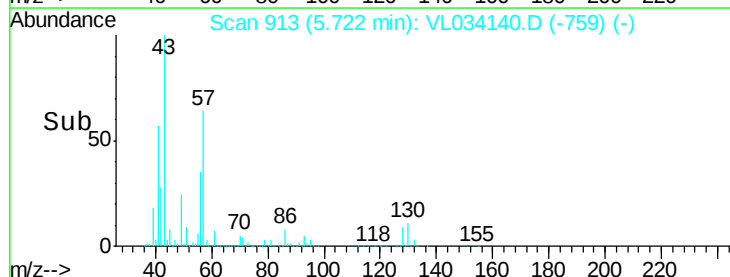
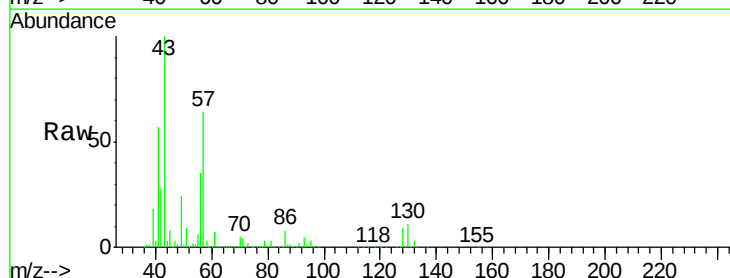
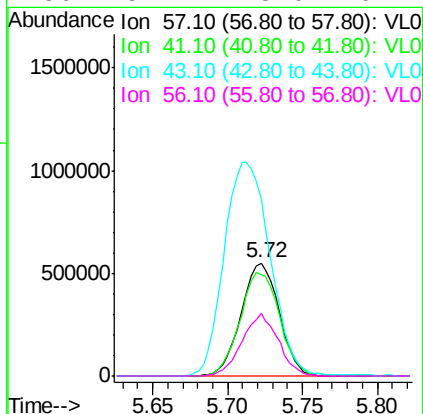
Manual Integrations  
APPROVED

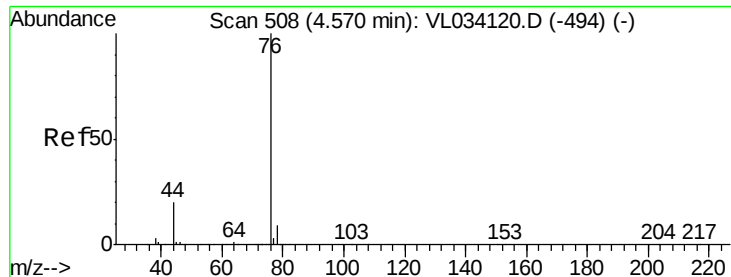
MMDadoda  
9/12/2019 5:16:45 AM



#26  
Hexane  
Concen: 8.170 ppbv  
RT: 5.72 min Scan# 913  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

| Tgt Ion | 57    | Resp  | 971687 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 57      | 100   |       |        |
| 41      | 96.5  | 76.6  | 115.0  |
| 43      | 229.3 | 189.2 | 283.8  |
| 56      | 52.7  | 43.0  | 64.4   |





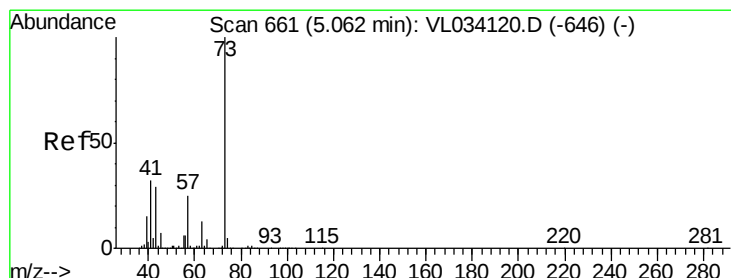
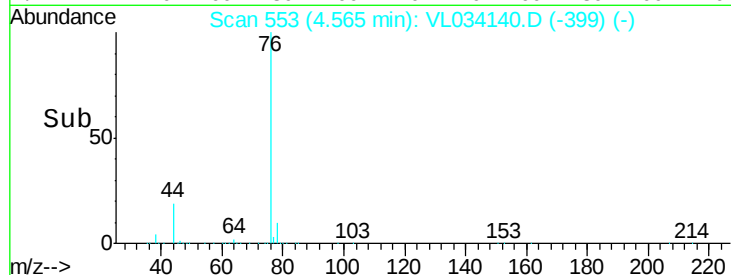
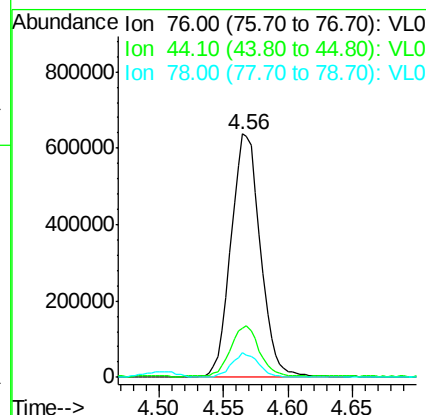
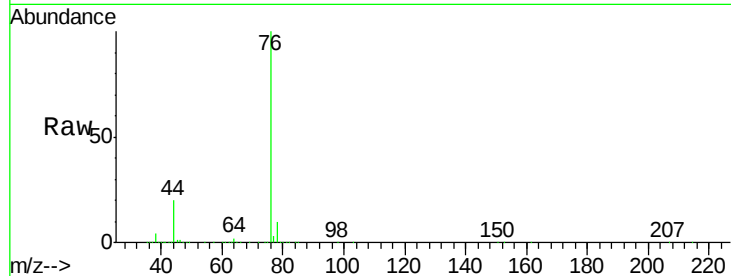
#27  
Carbon Disulfide  
Concen: 9.412 ppbv  
RT: 4.56 min Scan# 553  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

| Tot Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 76      | 76  | 100   |       |       |
| 44      | 44  | 20.6  | 17.6  | 26.4  |
| 78      | 78  | 9.3   | 7.3   | 10.9  |

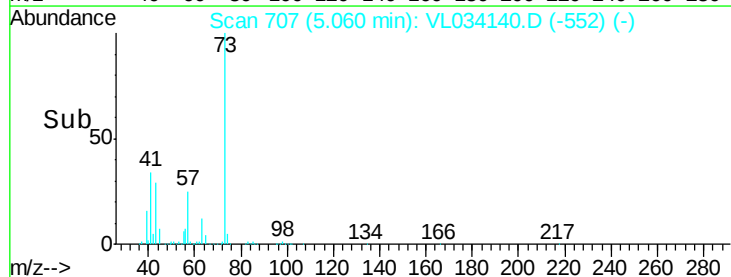
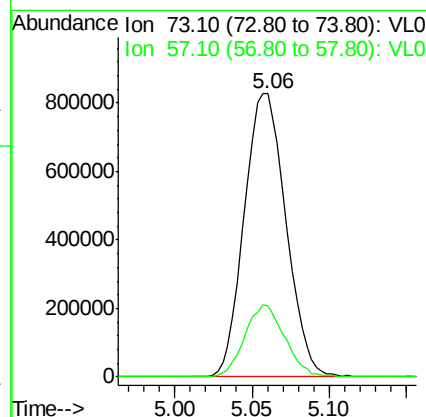
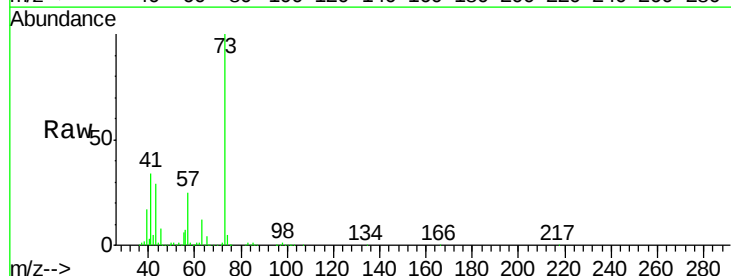
Manual Integrations  
APPROVED

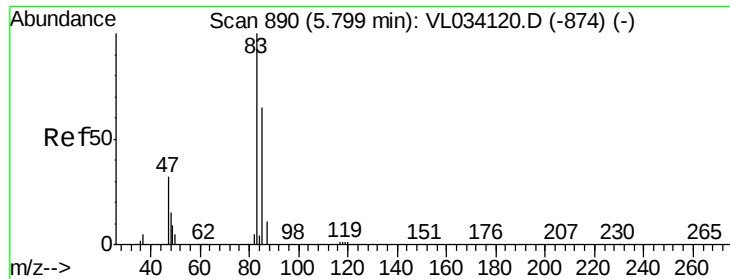
MMDadoda  
9/12/2019 5:16:45 AM



#28  
Methyl tert-Butyl Ether  
Concen: 8.910 ppbv  
RT: 5.06 min Scan# 707  
Delta R.T. -0.00 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

| Tgt Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 73      | 73  | 100   |       |       |
| 57      | 57  | 24.5  | 19.8  | 29.8  |





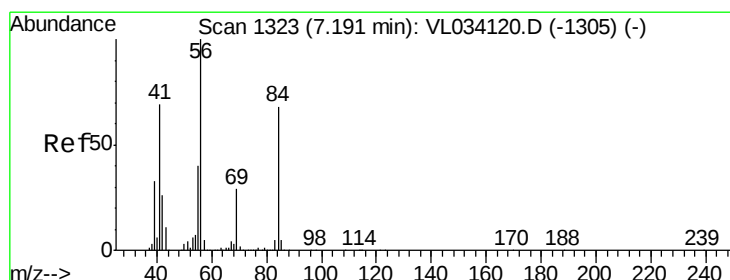
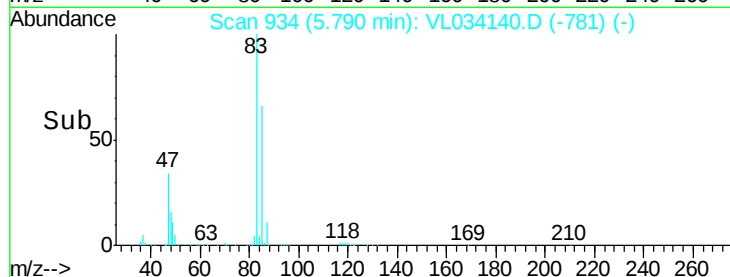
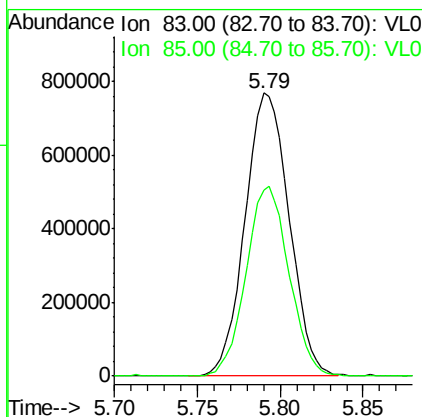
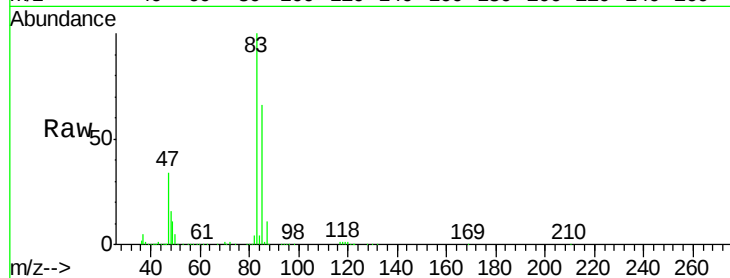
#29  
Chloroform  
Concen: 8.878 ppbv  
RT: 5.79 min Scan# 934  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

Tot Ion: 83 Resp: 1424257  
Ion Ratio Lower Upper  
83 100  
85 65.9 51.8 77.6

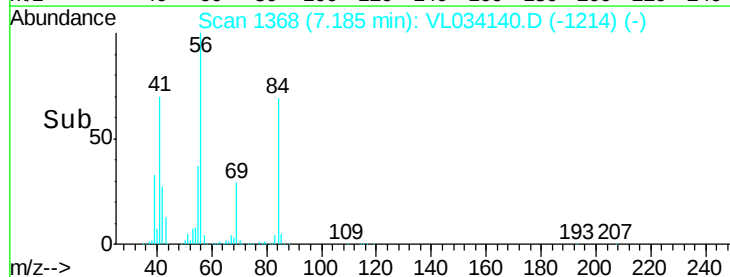
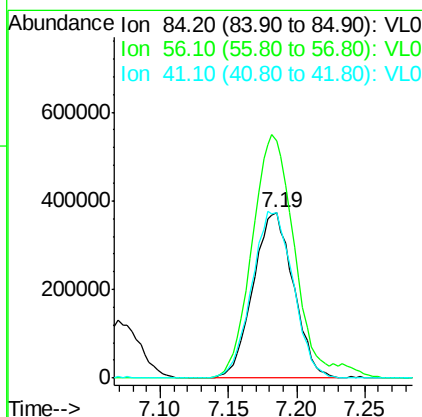
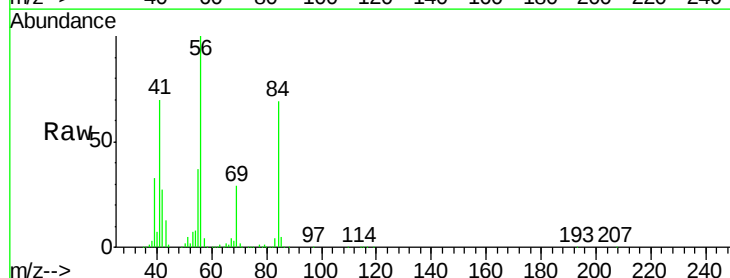
Manual Integrations  
APPROVED

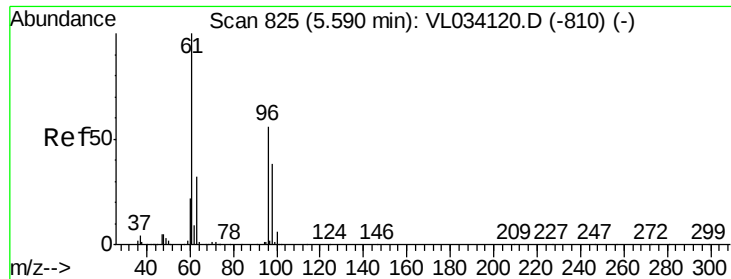
MMDadoda  
9/12/2019 5:16:45 AM



#30  
Cyclohexane  
Concen: 8.884 ppbv  
RT: 7.19 min Scan# 1368  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Tgt Ion: 84 Resp: 763887  
Ion Ratio Lower Upper  
84 100  
56 157.3 122.6 183.8  
41 103.7 79.1 118.7





#31

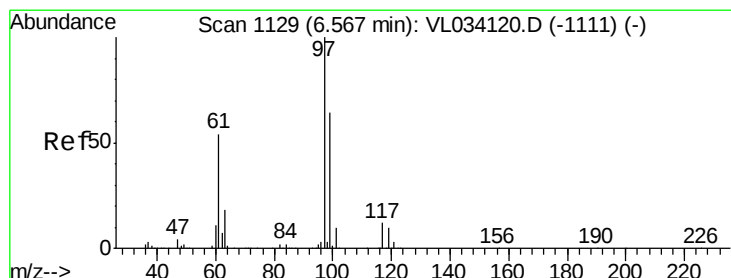
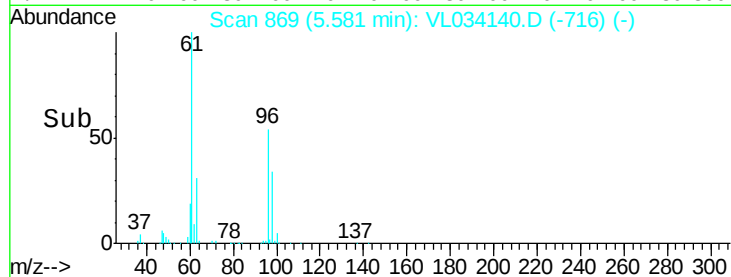
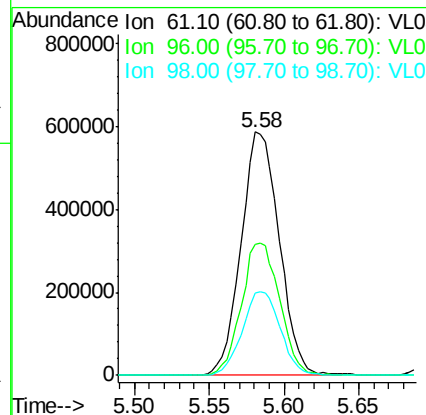
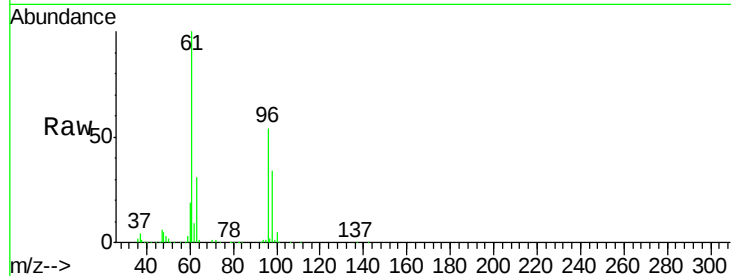
cis-1,2-Dichloroethene  
Concen: 9.151 ppbv  
RT: 5.58 min Scan# 869  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 53.8  | 44.4  | 66.6  |
| 98      | 33.7  | 30.0  | 45.0  |

Manual Integrations  
APPROVED

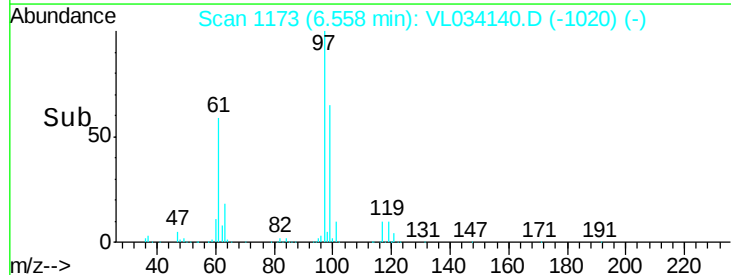
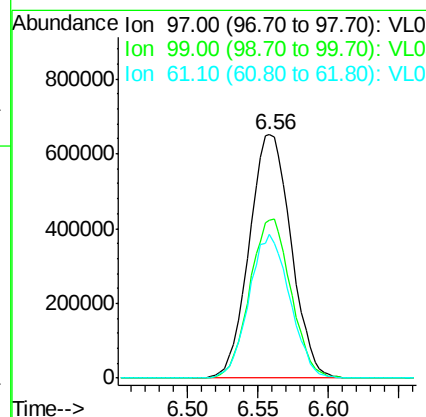
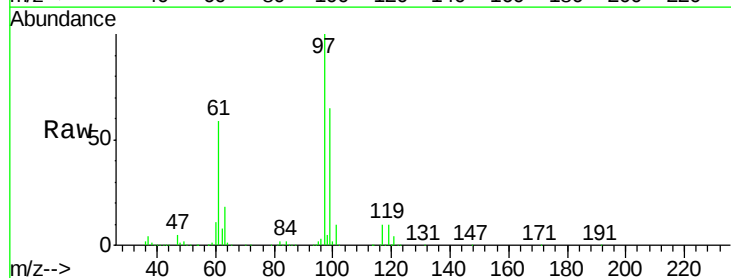
MMDadoda  
9/12/2019 5:16:45 AM

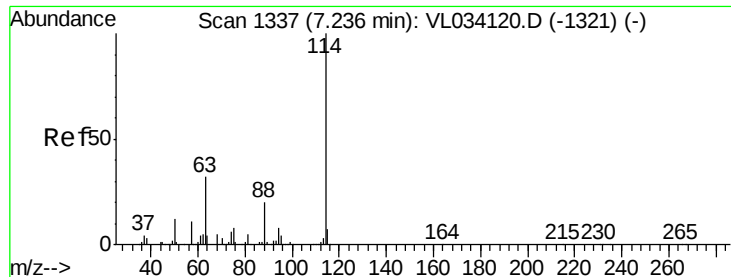


#32

1,1,1-Trichloroethane  
Concen: 8.919 ppbv  
RT: 6.56 min Scan# 1173  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 64.2  | 51.7  | 77.5  |
| 61      | 57.8  | 44.0  | 66.0  |





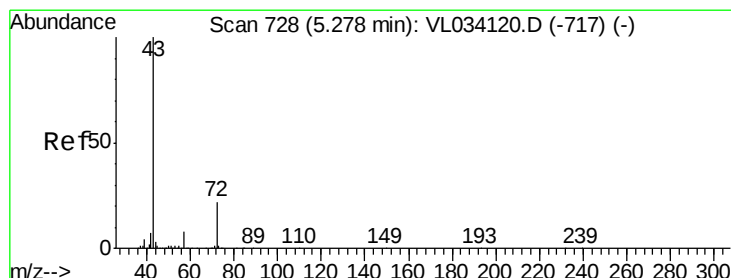
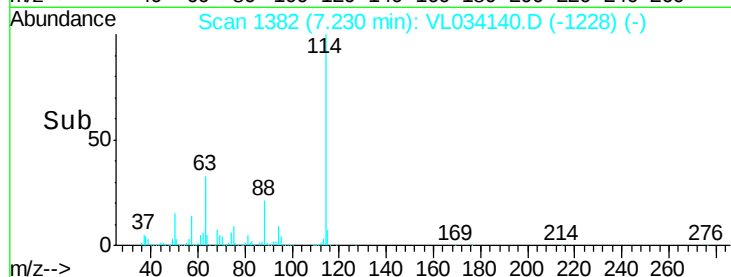
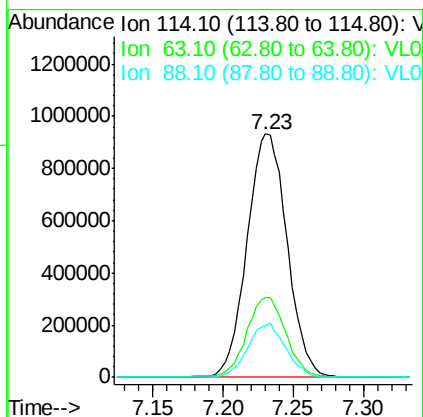
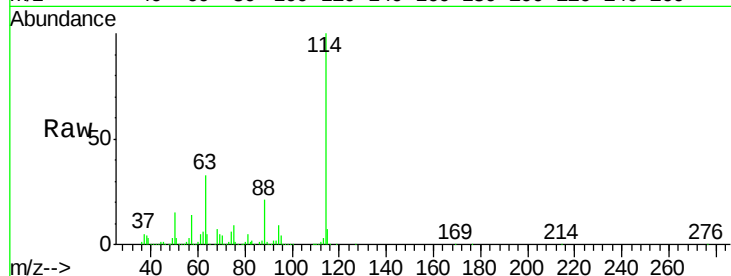
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.23 min Scan# 1382  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 32.6  | 25.5  | 38.3  |
| 88      | 21.0  | 16.8  | 25.2  |

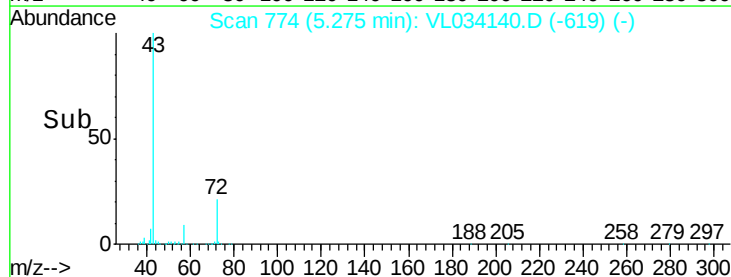
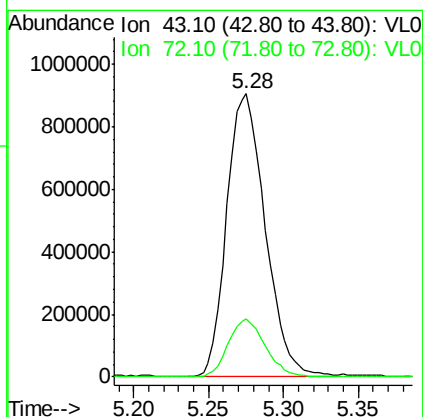
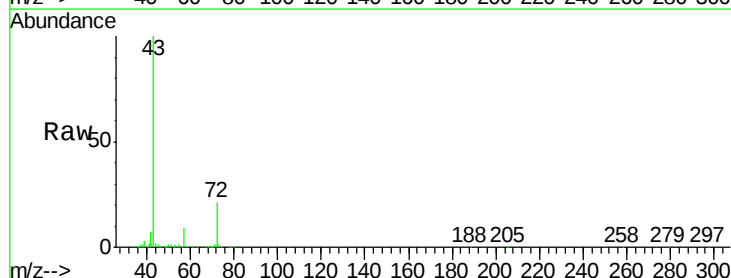
Manual Integrations  
 APPROVED

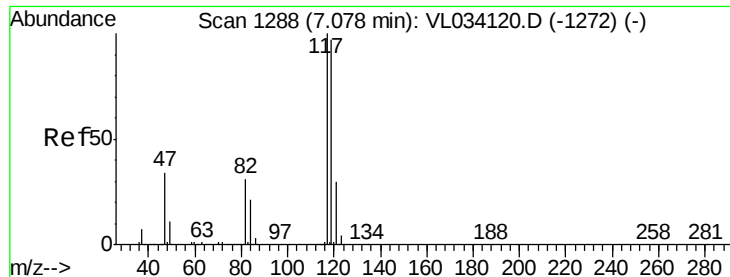
MMDadoda  
 9/12/2019 5:16:45 AM



#34  
 2-Butanone  
 Concen: 9.100 ppbv  
 RT: 5.28 min Scan# 774  
 Delta R.T. -0.00 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 20.0  | 16.5  | 24.7  |





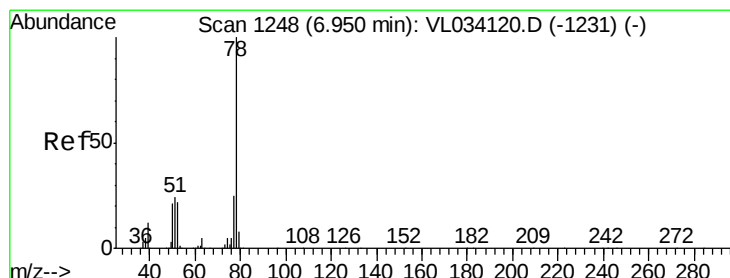
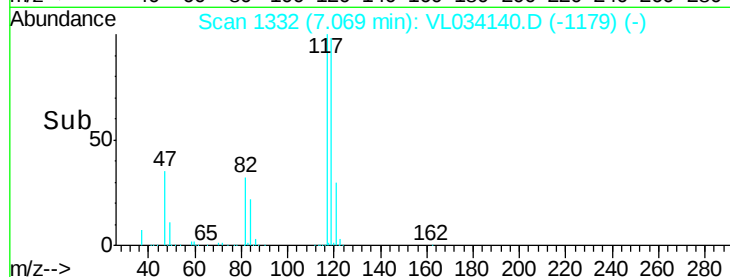
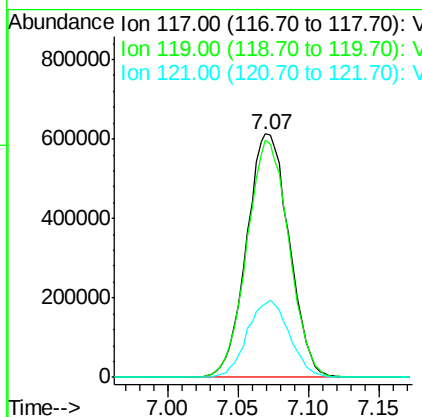
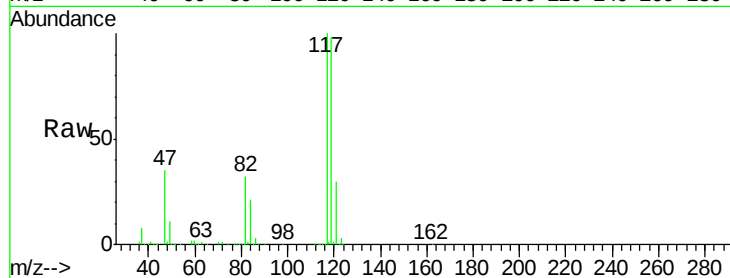
#35  
Carbon Tetrachloride  
Concen: 8.954 ppbv  
RT: 7.07 min Scan# 1332  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 119     | 97.6  | 77.2  | 115.8 |
| 121     | 30.1  | 24.2  | 36.4  |

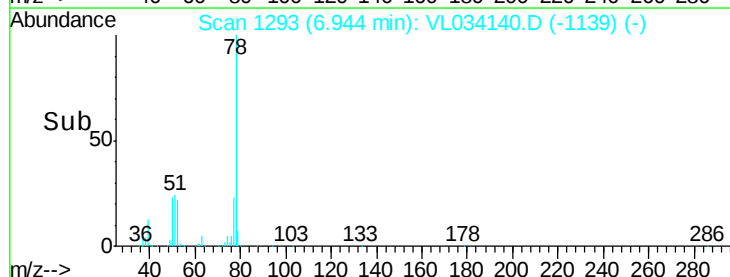
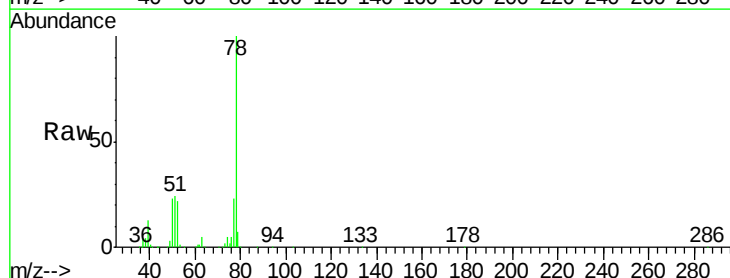
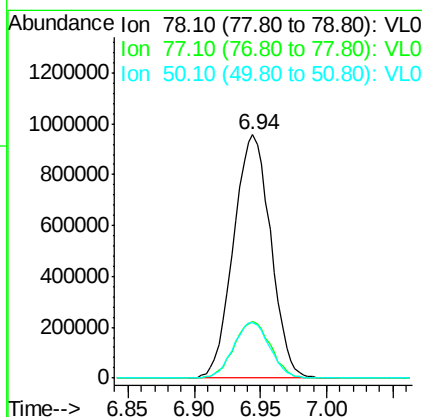
Manual Integrations  
APPROVED

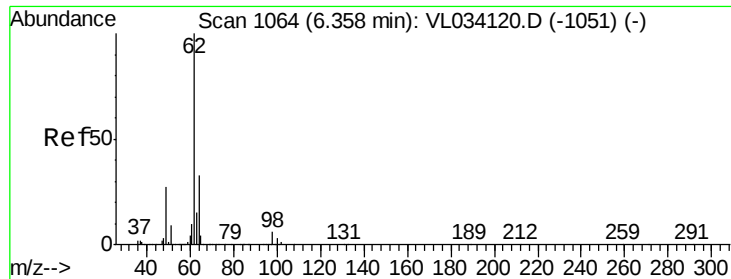
MMDadoda  
9/12/2019 5:16:45 AM



#36  
Benzene  
Concen: 8.832 ppbv  
RT: 6.94 min Scan# 1293  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 78      | 100   |       |       |
| 77      | 23.3  | 20.3  | 30.5  |
| 50      | 22.8  | 16.9  | 25.3  |





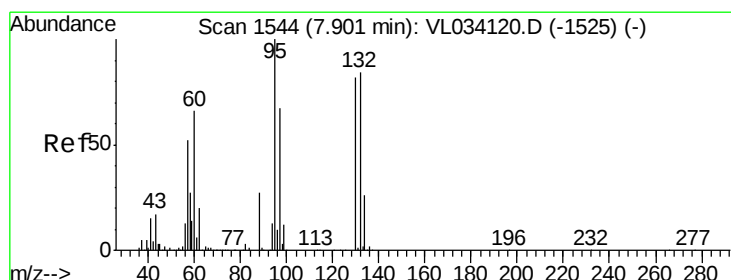
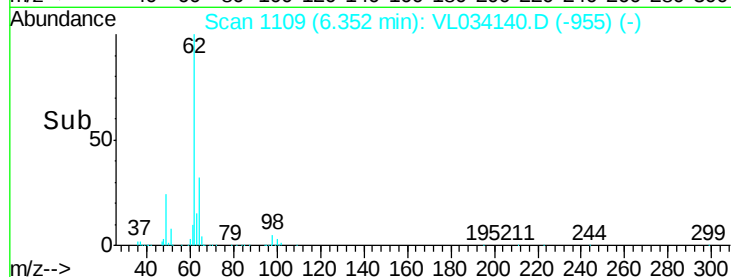
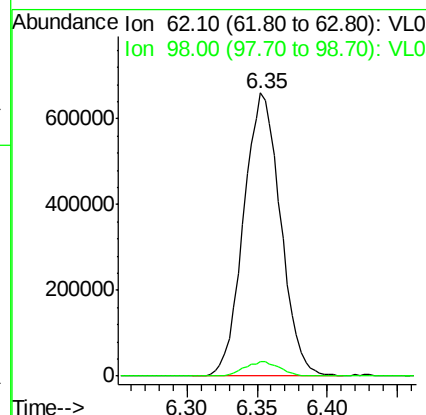
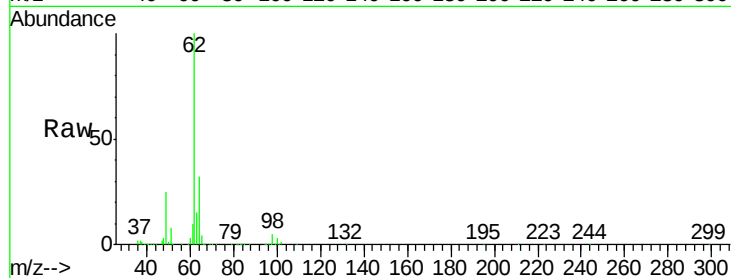
#37  
 1,2-Dichloroethane  
 Concen: 9.349 ppbv  
 RT: 6.35 min Scan# 1109  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

Tot Ion: 62 Resp: 1212348  
 Ion Ratio Lower Upper  
 62 100  
 98 5.0 4.4 6.6

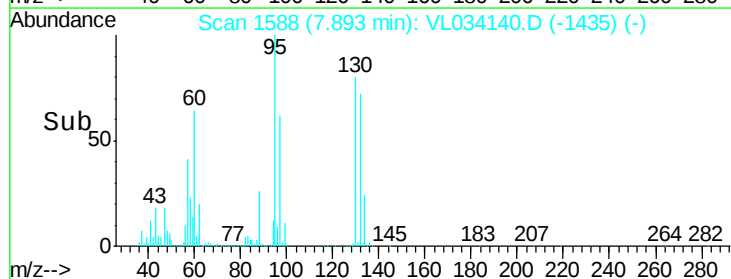
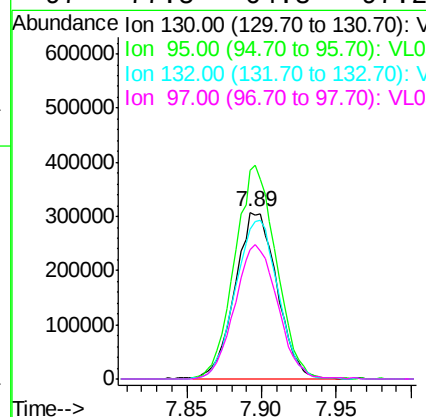
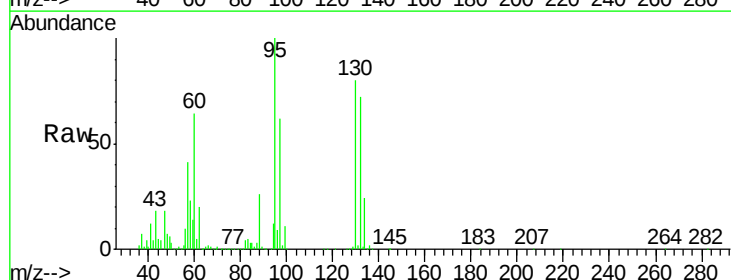
Manual Integrations  
 APPROVED

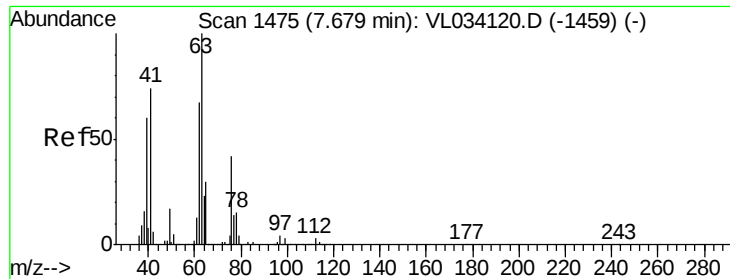
MMDadoda  
 9/12/2019 5:16:45 AM



#38  
 Trichloroethene  
 Concen: 7.593 ppbv  
 RT: 7.89 min Scan# 1588  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Tgt Ion: 130 Resp: 598931  
 Ion Ratio Lower Upper  
 130 100  
 95 124.5 97.2 145.8  
 132 89.4 81.4 122.2  
 97 77.5 64.8 97.2





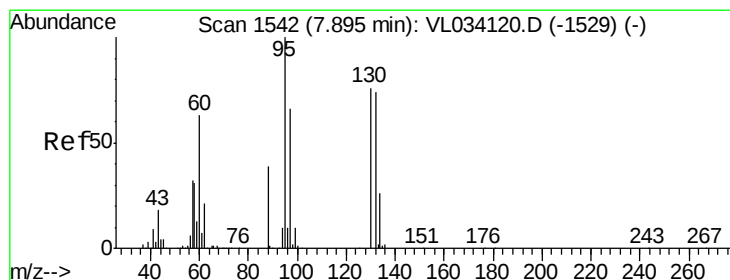
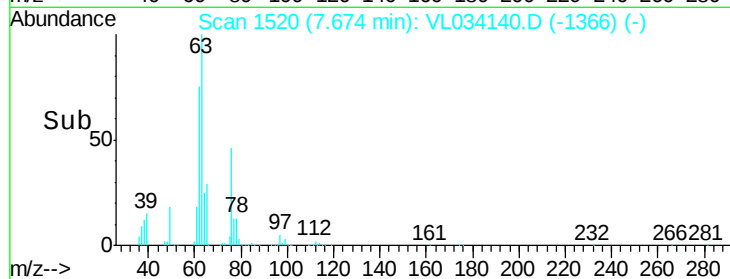
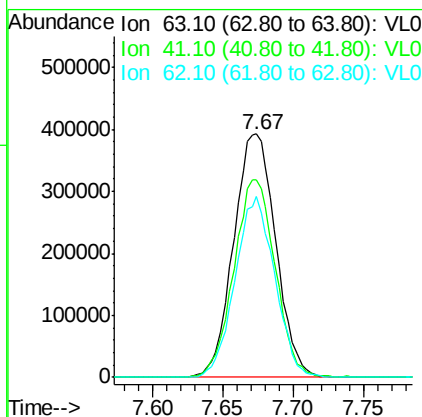
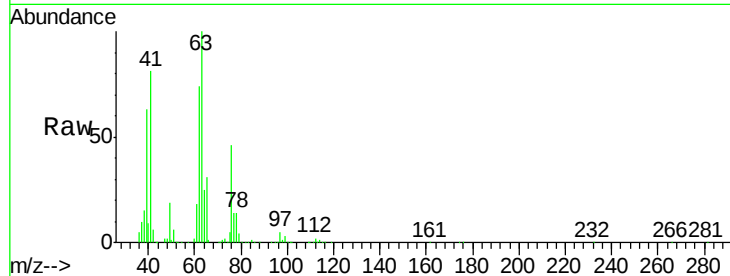
#39  
 1,2-Dichloropropane  
 Concen: 9.075 ppbv  
 RT: 7.67 min Scan# 1520  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 80.8  | 59.3  | 88.9  |
| 62      | 74.0  | 53.8  | 80.6  |

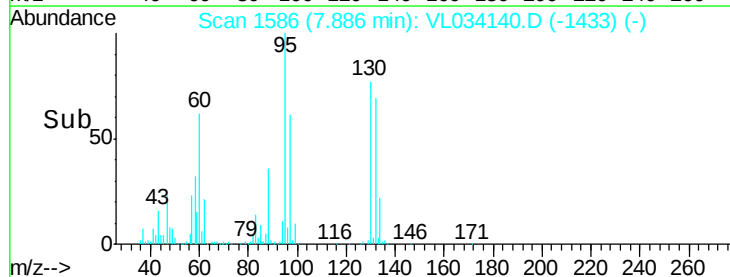
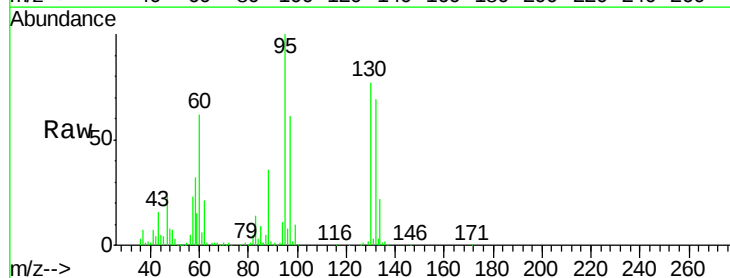
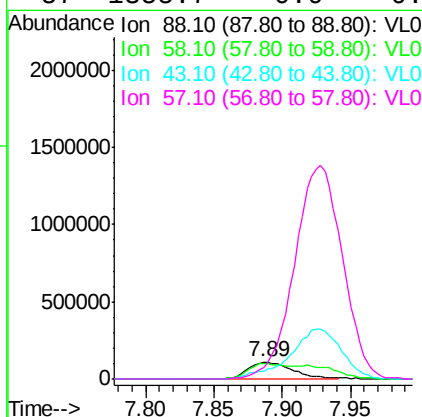
Manual Integrations  
 APPROVED

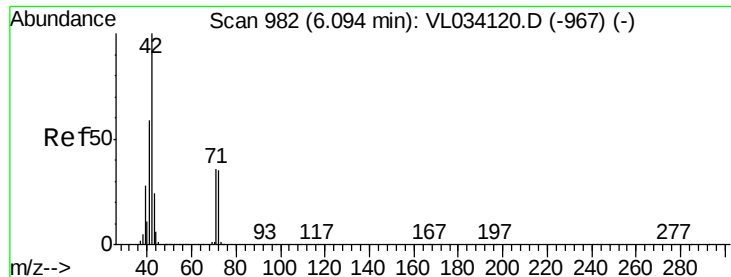
MMDadoda  
 9/12/2019 5:16:45 AM



#40  
 1,4-Dioxane  
 Concen: 7.509 ppbv  
 RT: 7.89 min Scan# 1586  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio  | Lower | Upper |
|---------|--------|-------|-------|
| 88      | 100    |       |       |
| 58      | 153.6  | 121.7 | 182.5 |
| 43      | 341.8  | 0.0   | 0.0#  |
| 57      | 1355.7 | 0.0   | 0.0#  |





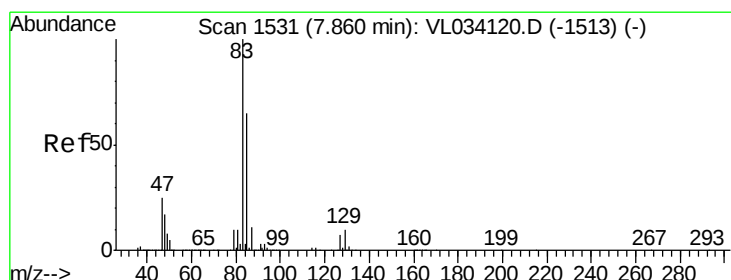
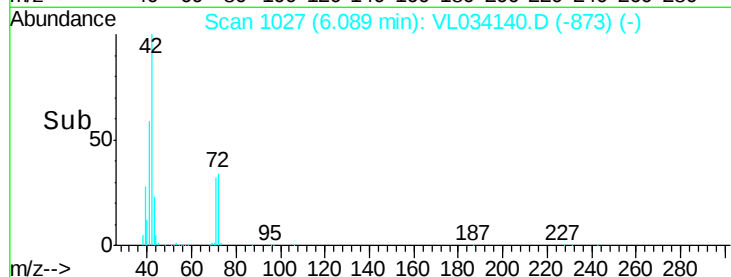
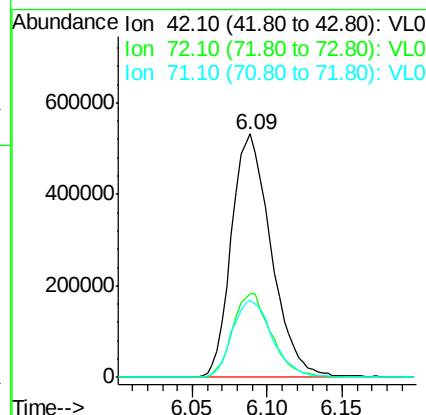
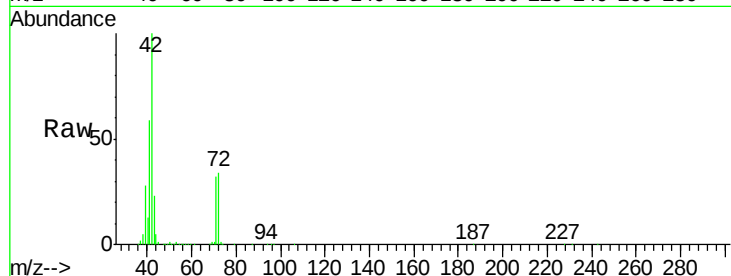
#41  
Tetrahydrofuran  
Concen: 9.263 ppbv  
RT: 6.09 min Scan# 1027  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 33.6  | 27.7  | 41.5  |
| 71      | 32.2  | 26.7  | 40.1  |

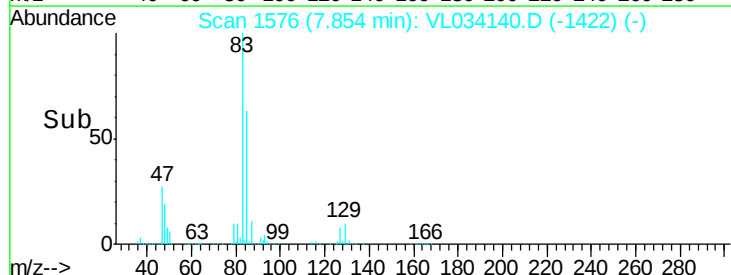
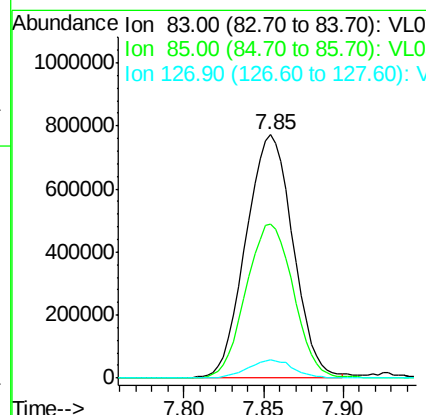
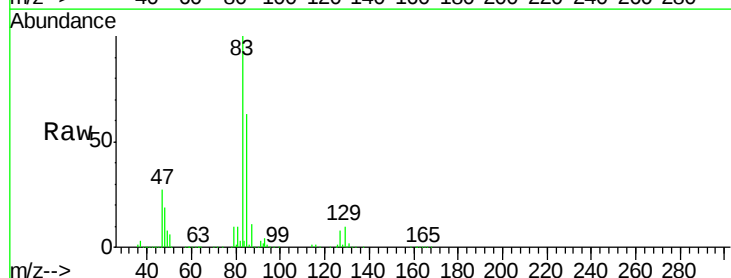
Manual Integrations  
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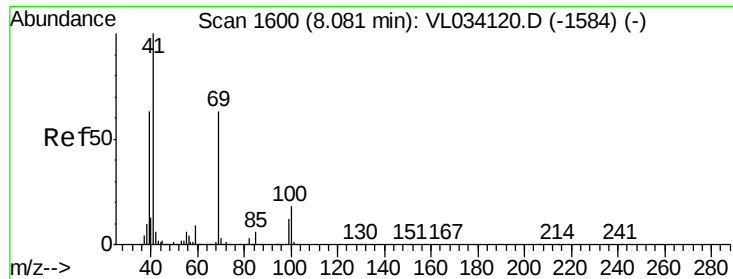
MMDadoda  
9/12/2019 5:16:45 AM



#42  
Bromodichloromethane  
Concen: 9.217 ppbv  
RT: 7.85 min Scan# 1576  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 85      | 63.2  | 51.6  | 77.4  |
| 127     | 7.7   | 5.4   | 8.0   |





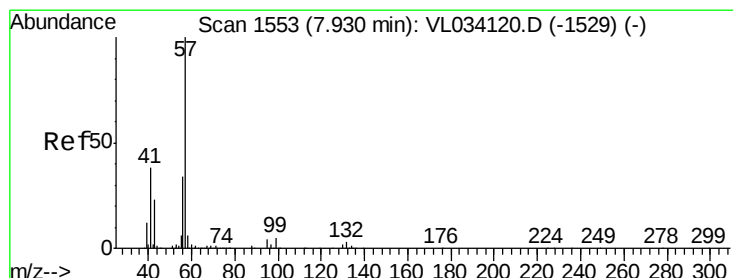
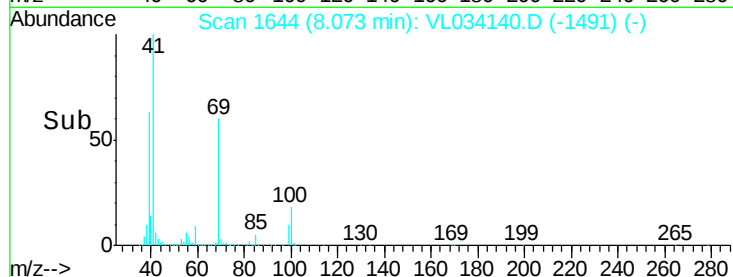
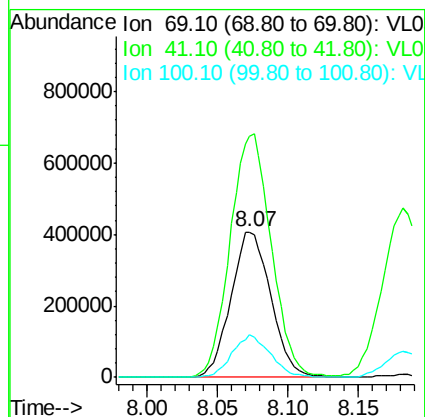
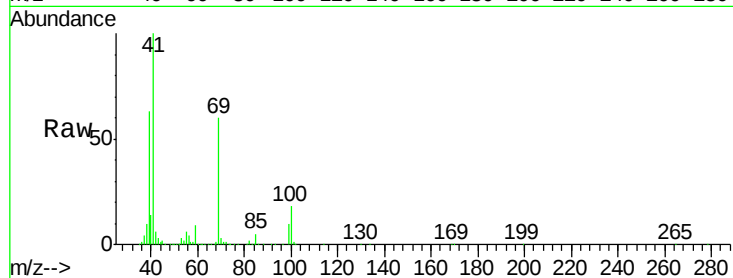
#43  
Methvl Methacrilate  
Concen: 9.268 ppbv  
RT: 8.07 min Scan# 1644  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

| Tot Ion | Ion   | Ratio | Lower | Upper |
|---------|-------|-------|-------|-------|
| 69      | 100   |       |       |       |
| 41      | 171.6 | 131.0 | 196.6 |       |
| 100     | 27.9  | 22.6  | 33.8  |       |

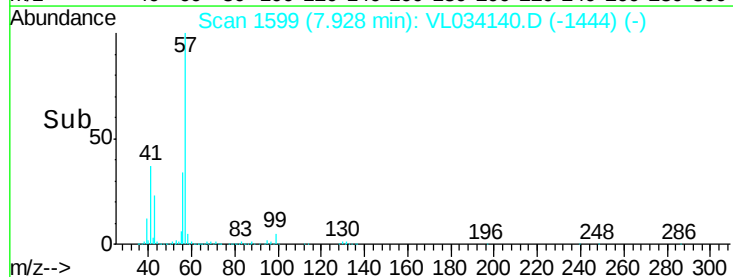
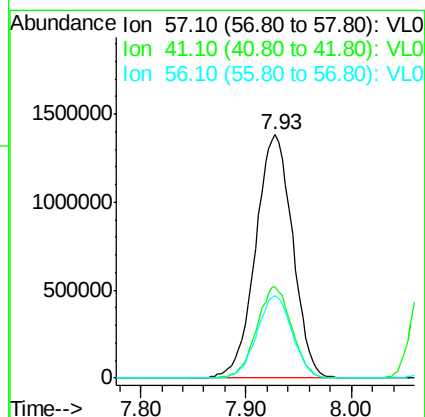
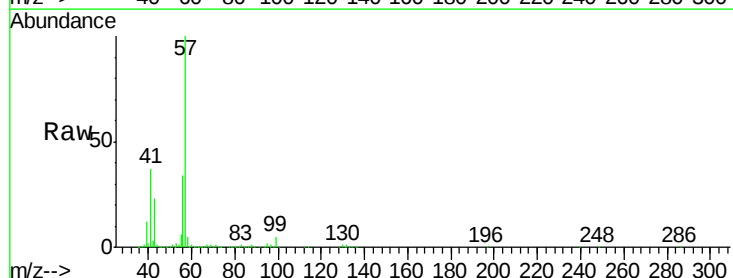
Manual Integrations  
APPROVED

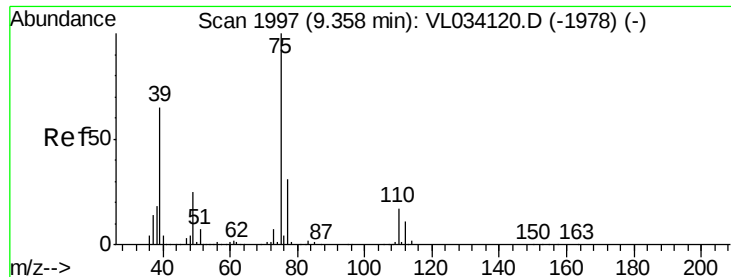
MMDadoda  
9/12/2019 5:16:45 AM



#44  
2,2,4-Trimethylpentane  
Concen: 8.670 ppbv  
RT: 7.93 min Scan# 1599  
Delta R.T. -0.00 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

| Tgt Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 57      | 100  |       |       |       |
| 41      | 35.5 | 28.4  | 42.6  |       |
| 56      | 32.3 | 26.3  | 39.5  |       |





#45

t-1,3-Dichloropropene

Concen: 9.619 ppbv

RT: 9.35 min Scan# 2041

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion: 75 Resp: 984545

Ion Ratio Lower Upper

75 100

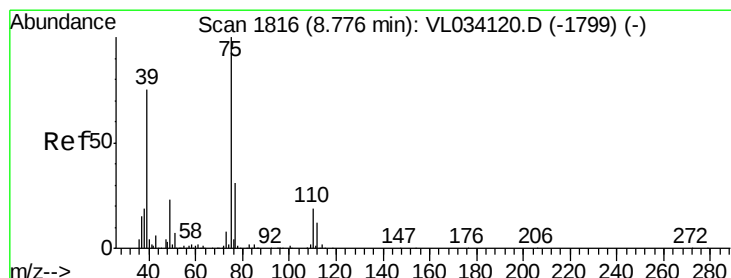
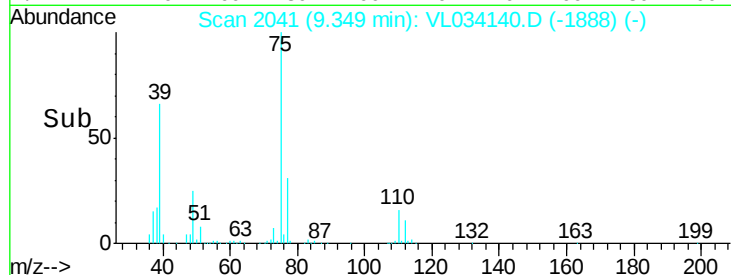
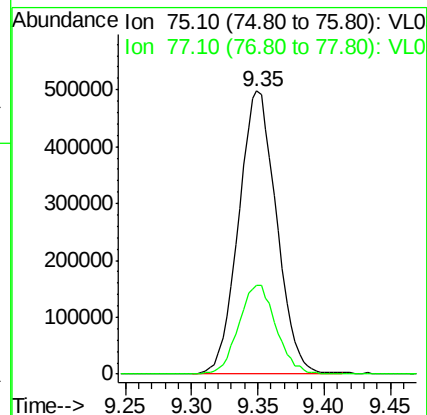
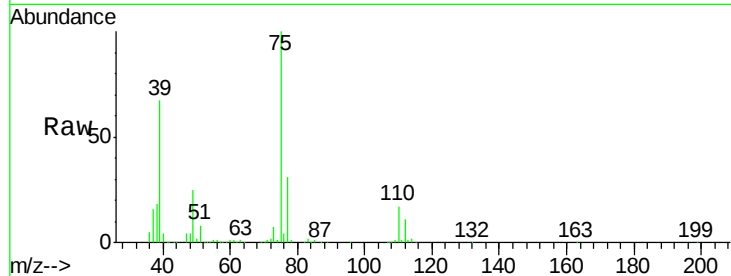
77 31.5 24.6 36.8

Manual Integrations

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#46

cis-1,3-Dichloropropene

Concen: 9.231 ppbv

RT: 8.77 min Scan# 1860

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

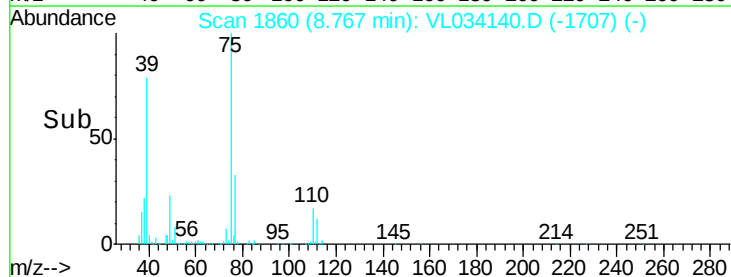
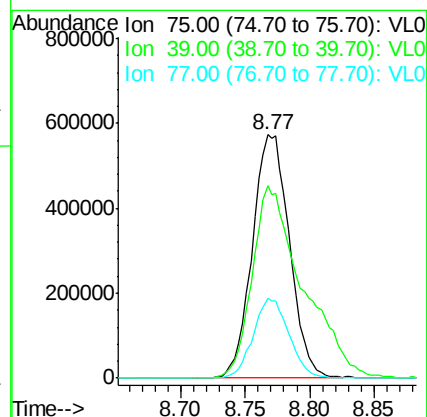
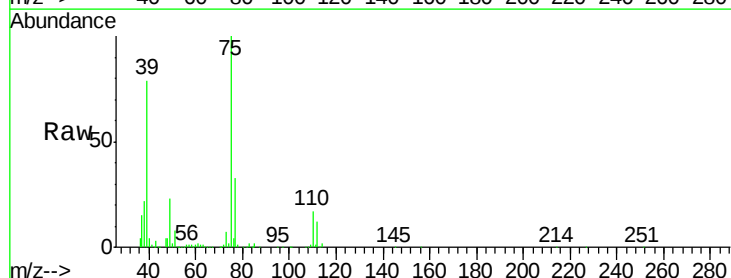
Tgt Ion: 75 Resp: 1149394

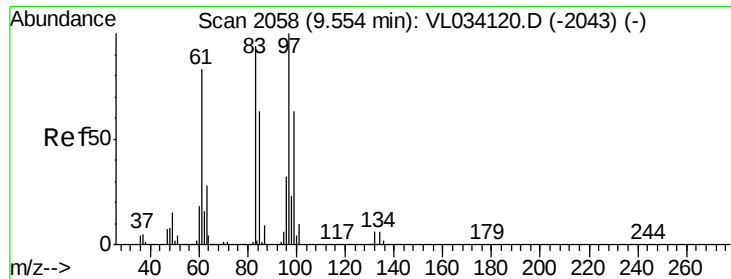
Ion Ratio Lower Upper

75 100

39 78.7 60.0 90.0

77 32.8 24.8 37.2





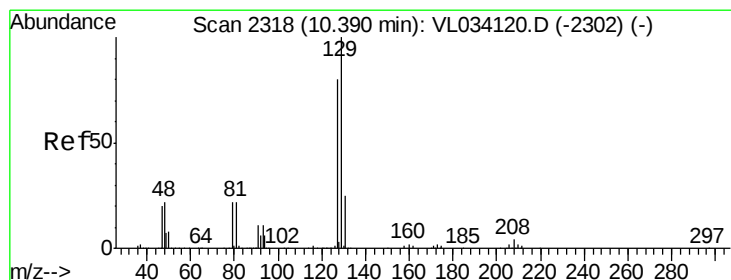
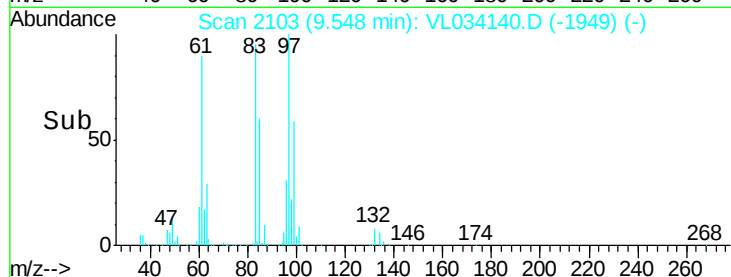
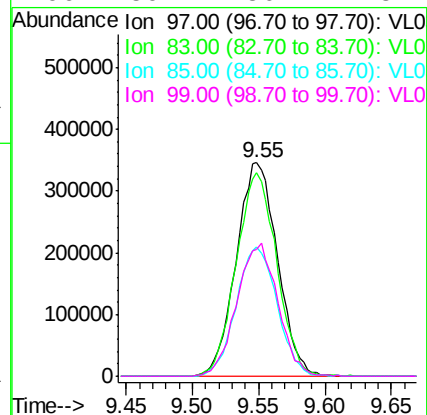
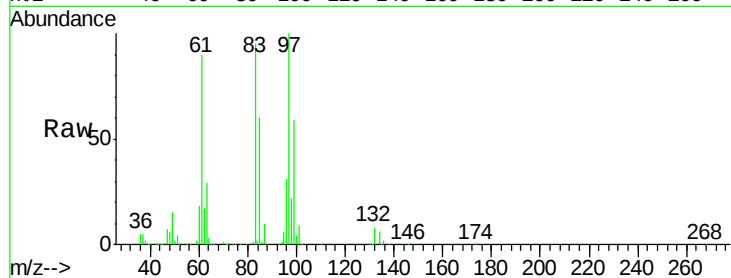
#47  
 1,1,2-Trichloroethane  
 Concen: 9.024 ppbv  
 RT: 9.55 min Scan# 2103  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 97    | Resp: | 743739 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 83       | 95.5  | 74.9  | 112.3  |
| 85       | 60.2  | 50.6  | 75.8   |
| 99       | 59.1  | 50.2  | 75.2   |

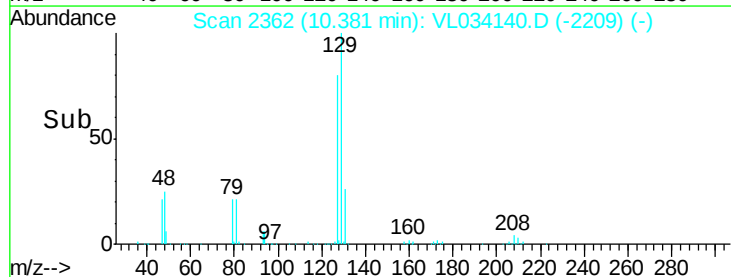
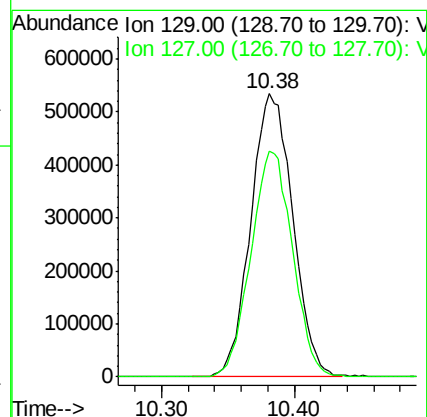
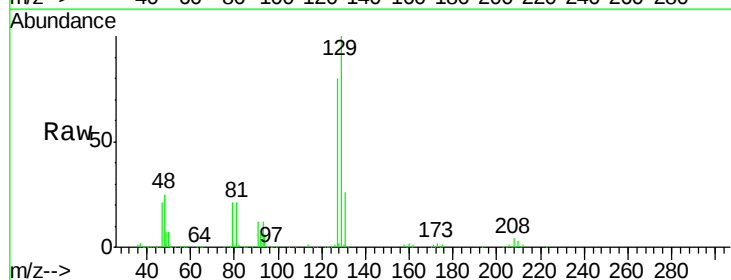
Manual Integrations  
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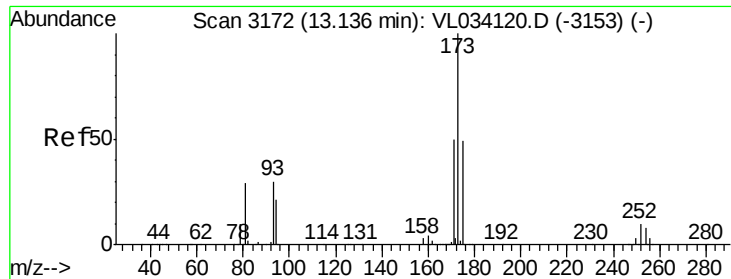
MMDadoda  
 9/12/2019 5:16:45 AM



#48  
 Dibromochloromethane  
 Concen: 9.606 ppbv  
 RT: 10.38 min Scan# 2362  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 129   | Resp: | 1181309 |
| Ion      | Ratio | Lower | Upper   |
| 129      | 100   |       |         |
| 127      | 79.3  | 40.2  | 120.6   |





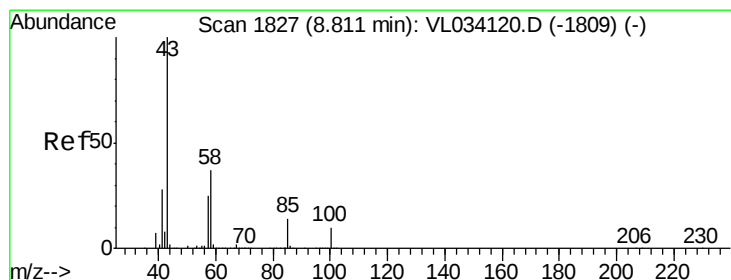
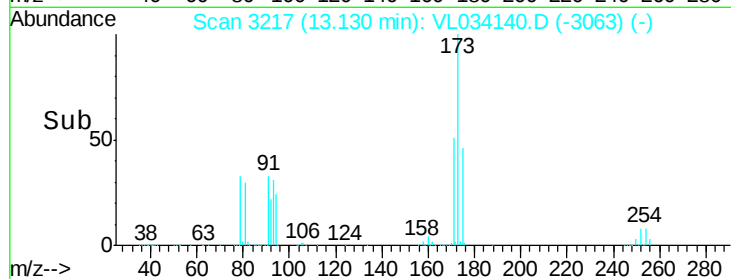
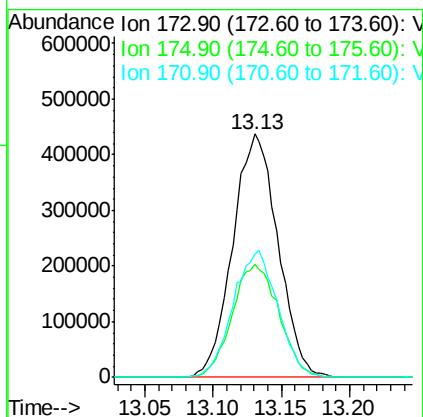
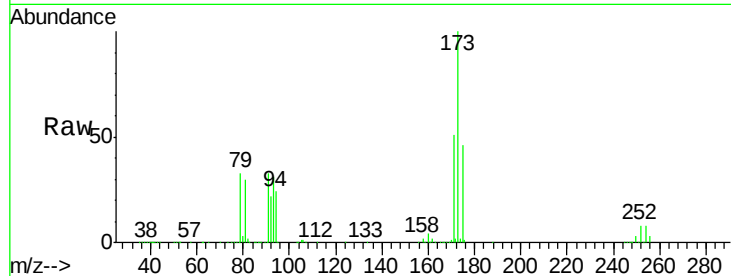
#49  
Bromoform  
Concen: 9.263 ppbv  
RT: 13.13 min Scan# 3217  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 173     | 100   |       |       |
| 175     | 48.3  | 40.0  | 60.0  |
| 171     | 52.0  | 42.2  | 63.2  |

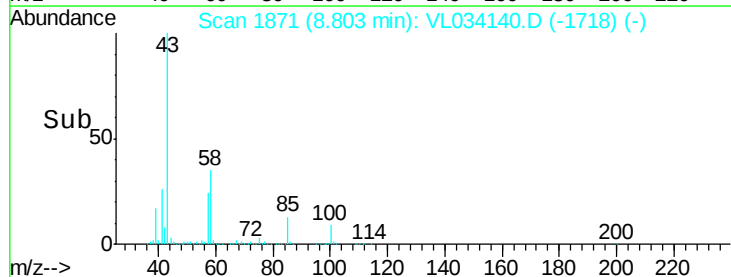
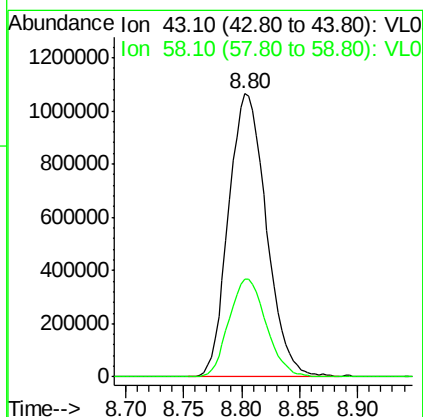
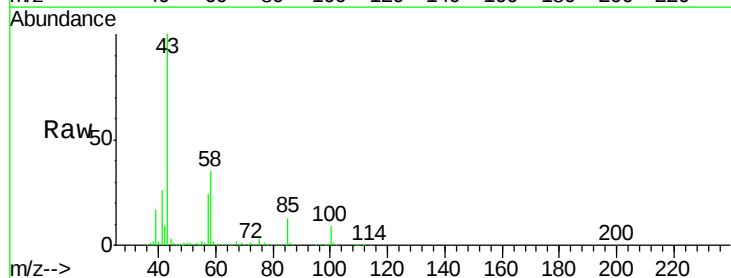
Manual Integrations  
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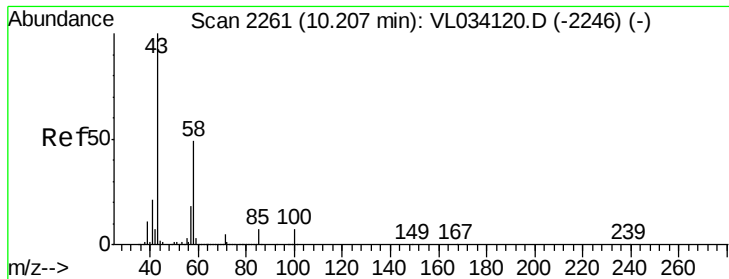
MMDadoda  
9/12/2019 5:16:45 AM



#50  
4-Methyl-2-Pentanone  
Concen: 8.859 ppbv  
RT: 8.80 min Scan# 1871  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 34.3  | 28.5  | 42.7  |





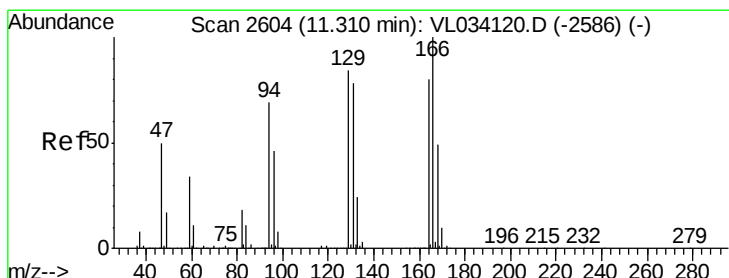
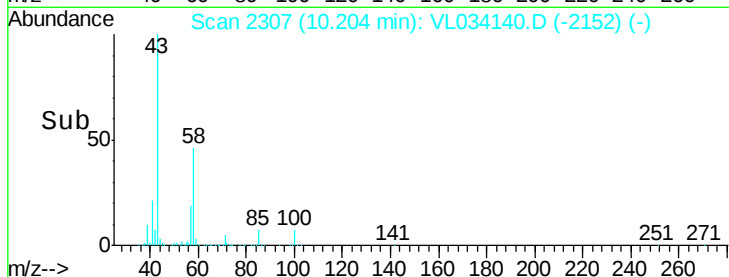
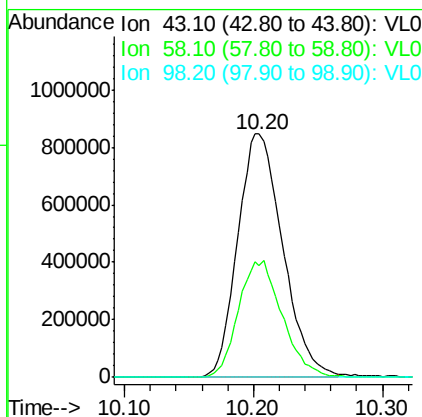
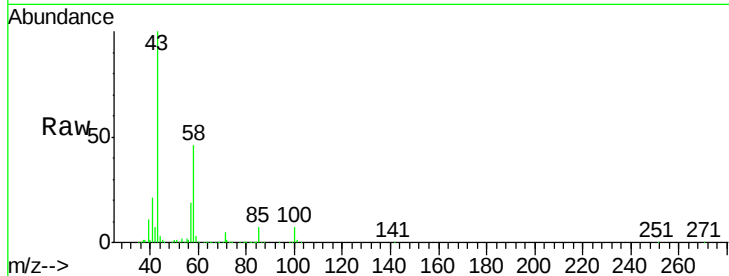
#51  
 2-Hexanone  
 Concen: 8.766 ppbv  
 RT: 10.20 min Scan# 2307  
 Delta R.T. -0.00 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Instrument :  
 MSVOA\_L  
 ClientSampled :  
 VL0910ABS01

Tot Ion: 43 Resp: 2054424  
 Ion Ratio Lower Upper  
 43 100  
 58 46.9 38.2 57.2  
 98 0.1 0.1 0.1#

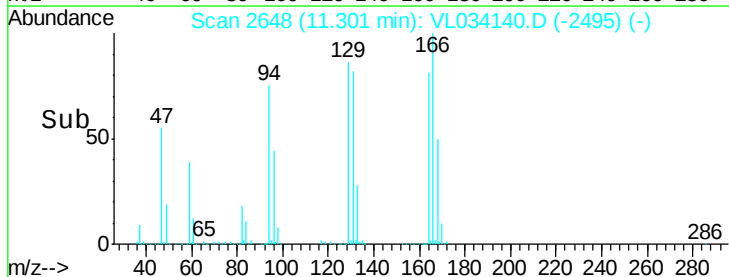
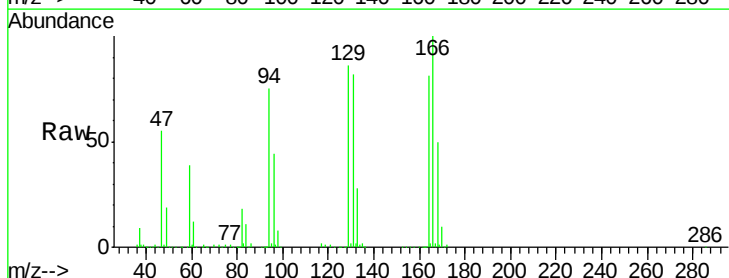
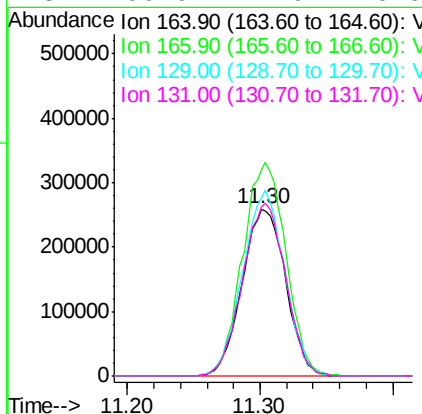
Manual Integrations  
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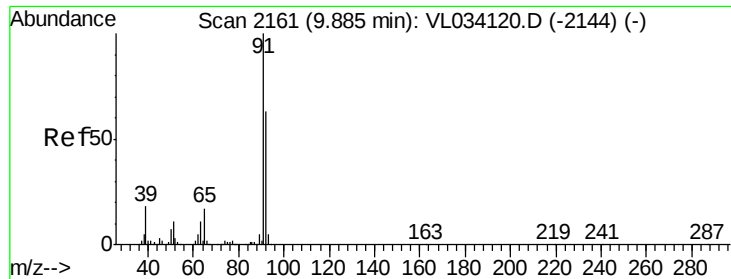
MMDadoda  
 9/12/2019 5:16:45 AM



#52  
 Tetrachloroethene  
 Concen: 7.942 ppbv  
 RT: 11.30 min Scan# 2648  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Tgt Ion: 164 Resp: 591987  
 Ion Ratio Lower Upper  
 164 100  
 166 123.7 99.5 149.3  
 129 106.6 83.6 125.4  
 131 100.9 77.9 116.9





#53

Toluene

Concen: 8.959 ppbv

RT: 9.88 min Scan# 2205

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion: 91 Resp: 2094574

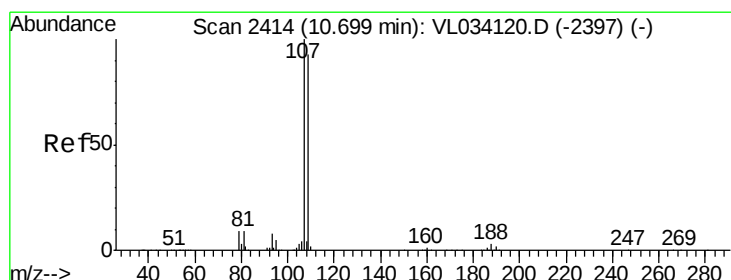
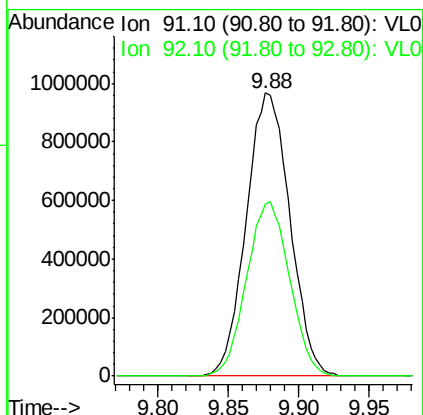
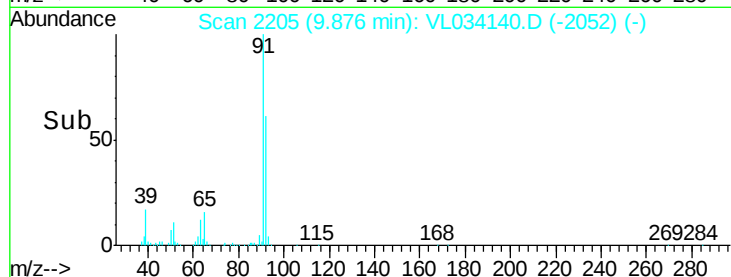
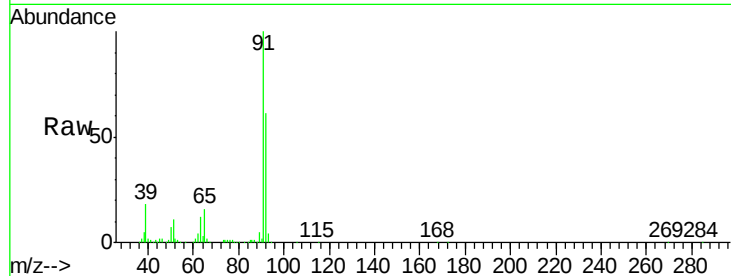
Ion Ratio Lower Upper

91 100

92 60.8 49.3 73.9

Manual Integrations  
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9/12/2019 5:16:45 AM



#54

1,2-Dibromoethane

Concen: 9.227 ppbv

RT: 10.69 min Scan# 2458

Delta R.T. -0.01 min

Lab File: VL034140.D

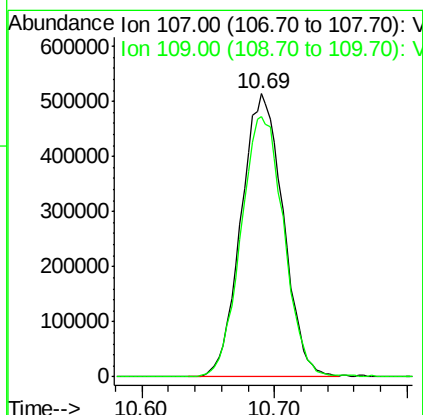
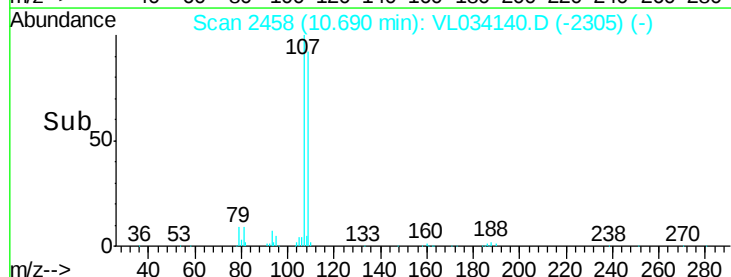
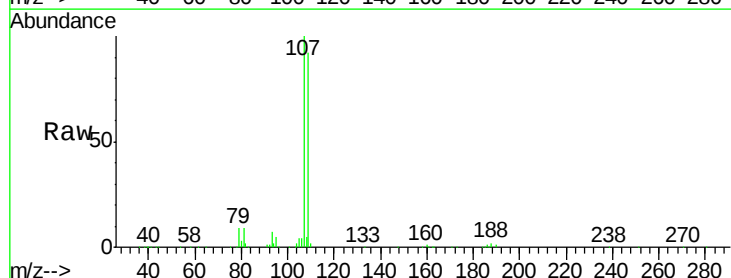
Acq: 10 Sep 2019 12:10

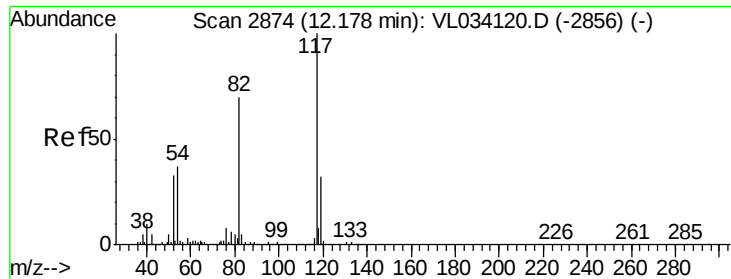
Tgt Ion: 107 Resp: 1132871

Ion Ratio Lower Upper

107 100

109 92.1 74.5 111.7





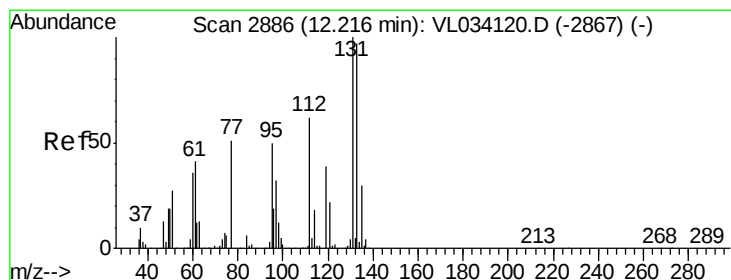
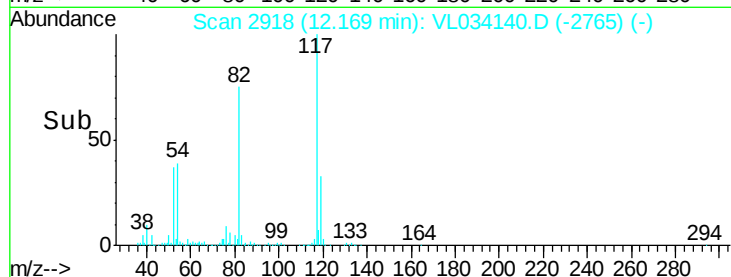
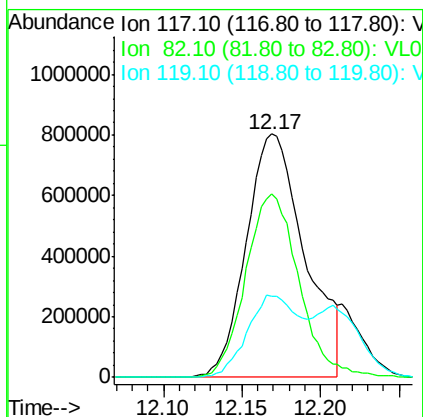
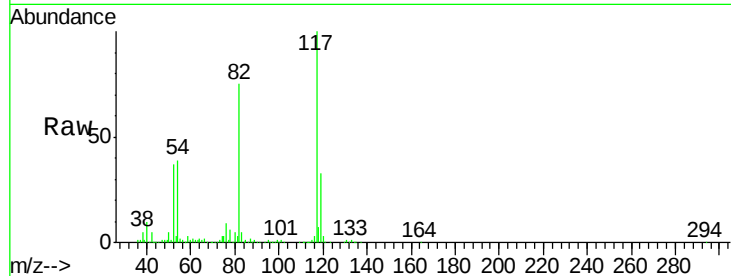
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv m  
RT: 12.17 min Scan# 2918  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 68.2  | 55.8  | 83.6  |
| 119     | 28.0  | 43.1  | 64.7# |

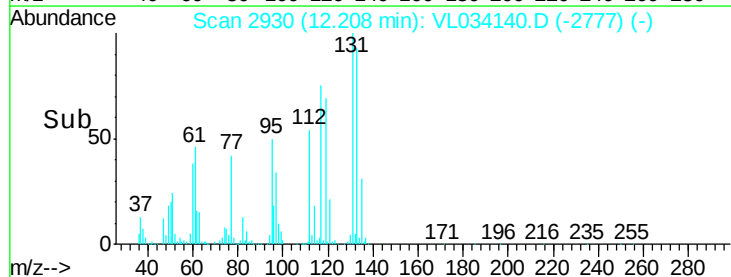
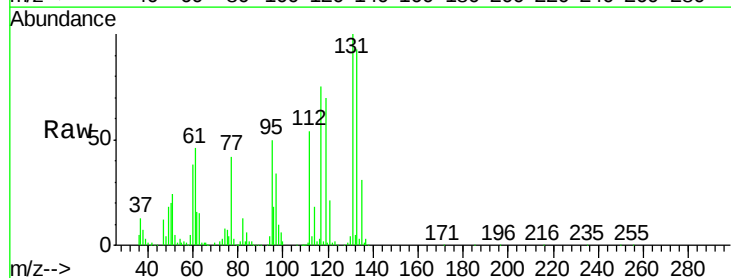
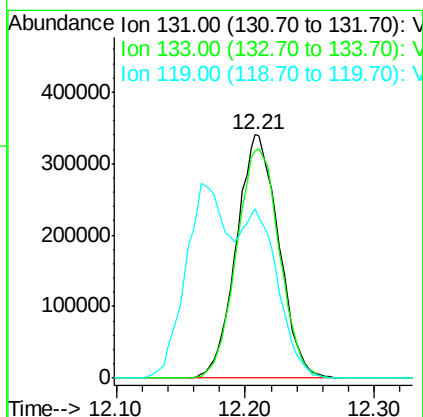
Manual Integrations  
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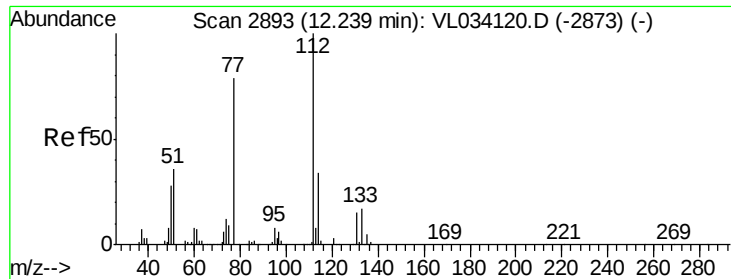
MMDadoda  
9/12/2019 5:16:45 AM



#56  
1,1,1,2-Tetrachloroethane  
Concen: 8.627 ppbv  
RT: 12.21 min Scan# 2930  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 131     | 100   |       |        |
| 133     | 96.4  | 75.8  | 113.6  |
| 119     | 62.0  | 114.7 | 172.1# |





#57

Chlorobenzene

Concen: 8.040 ppbv

RT: 12.23 min Scan# 2938

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

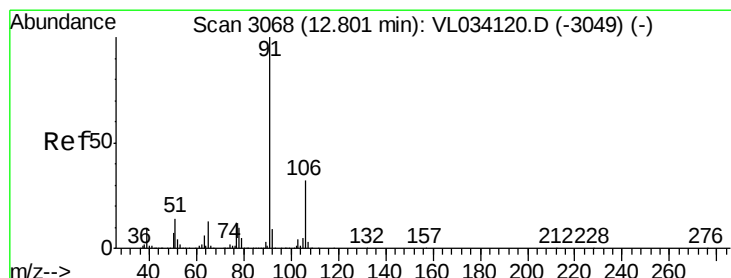
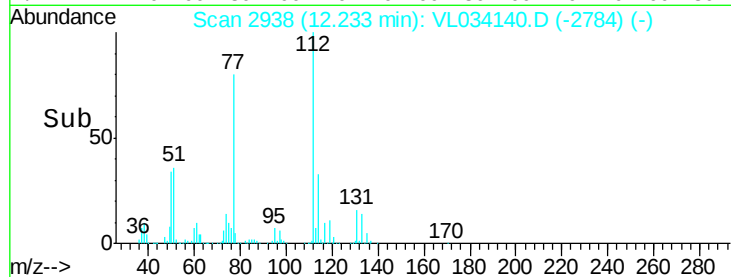
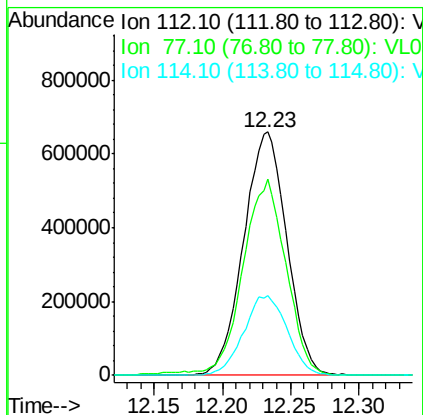
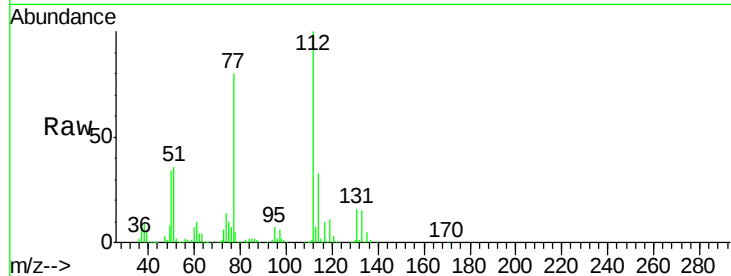
ClientSampleId :

VL0910ABS01

|           |       |       |         |
|-----------|-------|-------|---------|
| Tot Ion:  | 112   | Resp: | 1445345 |
| Ion Ratio | Lower | Upper |         |
| 112       | 100   |       |         |
| 77        | 80.2  | 64.4  | 96.6    |
| 114       | 33.0  | 30.3  | 37.1    |

Manual Integrations  
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#58

Ethyl Benzene

Concen: 8.264 ppbv

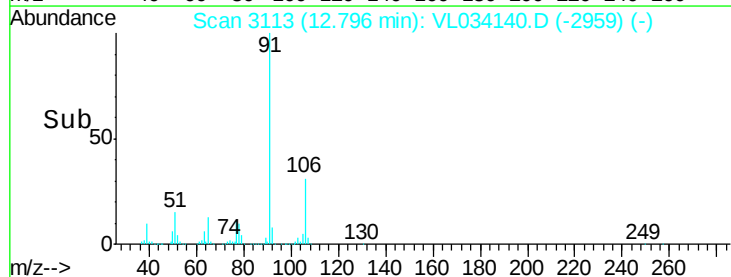
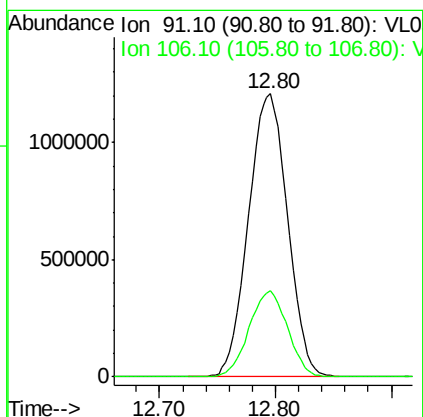
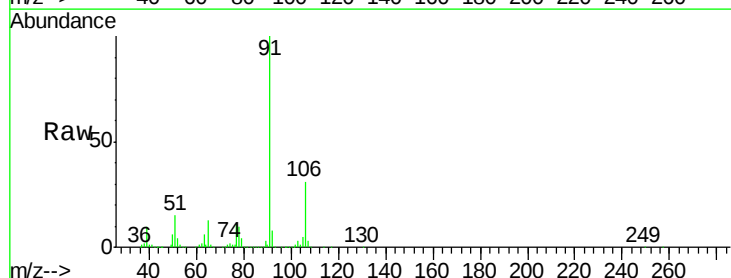
RT: 12.80 min Scan# 3113

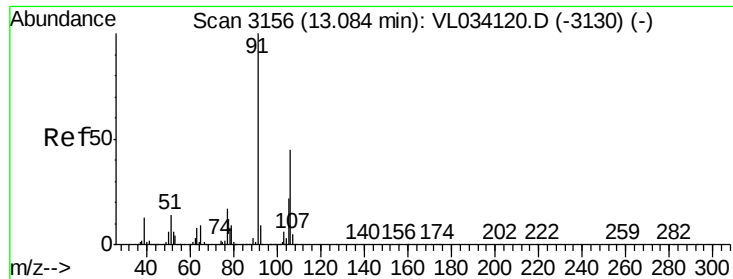
Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 91    | Resp: | 2832130 |
| Ion Ratio | Lower | Upper |         |
| 91        | 100   |       |         |
| 106       | 30.5  | 25.3  | 37.9    |





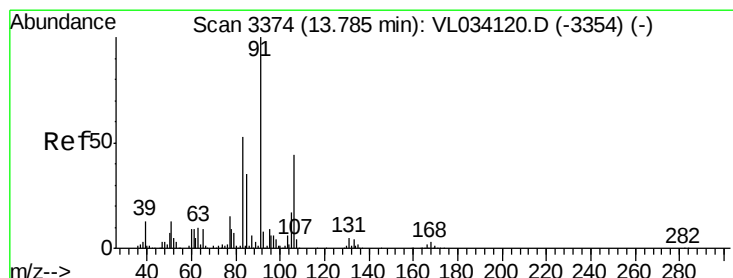
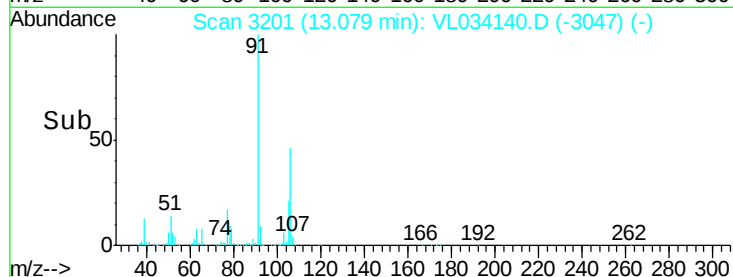
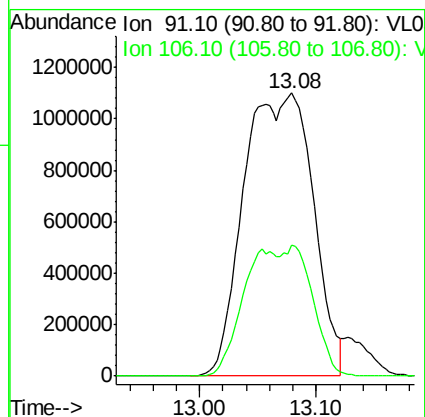
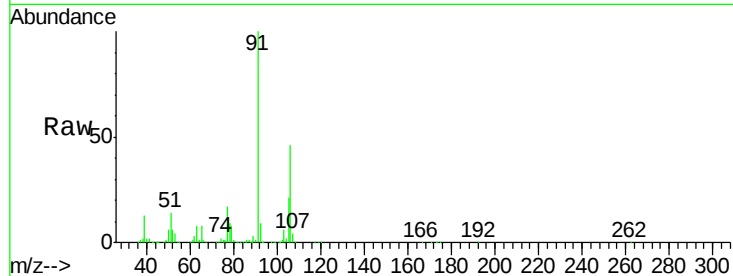
#59  
m/p-Xylene  
Concen: 16.156 ppbv m  
RT: 13.08 min Scan# 3201  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

Tot Ion: 91 Resp: 4516391  
Ion Ratio Lower Upper  
91 100  
106 44.3 35.4 53.2

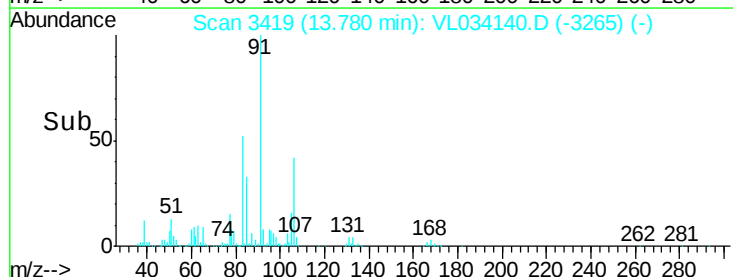
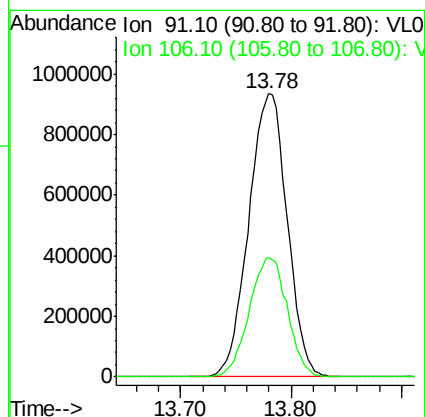
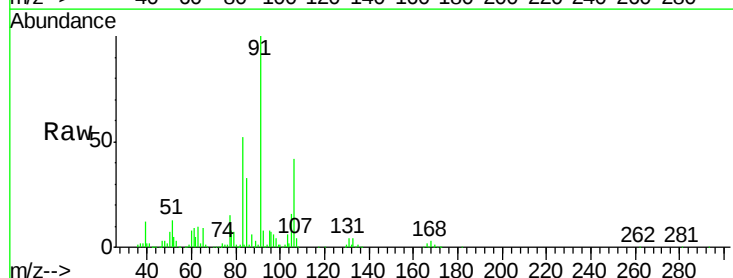
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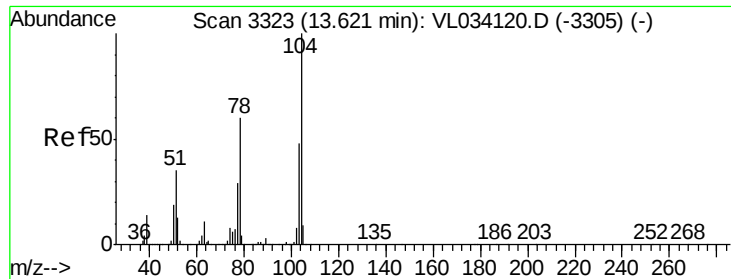
MMDadoda  
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#60  
o-Xylene  
Concen: 8.111 ppbv  
RT: 13.78 min Scan# 3419  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Tgt Ion: 91 Resp: 2258194  
Ion Ratio Lower Upper  
91 100  
106 41.8 21.4 64.3





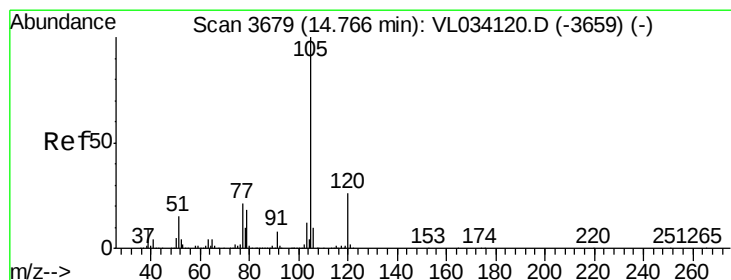
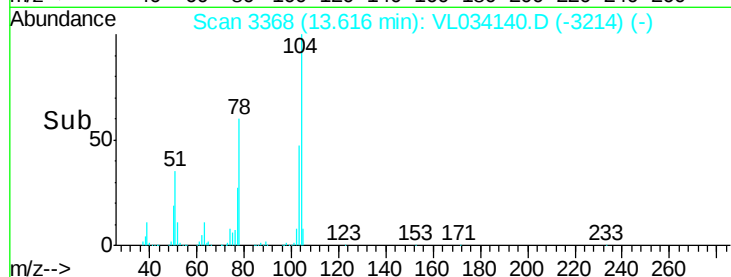
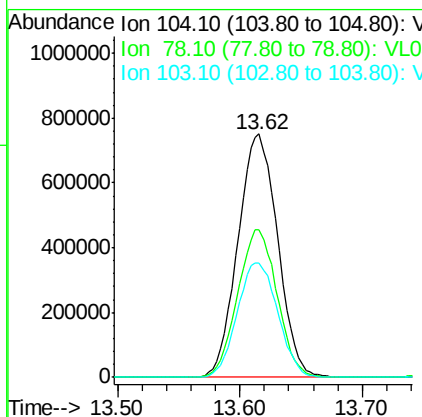
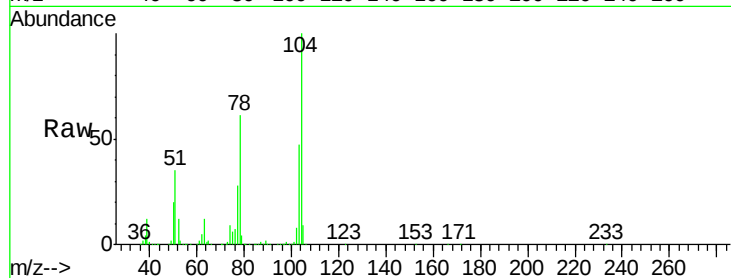
#61  
Stvrene  
Concen: 8.097 ppbv  
RT: 13.62 min Scan# 3368  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 104     | 100   |       |       |
| 78      | 60.4  | 47.8  | 71.6  |
| 103     | 48.3  | 38.7  | 58.1  |

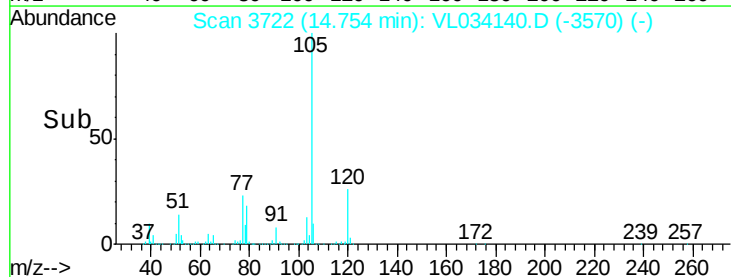
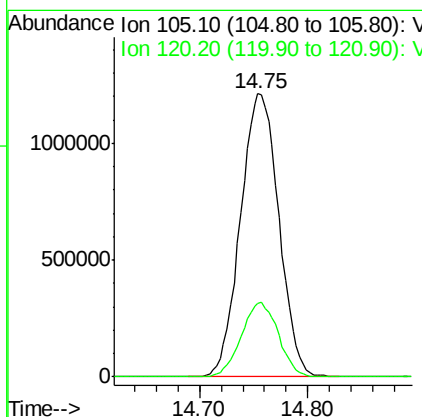
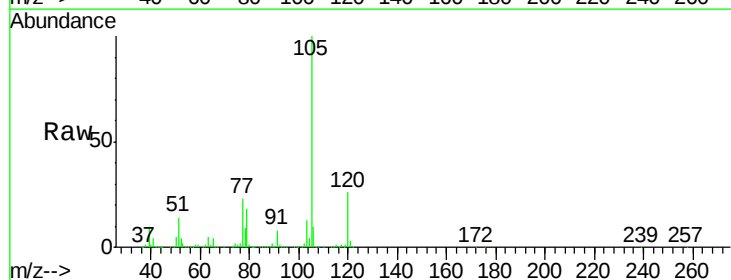
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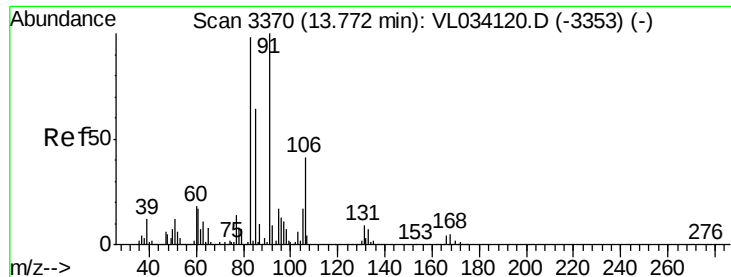
MMDadoda  
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#62  
Isopropylbenzene  
Concen: 8.265 ppbv  
RT: 14.75 min Scan# 3722  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 25.5  | 20.6  | 31.0  |





#63

1,1,2,2-Tetrachloroethane

Concen: 7.246 ppbv

RT: 13.76 min Scan# 3414

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion: 83 Resp: 1644157

Ion Ratio Lower Upper

83 100

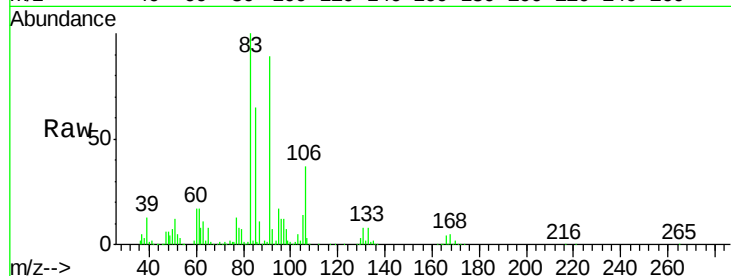
131 8.3 4.3 12.8

85 65.5 32.5 97.5

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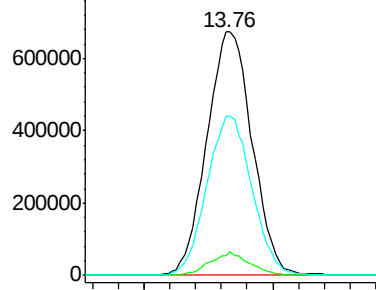
9/12/2019 5:16:45 AM



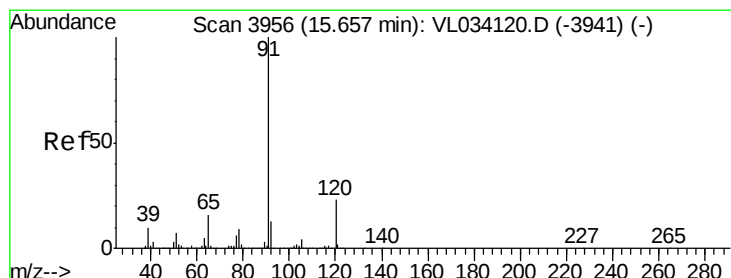
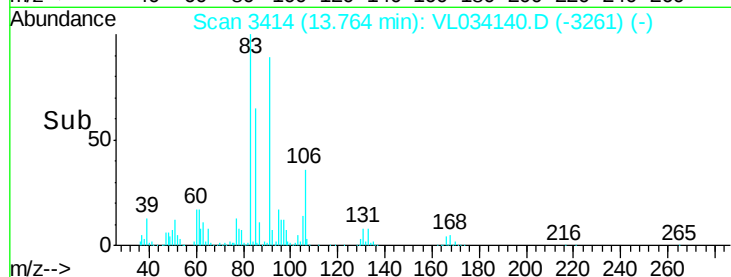
Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VL0



Time-->



#64

n-propylbenzene

Concen: 8.592 ppbv

RT: 15.65 min Scan# 4002

Delta R.T. -0.00 min

Lab File: VL034140.D

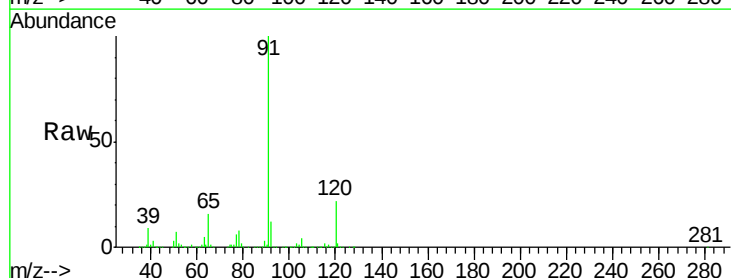
Acq: 10 Sep 2019 12:10

Tgt Ion:120 Resp: 779767

Ion Ratio Lower Upper

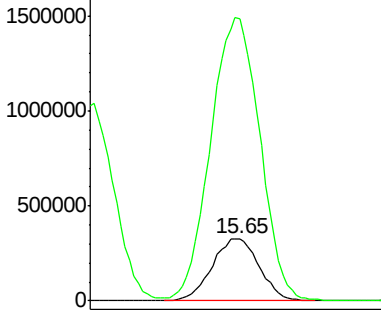
120 100

91 480.2 376.8 565.2

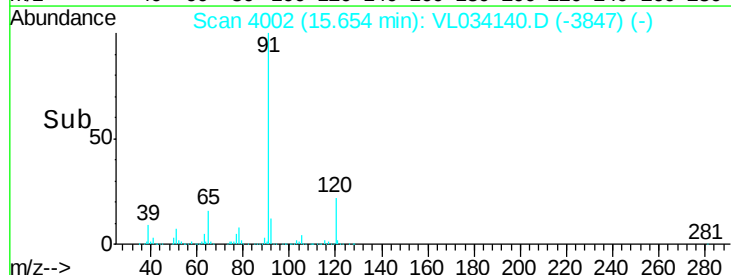


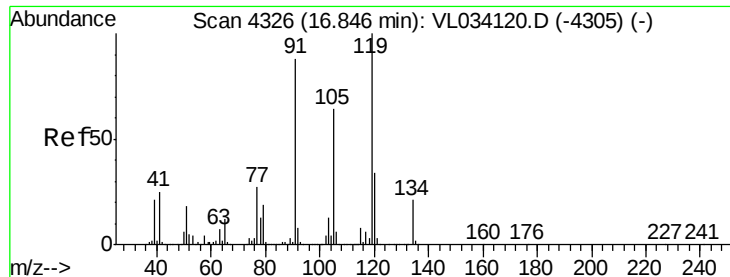
Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0



Time-->





#65

tert-Butylbenzene

Concen: 7.989 ppbv

RT: 16.84 min Scan# 4370

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion:119 Resp: 2497845

Ion Ratio Lower Upper

119 100

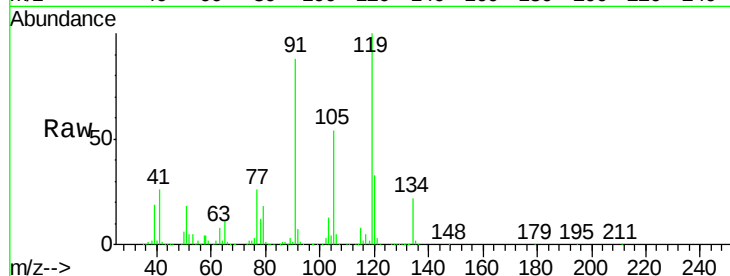
91 92.5 72.8 109.2

134 19.7 15.8 23.8

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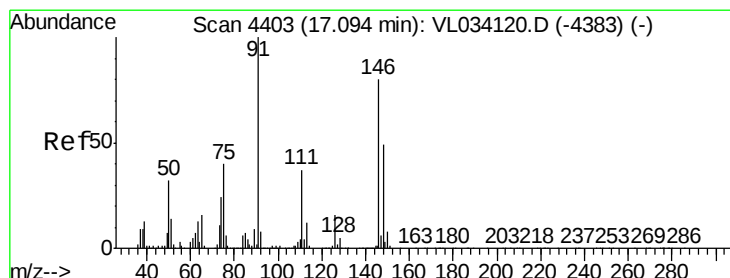
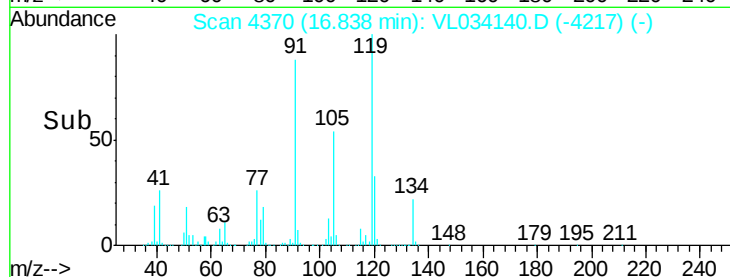
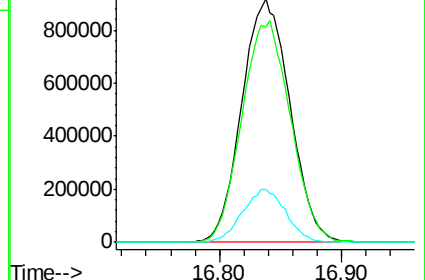
9/12/2019 5:16:45 AM



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 8.955 ppbv

RT: 17.09 min Scan# 4448

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

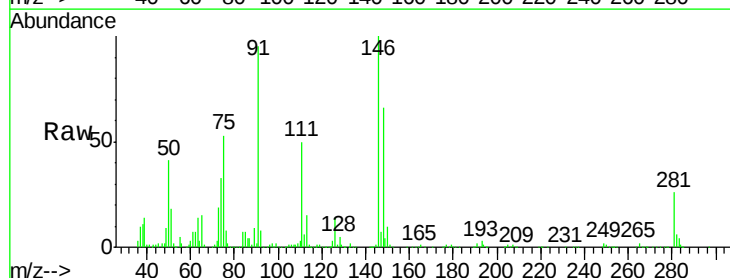
Tgt Ion: 91 Resp: 1032251

Ion Ratio Lower Upper

91 100

126 15.7 13.7 20.5

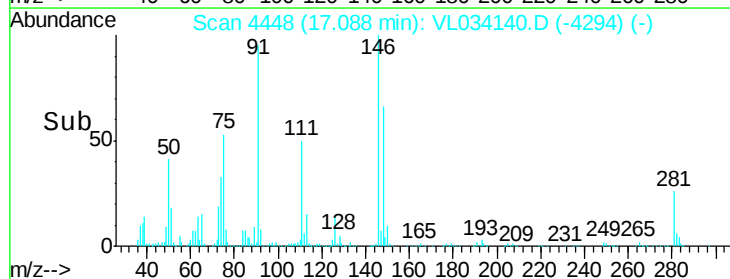
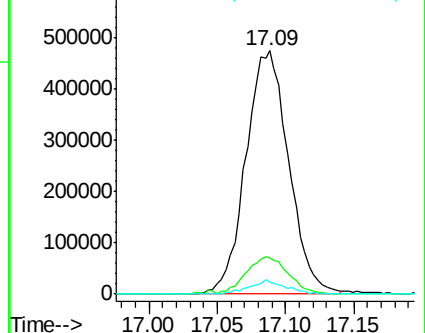
128 5.1 4.2 6.4

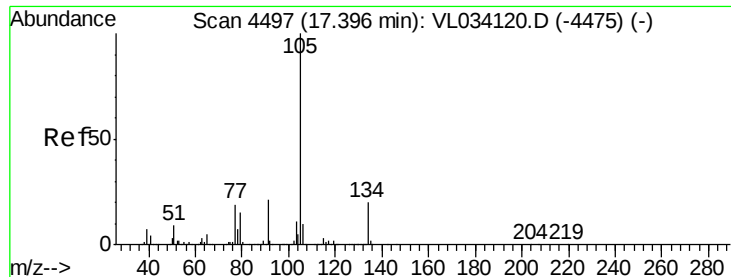


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V





#67

sec-Butylbenzene

Concen: 8.175 ppbv

RT: 17.39 min Scan# 4541

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion:105 Resp: 3675234

Ion Ratio Lower Upper

105 100

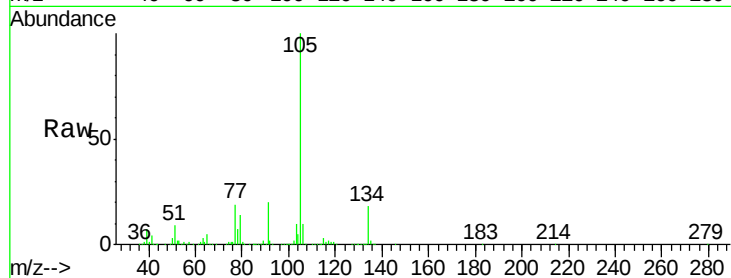
134 18.0 15.0 22.4

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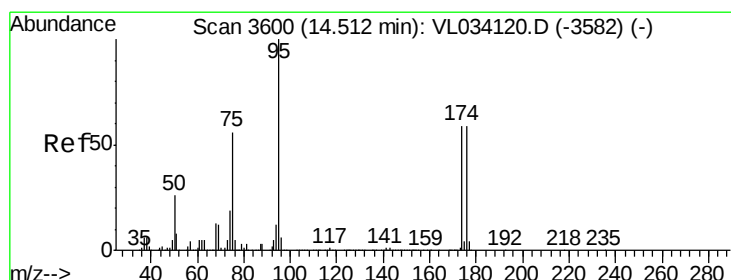
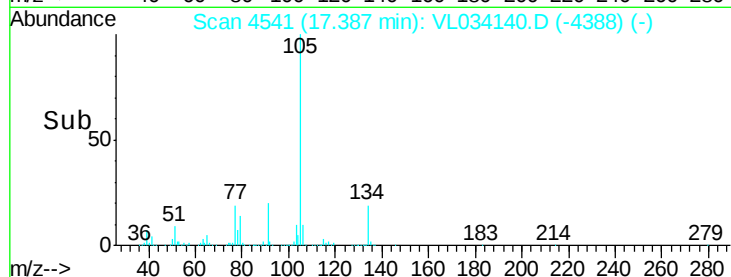
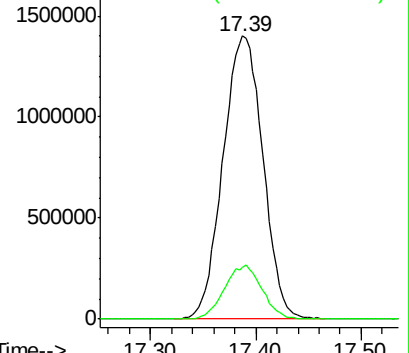
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.176 ppbv

RT: 14.51 min Scan# 3645

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

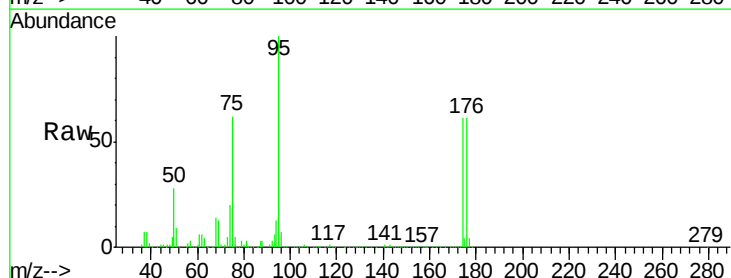
Tgt Ion: 95 Resp: 1567752

Ion Ratio Lower Upper

95 100

174 60.6 48.1 72.1

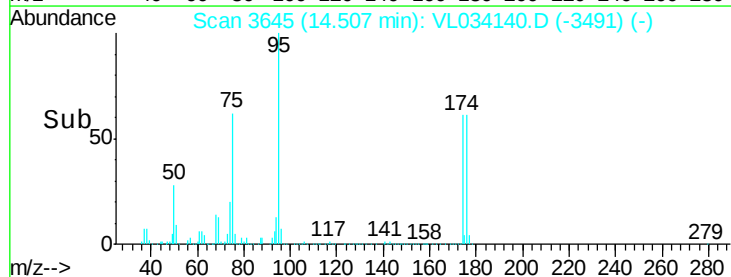
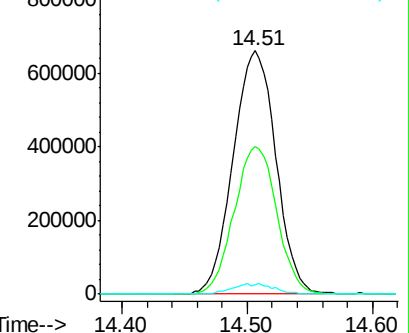
175 4.2 3.5 5.3

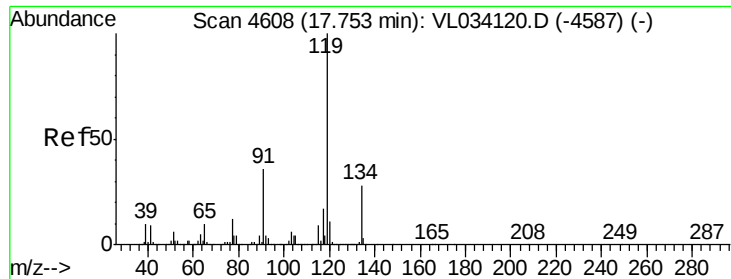


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





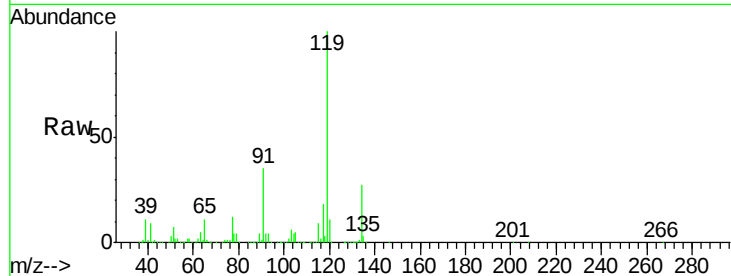
#69  
 p-Isopropyltoluene  
 Concen: 8.224 ppbv  
 RT: 17.74 min Scan# 4652  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

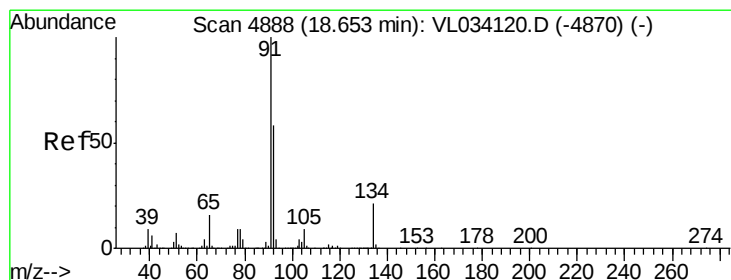
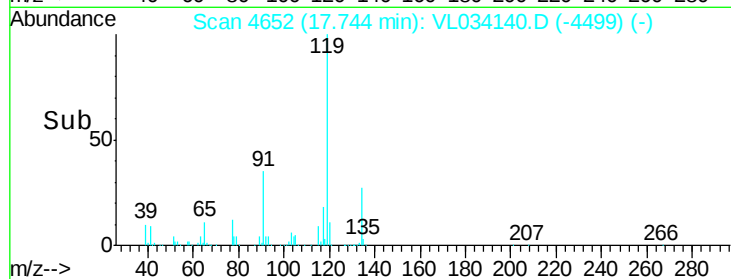
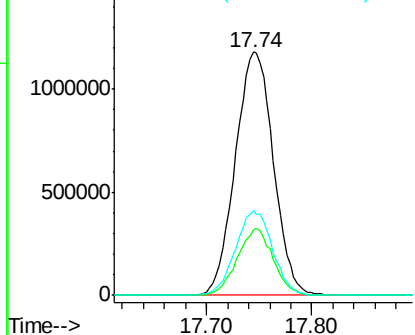
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 25.9  | 20.8  | 31.2  |
| 91      | 33.9  | 27.2  | 40.8  |

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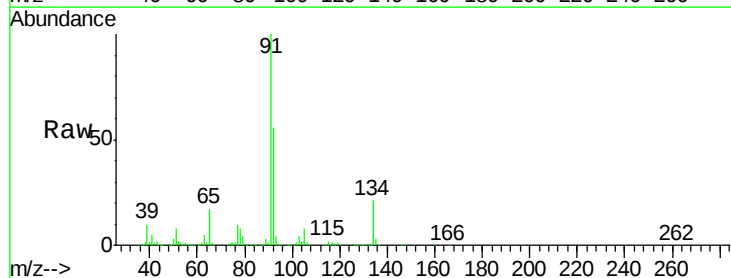


Abundance Ion 119.10 (118.80 to 119.80): V  
 Ion 134.20 (133.90 to 134.90): V  
 Ion 91.10 (90.80 to 91.80): V

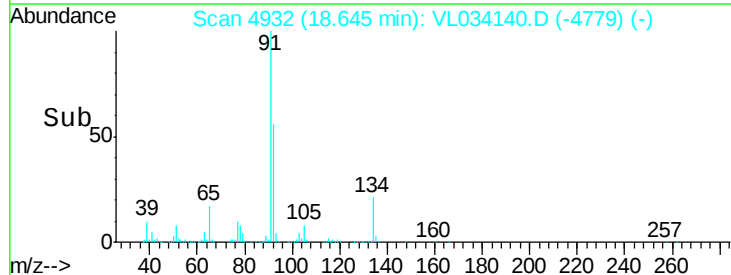
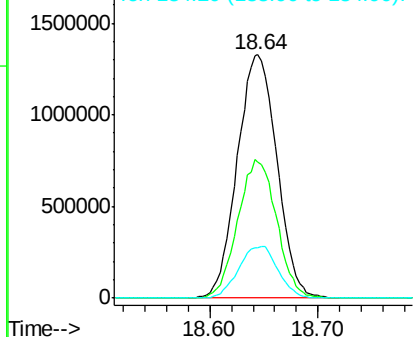


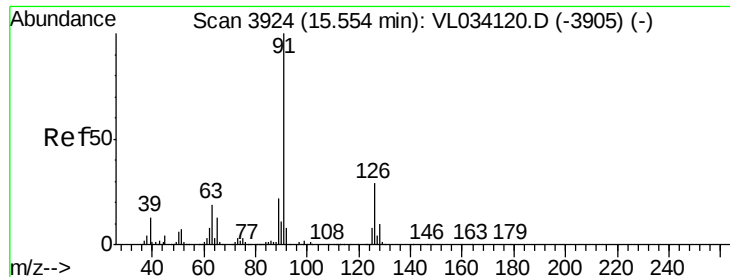
#70  
 n-Butylbenzene  
 Concen: 8.282 ppbv  
 RT: 18.64 min Scan# 4932  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 55.6  | 45.3  | 67.9  |
| 134     | 21.3  | 17.4  | 26.0  |



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: 8.353 ppbv

RT: 15.55 min Scan# 3969

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion: 91 Resp: 2472047

Ion Ratio Lower Upper

91 100

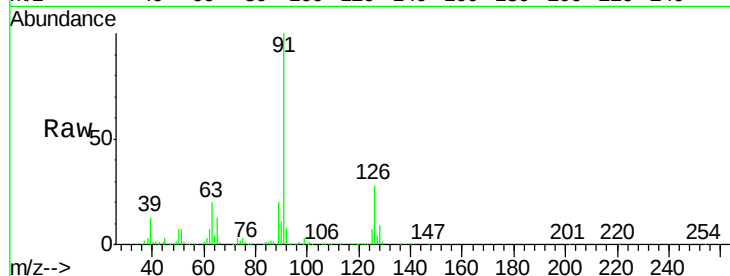
126 28.2 11.4 45.4

Manual Integrations

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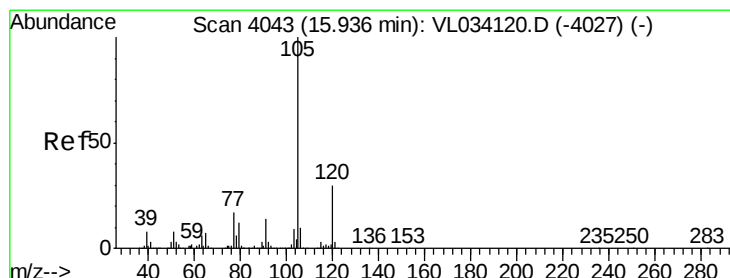
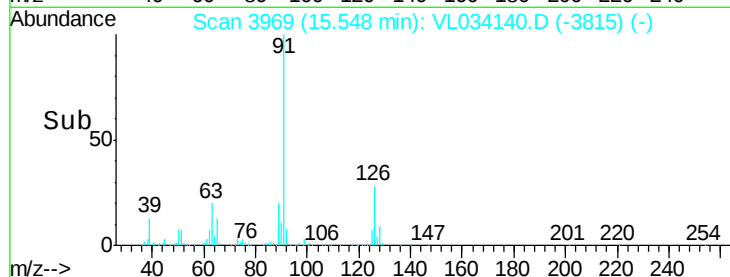
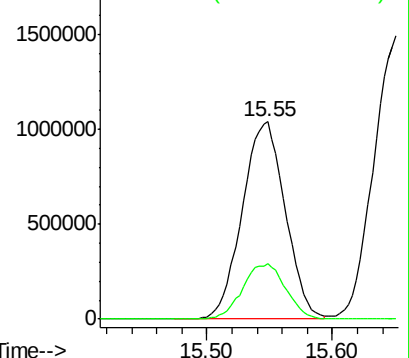
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 8.296 ppbv

RT: 15.93 min Scan# 4088

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Tgt Ion:105 Resp: 2606039

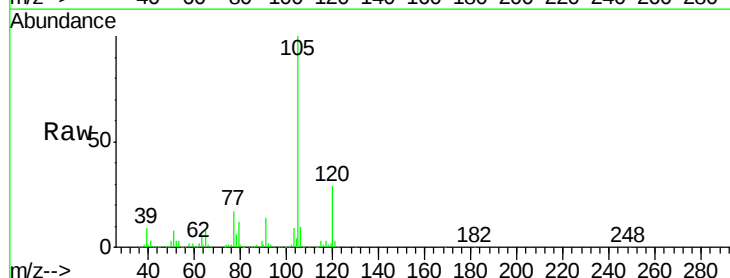
Ion Ratio Lower Upper

105 100

120 28.8 23.8 35.6

91 13.9 11.4 17.0

77 16.0 12.6 18.8

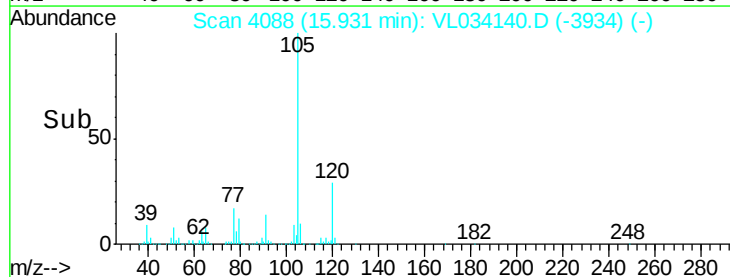
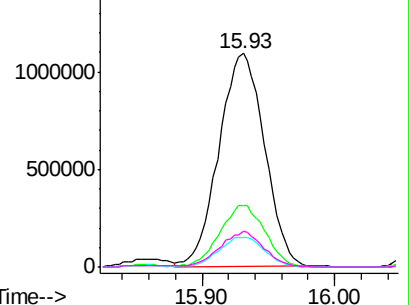


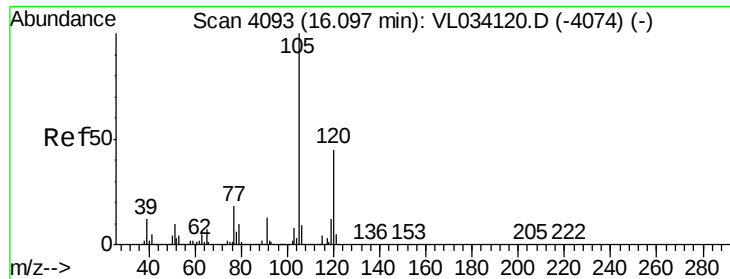
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





#73

1,3,5-Trimethylbenzene

Concen: 8.191 ppbv

RT: 16.09 min Scan# 4137

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Instrument :

MSVOA\_L

ClientSampleId :

VL0910ABS01

Tot Ion:105 Resp: 2500813

Ion Ratio Lower Upper

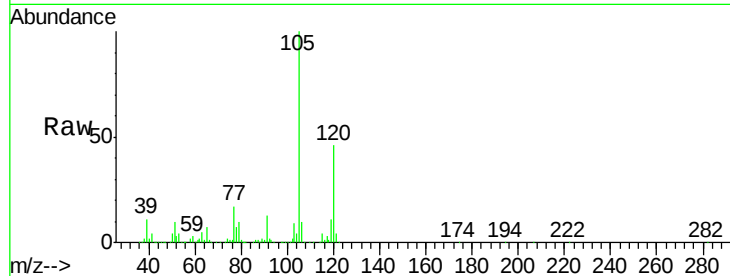
105 100

120 46.3 35.8 53.8

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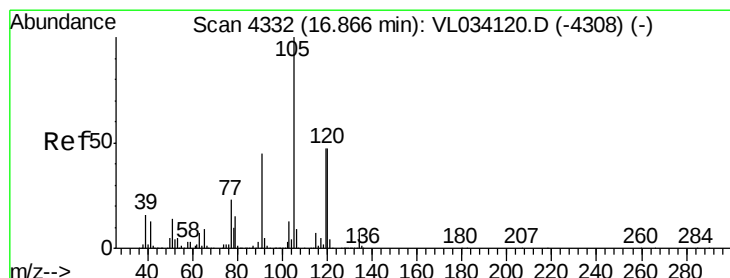
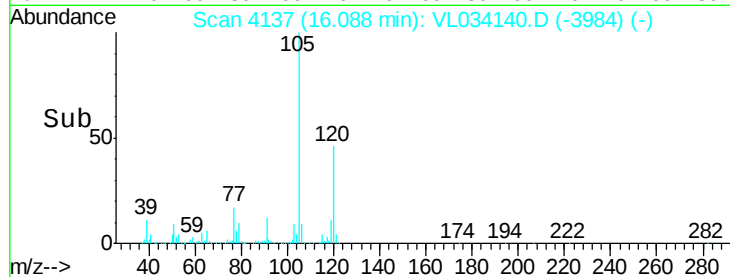
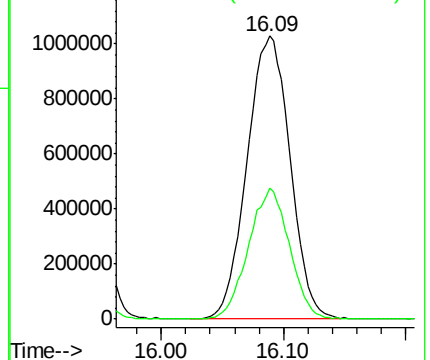
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 7.835 ppbv

RT: 16.86 min Scan# 4376

Delta R.T. -0.01 min

Lab File: VL034140.D

Acq: 10 Sep 2019 12:10

Tgt Ion:105 Resp: 2463297

Ion Ratio Lower Upper

105 100

120 46.0 37.7 56.5

91 48.8 36.2 54.2

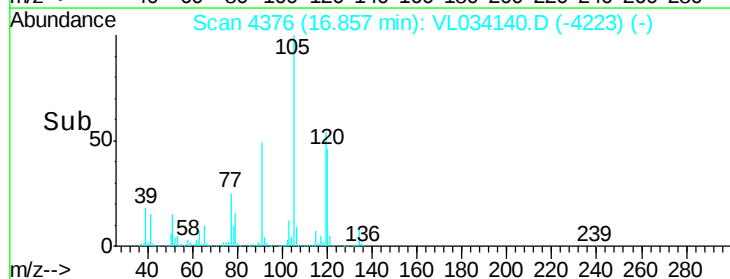
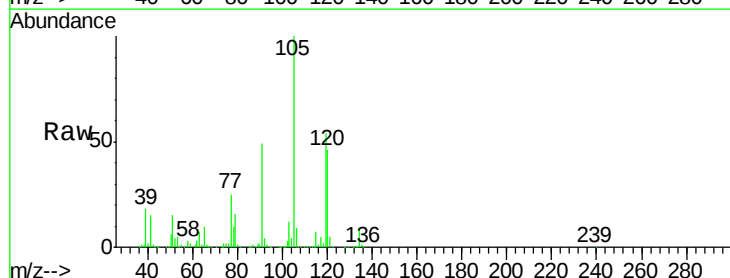
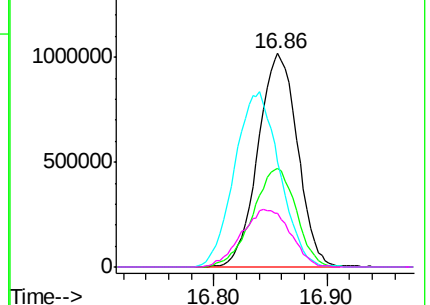
77 25.1 18.5 27.7

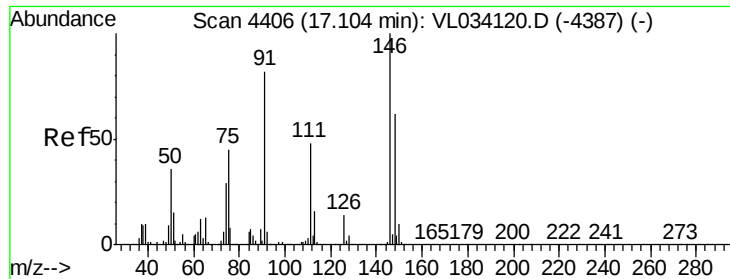
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





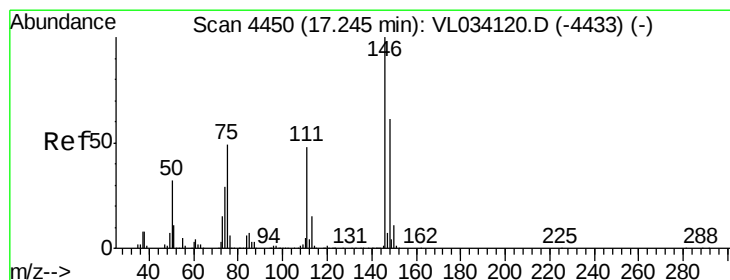
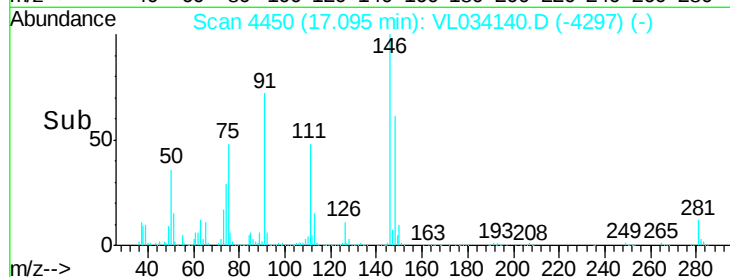
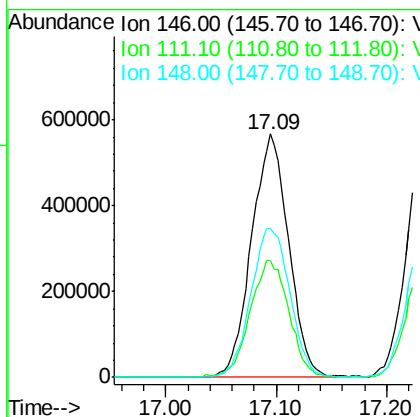
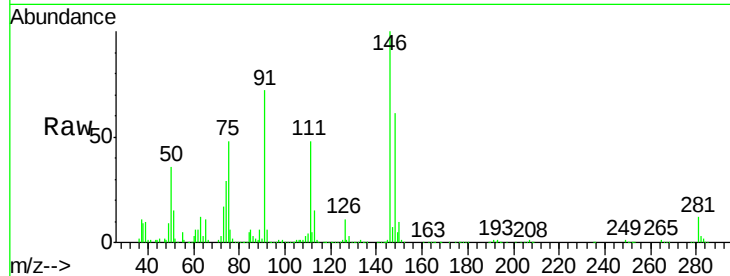
#75  
 1,3-Dichlorobenzene  
 Concen: 7.889 ppbv  
 RT: 17.09 min Scan# 4450  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 50.6  | 24.9  | 74.7  |
| 148     | 64.9  | 32.5  | 97.5  |

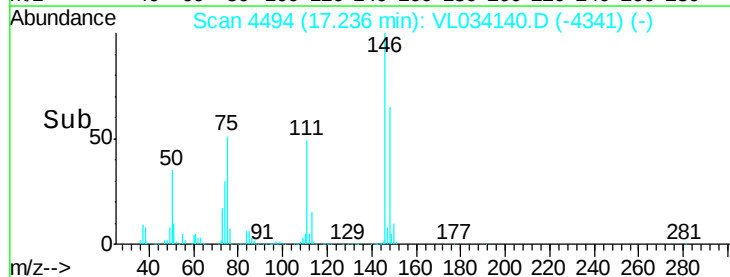
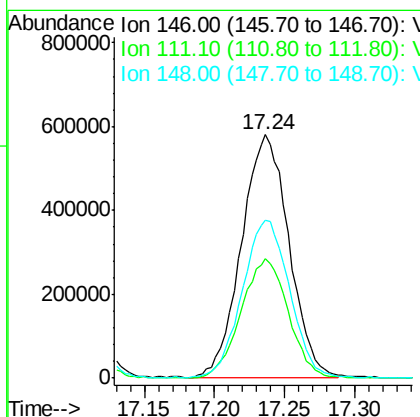
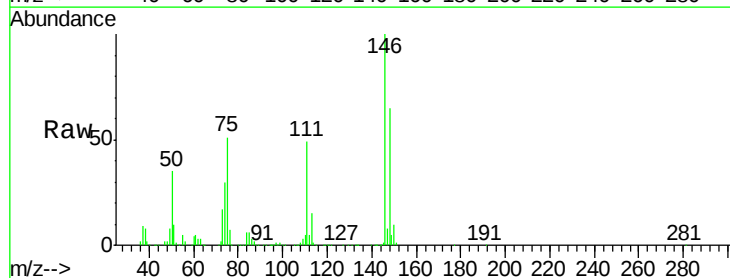
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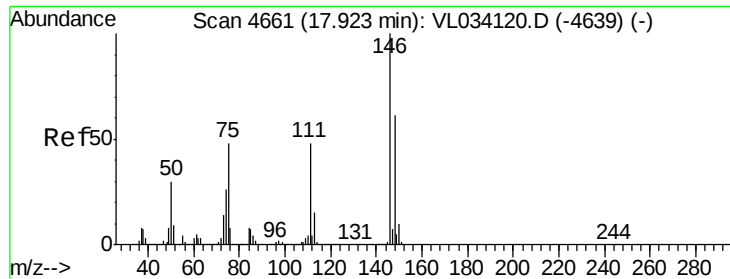
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#76  
 1,4-Dichlorobenzene  
 Concen: 7.771 ppbv  
 RT: 17.24 min Scan# 4494  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 49.2  | 24.3  | 72.8  |
| 148     | 65.7  | 32.6  | 98.0  |





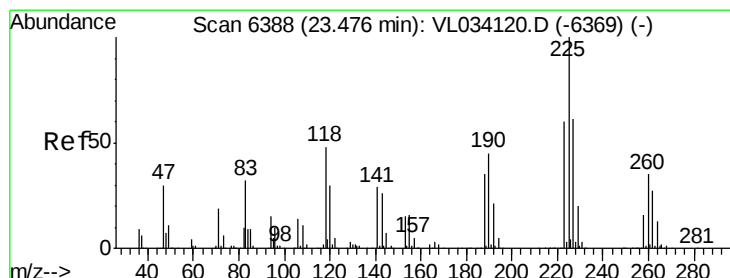
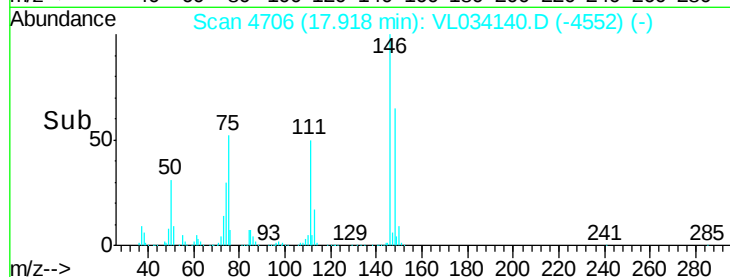
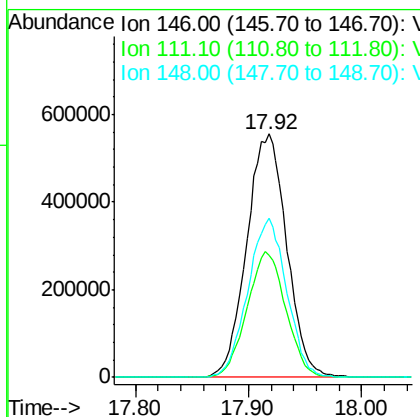
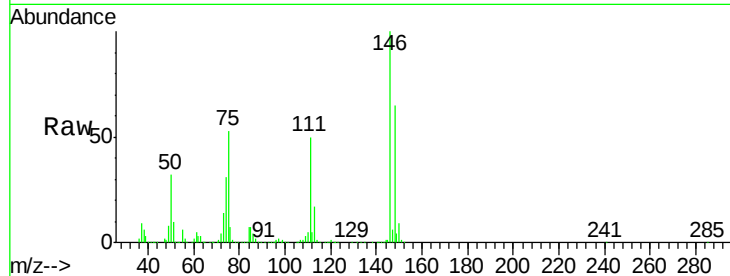
#77  
 1,2-Dichlorobenzene  
 Concen: 7.988 ppbv  
 RT: 17.92 min Scan# 4706  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 50.5  | 25.1  | 75.4  |
| 148     | 63.7  | 32.0  | 96.2  |

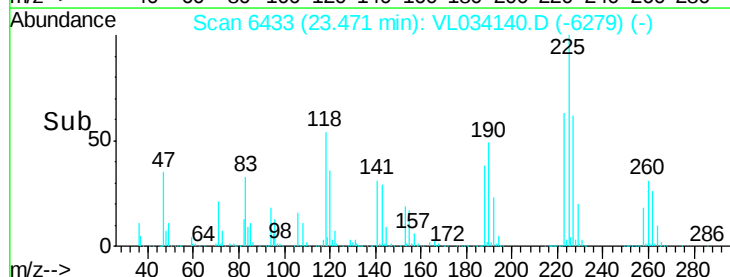
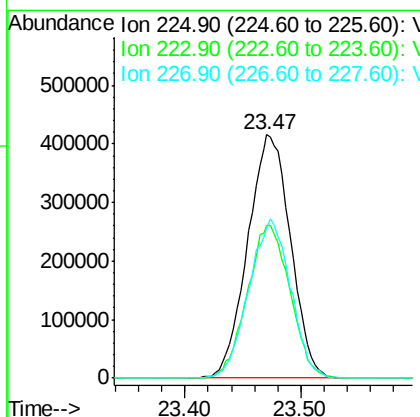
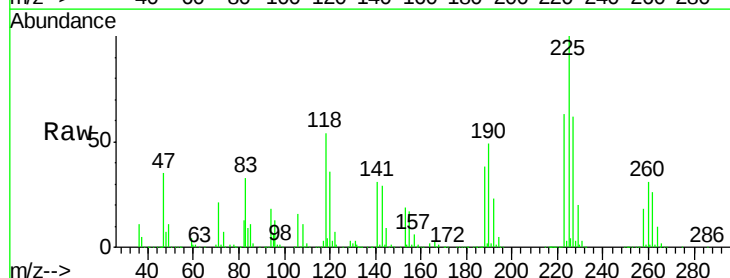
Manual Integrations  
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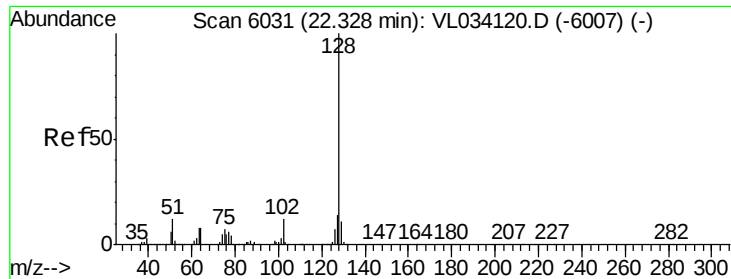
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#78  
 Hexachloro-1,3-Butadiene  
 Concen: 9.154 ppbv  
 RT: 23.47 min Scan# 6433  
 Delta R.T. -0.01 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 225     | 100   |       |       |
| 223     | 62.7  | 50.3  | 75.5  |
| 227     | 63.8  | 50.9  | 76.3  |





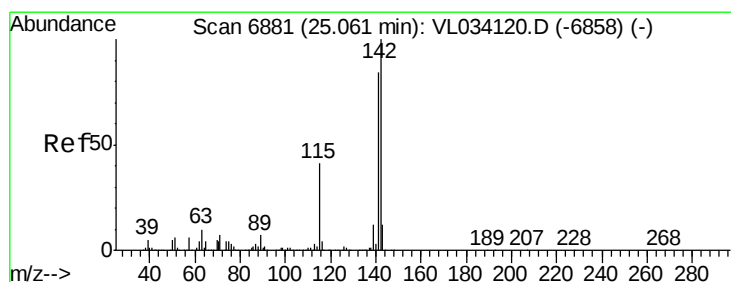
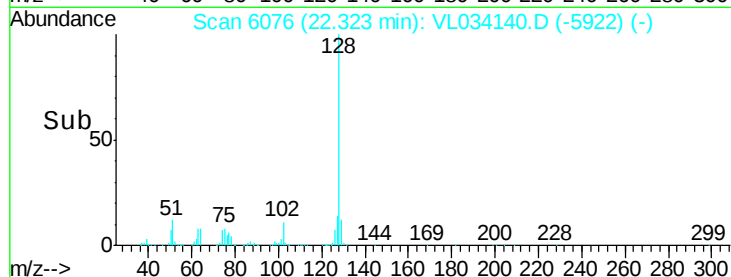
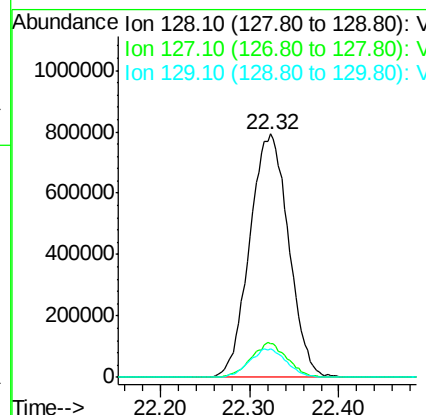
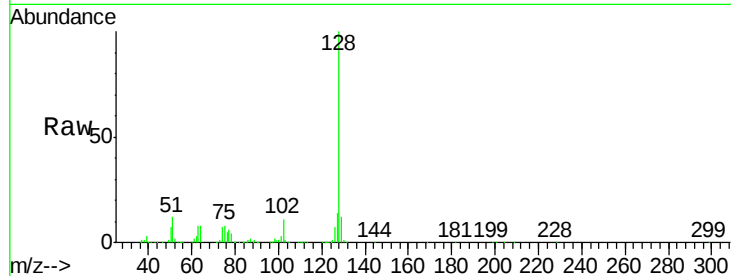
#79  
Naphthalene  
Concen: 8.461 ppbv  
RT: 22.32 min Scan# 6076  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 13.9  | 10.9  | 16.3  |
| 129     | 11.8  | 8.5   | 12.7  |

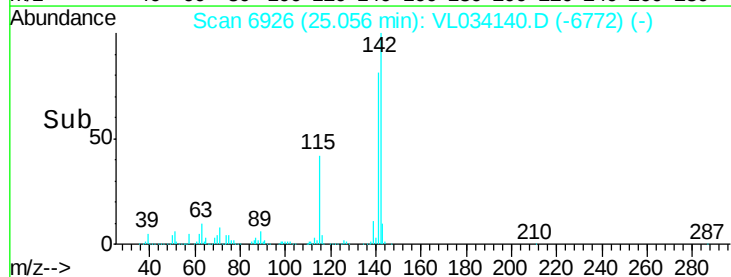
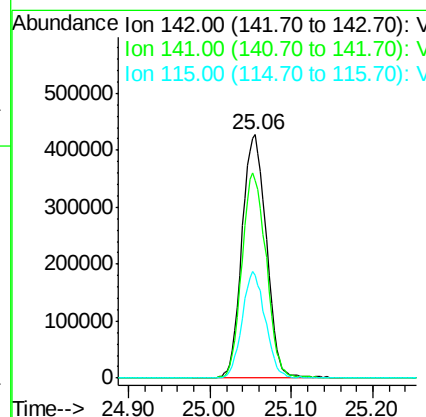
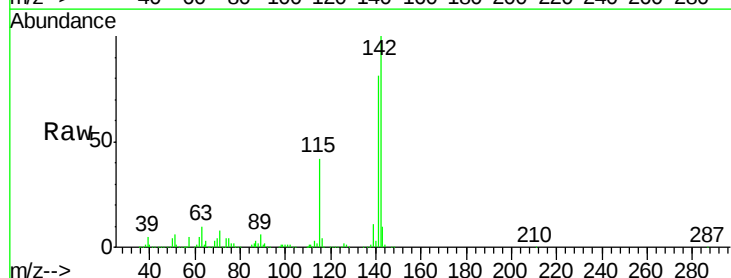
Manual Integrations  
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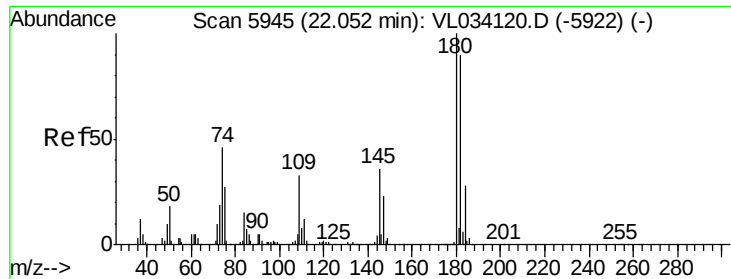
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#80  
Naphthalene, 2-methyl-  
Concen: 8.956 ppbv  
RT: 25.06 min Scan# 6926  
Delta R.T. -0.01 min  
Lab File: VL034140.D  
Acq: 10 Sep 2019 12:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 84.1  | 67.6  | 101.4 |
| 115     | 41.6  | 34.6  | 52.0  |





#81  
 1,2,4-Trichlorobenzene  
 Concen: 7.832 ppbv  
 RT: 22.05 min Scan# 5991  
 Delta R.T. -0.00 min  
 Lab File: VL034140.D  
 Acq: 10 Sep 2019 12:10

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0910ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.1  | 77.0  | 115.4 |
| 184     | 30.6  | 25.5  | 38.3  |

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