

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101719\  
 Data File : VL034318.D  
 Acq On : 17 Oct 2019 15:22  
 Operator : SY/AP  
 Sample : VL1017ABS01  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

Manual Integrations  
 APPROVED

MMDadoda  
 10/22/2019 2:54:36 PM

Quant Time: Oct 18 04:58:37 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101619AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Oct 18 04:58:37 2019  
 QLast Update : Thu Oct 17 05:12:37 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.70  | 49   | 1069257  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.22  | 114  | 2104851  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.16 | 117  | 2318469  | 10.00 | ppbv  | 0.00     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.50  | 95    | 1869887  | 9.52     | ppbv | 0.01   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 95.20% |

| Target Compounds               |      |     |         |        |      | Ovalue |
|--------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane     | 3.03 | 85  | 1324284 | 7.184  | ppbv | 100    |
| 3) Chlorodifluoromethane       | 2.97 | 51  | 1255517 | 10.018 | ppbv | 100    |
| 4) Chloromethane               | 3.12 | 50  | 748121  | 10.092 | ppbv | 96     |
| 5) Vinyl Chloride              | 3.24 | 62  | 696927  | 9.859  | ppbv | 97     |
| 6) Bromomethane                | 3.46 | 94  | 364133  | 10.520 | ppbv | 90     |
| 7) Chloroethane                | 3.55 | 64  | 253969  | 10.208 | ppbv | 98     |
| 8) Dichlorotetrafluoroethane   | 3.17 | 85  | 1551425 | 9.713  | ppbv | 100    |
| 9) Propene                     | 2.99 | 41  | 567799  | 10.220 | ppbv | 98     |
| 10) Heptane                    | 8.18 | 43  | 1540594 | 10.804 | ppbv | 98     |
| 11) Trichlorofluoromethane     | 3.95 | 101 | 1726099 | 9.863  | ppbv | 98     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.49 | 101 | 1167431 | 10.182 | ppbv | 99     |
| 13) Ethanol                    | 3.60 | 45  | 131336  | 10.558 | ppbv | 95     |
| 14) Bromoethene                | 3.74 | 108 | 479407  | 10.620 | ppbv | 98     |
| 15) Acetone                    | 3.85 | 43  | 1320632 | 8.635  | ppbv | 100    |
| 16) 1,3-Butadiene              | 3.31 | 39  | 648616  | 10.438 | ppbv | 99     |
| 17) tert-Butyl alcohol         | 4.30 | 59  | 1192438 | 12.216 | ppbv | 99     |
| 18) 1,1-Dichloroethene         | 4.29 | 96  | 513133  | 10.221 | ppbv | 94     |
| 19) Isopropyl Alcohol          | 3.97 | 45  | 1025527 | 12.020 | ppbv | 100    |
| 20) Methylene Chloride         | 4.35 | 84  | 461412  | 8.345  | ppbv | 96     |
| 21) Allyl Chloride             | 4.42 | 41  | 916477  | 10.839 | ppbv | 100    |
| 22) trans-1,2-Dichloroethene   | 4.90 | 96  | 531298  | 10.610 | ppbv | 98     |
| 23) Vinyl Acetate              | 5.09 | 43  | 2054565 | 10.757 | ppbv | 98     |
| 24) 1,1-Dichloroethane         | 5.03 | 63  | 1430002 | 10.088 | ppbv | 99     |
| 25) Ethyl Acetate              | 5.71 | 43  | 2569812 | 9.953  | ppbv | 99     |
| 26) Hexane                     | 5.72 | 57  | 1108895 | 10.076 | ppbv | 99     |
| 27) Carbon Disulfide           | 4.56 | 76  | 1350065 | 11.816 | ppbv | 98     |
| 28) Methyl tert-Butyl Ether    | 5.05 | 73  | 1771927 | 10.638 | ppbv | 99     |
| 29) Chloroform                 | 5.79 | 83  | 1748309 | 10.043 | ppbv | 96     |
| 30) Cyclohexane                | 7.18 | 84  | 865364  | 10.692 | ppbv | 98     |
| 31) cis-1,2-Dichloroethene     | 5.58 | 61  | 1181026 | 10.574 | ppbv | 97     |
| 32) 1,1,1-Trichloroethane      | 6.55 | 97  | 1727350 | 10.203 | ppbv | 99     |
| 34) 2-Butanone                 | 5.27 | 43  | 1726351 | 10.034 | ppbv | 99     |
| 35) Carbon Tetrachloride       | 7.06 | 117 | 1841360 | 10.044 | ppbv | 97     |
| 36) Benzene                    | 6.94 | 78  | 2081806 | 10.308 | ppbv | 100    |
| 37) 1,2-Dichloroethane         | 6.35 | 62  | 1522600 | 10.116 | ppbv | 100    |
| 38) Trichloroethene            | 7.89 | 130 | 798776  | 9.856  | ppbv | 97     |
| 39) 1,2-Dichloropropane        | 7.67 | 63  | 893491  | 10.275 | ppbv | 98     |
| 40) 1,4-Dioxane                | 7.89 | 88  | 339819  | 11.120 | ppbv | 98     |
| 41) Tetrahydrofuran            | 6.08 | 42  | 995518  | 10.426 | ppbv | 98     |
| 42) Bromodichloromethane       | 7.85 | 83  | 1921518 | 10.423 | ppbv | 98     |
| 43) Methyl Methacrylate        | 8.07 | 69  | 904804  | 10.833 | ppbv | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101719\  
 Data File : VL034318.D  
 Acq On : 17 Oct 2019 15:22  
 Operator : SY/AP  
 Sample : VL1017ABS01  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

Manual Integrations  
 APPROVED

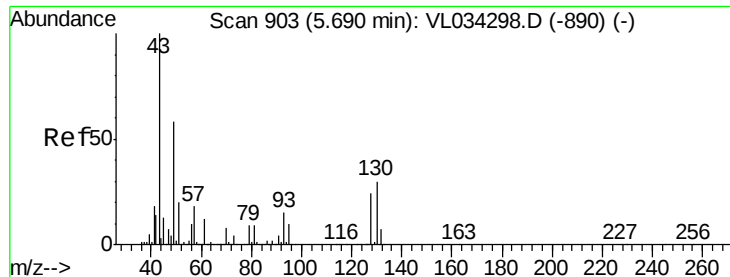
MMDadoda  
 10/22/2019 2:54:36 PM

Quant Time: Oct 18 04:58:37 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101619AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Oct 18 04:58:37 2019  
 QLast Update : Thu Oct 17 05:12:37 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|-------|------|----------|--------|-------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.92  | 57   | 3737783  | 10.000 | ppbv  | 99       |
| 45) t-1,3-Dichloropropene     | 9.34  | 75   | 1216871  | 11.958 | ppbv  | 98       |
| 46) cis-1,3-Dichloropropene   | 8.76  | 75   | 1356232  | 11.600 | ppbv  | 99       |
| 47) 1,1,2-Trichloroethane     | 9.54  | 97   | 885973   | 10.058 | ppbv  | 99       |
| 48) Dibromochloromethane      | 10.38 | 129  | 1603544  | 11.098 | ppbv  | 99       |
| 49) Bromoform                 | 13.13 | 173  | 1457926  | 11.387 | ppbv  | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.80  | 43   | 2589516  | 10.514 | ppbv  | 99       |
| 51) 2-Hexanone                | 10.20 | 43   | 2195323  | 10.873 | ppbv  | 100      |
| 52) Tetrachloroethene         | 11.30 | 164  | 778468   | 9.834  | ppbv  | 93       |
| 53) Toluene                   | 9.87  | 91   | 2406644  | 10.798 | ppbv  | 100      |
| 54) 1,2-Dibromoethane         | 10.68 | 107  | 1345612  | 10.307 | ppbv  | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 12.20 | 131  | 1046299  | 9.793  | ppbv  | 99       |
| 57) Chlorobenzene             | 12.22 | 112  | 1832553  | 9.475  | ppbv  | 99       |
| 58) Ethyl Benzene             | 12.79 | 91   | 3321499  | 10.248 | ppbv  | 99       |
| 59) m/p-Xylene                | 13.07 | 91   | 5539360m | 19.727 | ppbv  |          |
| 60) o-Xylene                  | 13.77 | 91   | 2757552  | 9.862  | ppbv  | 100      |
| 61) Styrene                   | 13.61 | 104  | 2082178  | 10.577 | ppbv  | 100      |
| 62) Isopropylbenzene          | 14.75 | 105  | 3606821  | 9.771  | ppbv  | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.76 | 83   | 1996648  | 8.886  | ppbv  | 100      |
| 64) n-propylbenzene           | 15.65 | 120  | 968865   | 10.228 | ppbv  | 98       |
| 65) tert-Butylbenzene         | 16.83 | 119  | 3215202  | 9.828  | ppbv  | 99       |
| 66) Benzyl Chloride           | 17.08 | 91   | 1643031  | 12.716 | ppbv  | 100      |
| 67) sec-Butylbenzene          | 17.38 | 105  | 4506751  | 9.789  | ppbv  | 100      |
| 69) p-Isopropyltoluene        | 17.74 | 119  | 3753422  | 10.000 | ppbv  | 100      |
| 70) n-Butylbenzene            | 18.64 | 91   | 4043037  | 9.900  | ppbv  | 100      |
| 71) 2-Chlorotoluene           | 15.54 | 91   | 2890878  | 10.101 | ppbv  | 99       |
| 72) 4-Ethyltoluene            | 15.92 | 105  | 3210848  | 10.215 | ppbv  | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.08 | 105  | 3109897  | 9.986  | ppbv  | 95       |
| 74) 1,2,4-Trimethylbenzene    | 16.85 | 105  | 3185761  | 9.809  | ppbv  | 96       |
| 75) 1,3-Dichlorobenzene       | 17.09 | 146  | 1862504  | 9.552  | ppbv  | 100      |
| 76) 1,4-Dichlorobenzene       | 17.23 | 146  | 1884903  | 9.896  | ppbv  | 99       |
| 77) 1,2-Dichlorobenzene       | 17.91 | 146  | 1819756  | 9.519  | ppbv  | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.47 | 225  | 1404514  | 8.882  | ppbv  | 99       |
| 79) Naphthalene               | 22.32 | 128  | 2753822  | 11.608 | ppbv  | 98       |
| 80) Naphthalene, 2-methyl-    | 25.05 | 142  | 926556   | 13.511 | ppbv  | 98       |
| 81) 1,2,4-Trichlorobenzene    | 22.04 | 180  | 1669000  | 10.771 | ppbv  | 99       |

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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.70 min Scan# 905

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion: 49 Resp: 1069257

Ion Ratio Lower Upper

49 100

128 42.2 20.6 61.8

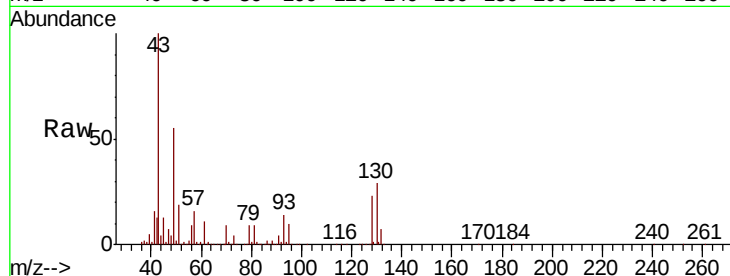
130 53.8 26.2 78.5

Manual Integrations

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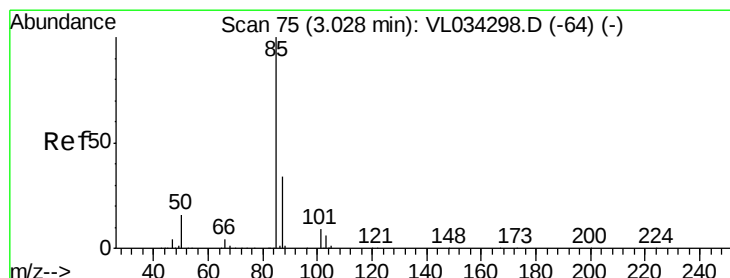
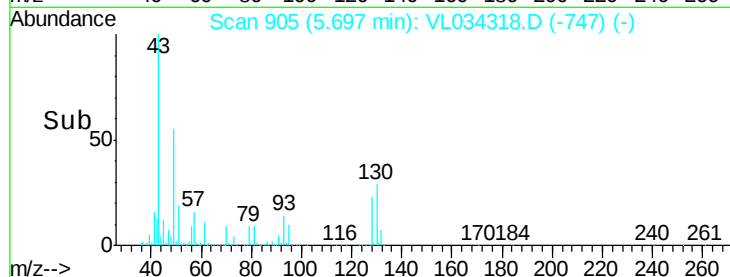
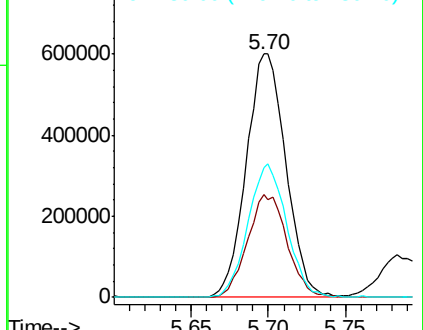
10/22/2019 2:54:36 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 7.184 ppbv

RT: 3.03 min Scan# 76

Delta R.T. 0.00 min

Lab File: VL034318.D

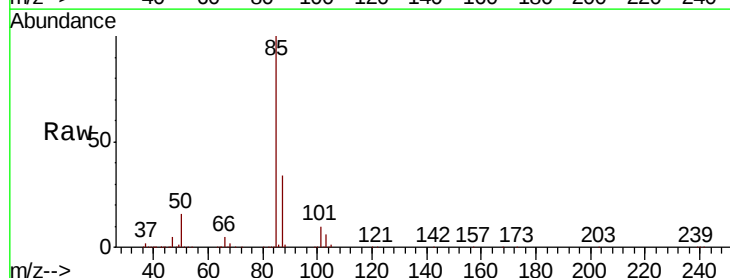
Acq: 17 Oct 2019 15:22

Tgt Ion: 85 Resp: 1324284

Ion Ratio Lower Upper

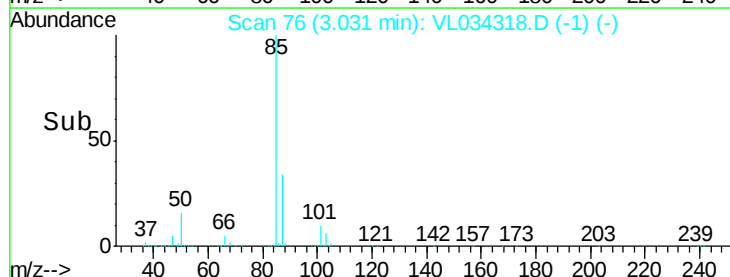
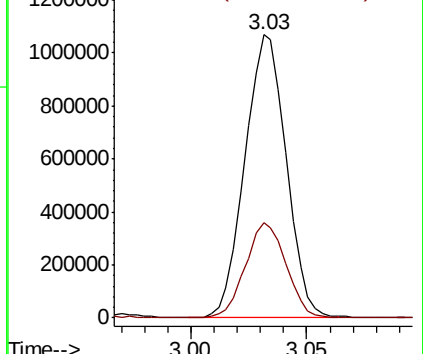
85 100

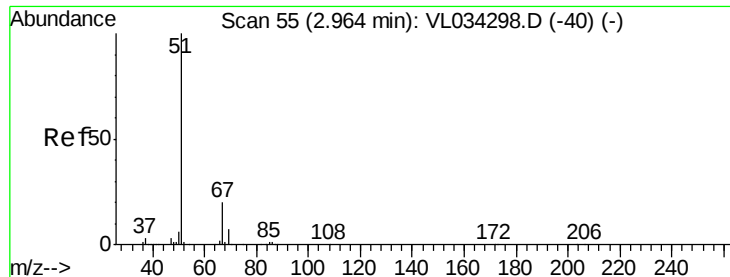
87 33.6 27.0 40.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 10.018 ppbv

RT: 2.97 min Scan# 57

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion: 51 Resp: 1255517

Ion Ratio Lower Upper

51 100

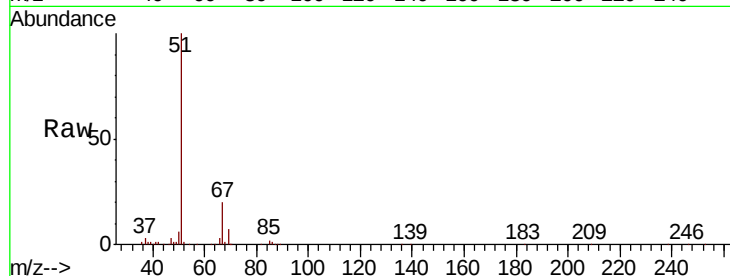
67 19.8 15.8 23.8

Manual Integrations

APPROVED

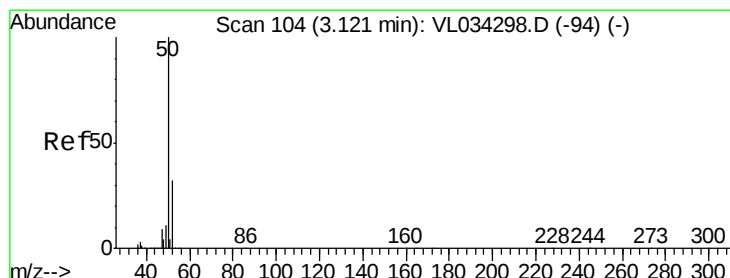
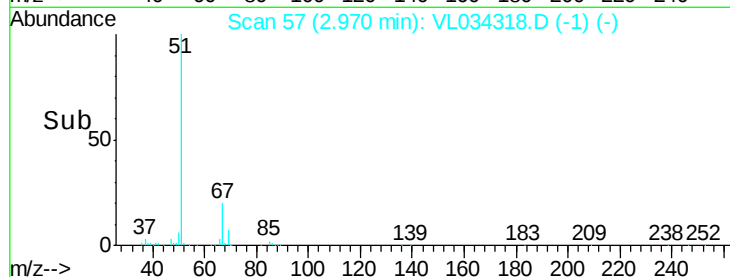
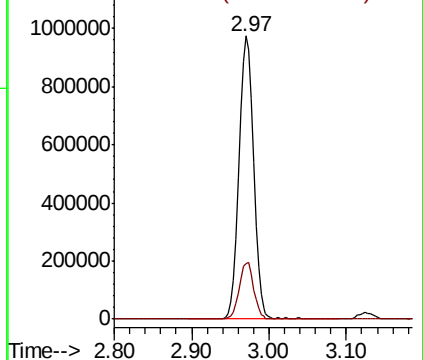
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10/22/2019 2:54:36 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 10.092 ppbv

RT: 3.12 min Scan# 105

Delta R.T. 0.00 min

Lab File: VL034318.D

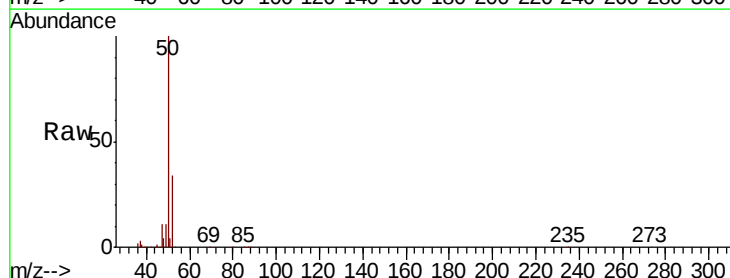
Acq: 17 Oct 2019 15:22

Tgt Ion: 50 Resp: 748121

Ion Ratio Lower Upper

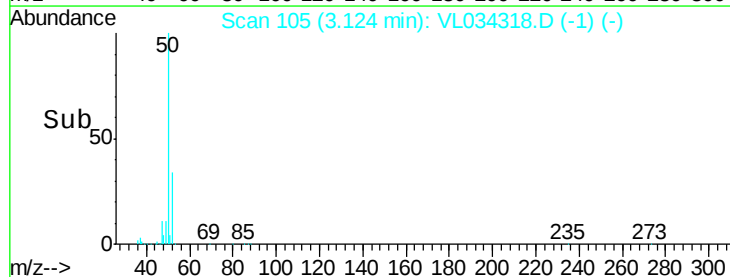
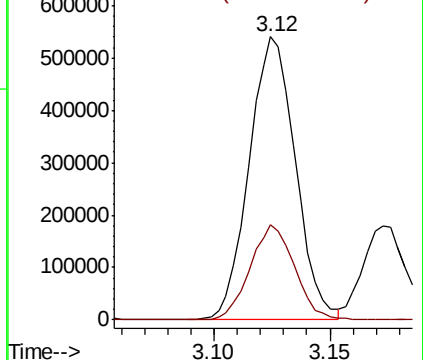
50 100

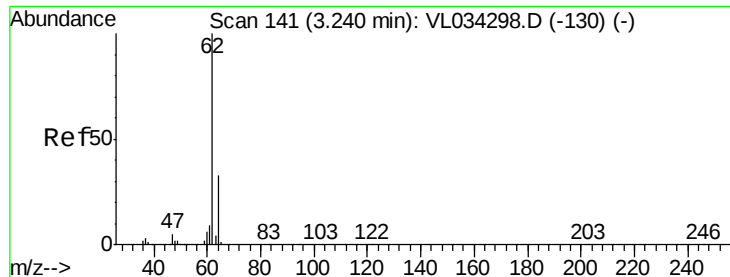
52 33.8 25.4 38.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 9.859 ppbv

RT: 3.24 min Scan# 142

Delta R.T. 0.00 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion: 62 Resp: 696927

Ion Ratio Lower Upper

62 100

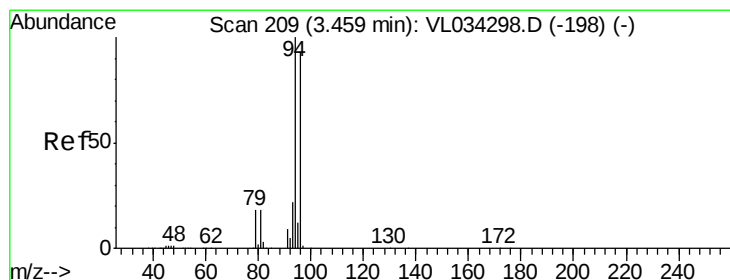
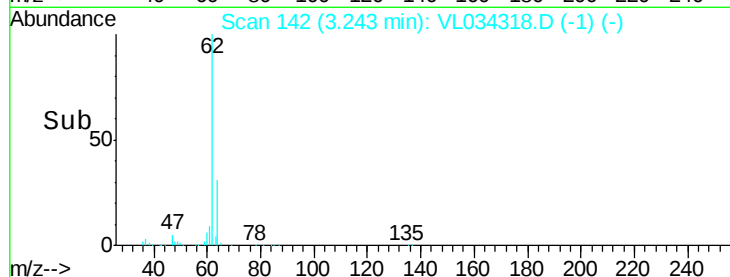
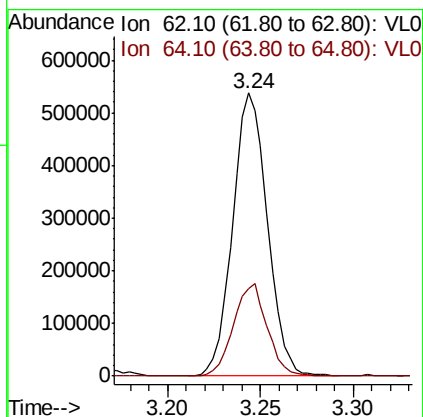
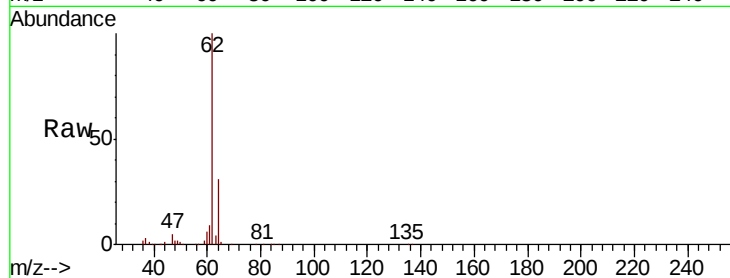
64 30.8 26.0 39.0

Manual Integrations

APPROVED

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#6

Bromomethane

Concen: 10.520 ppbv

RT: 3.46 min Scan# 210

Delta R.T. 0.00 min

Lab File: VL034318.D

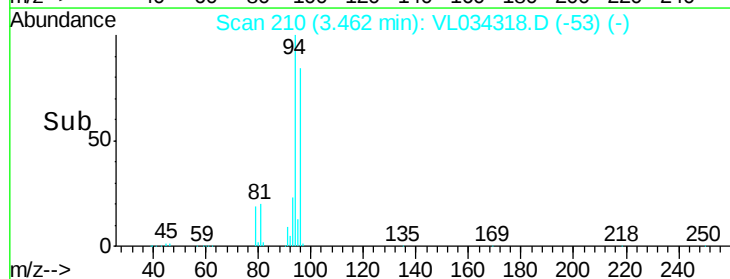
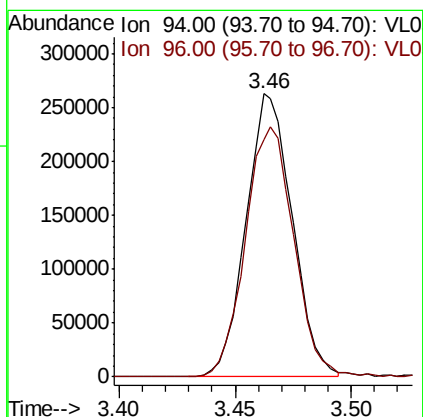
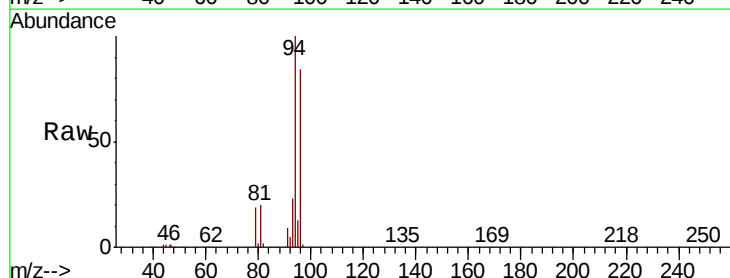
Acq: 17 Oct 2019 15:22

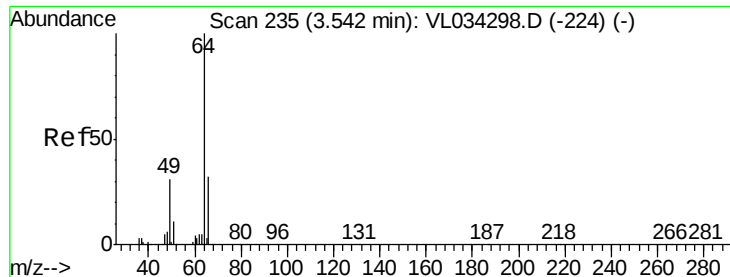
Tgt Ion: 94 Resp: 364133

Ion Ratio Lower Upper

94 100

96 84.0 74.6 112.0





#7

Chloroethane

Concen: 10.208 ppbv

RT: 3.55 min Scan# 237

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion: 64 Resp: 253969

Ion Ratio Lower Upper

64 100

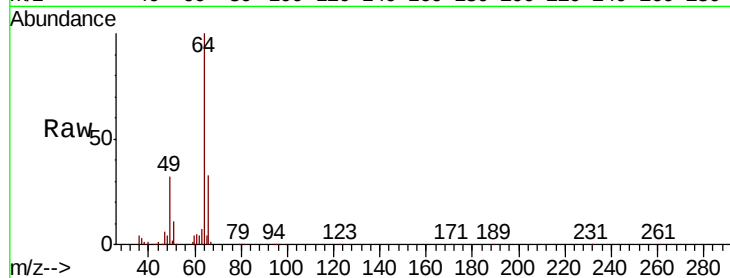
66 32.7 25.4 38.0

Manual Integrations

APPROVED

MMDadoda

10/22/2019 2:54:36 PM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

3.55

200000

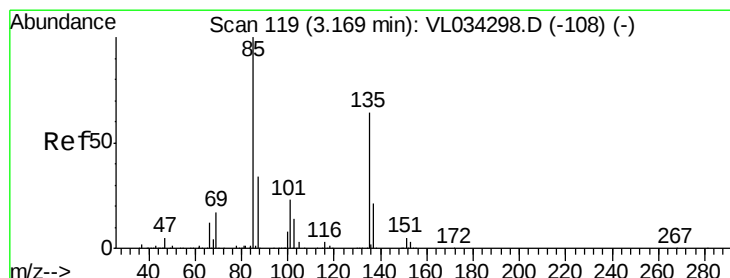
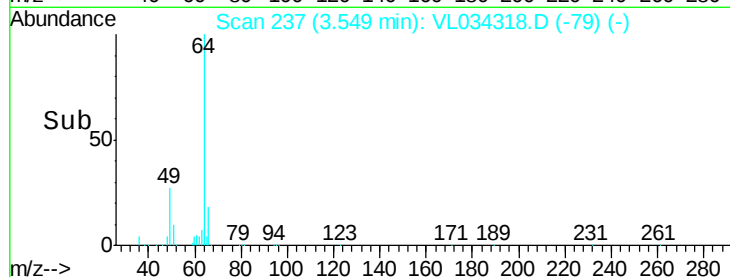
150000

100000

50000

0

Time-->



#8

Dichlorotetrafluoroethane

Concen: 9.713 ppbv

RT: 3.17 min Scan# 120

Delta R.T. 0.00 min

Lab File: VL034318.D

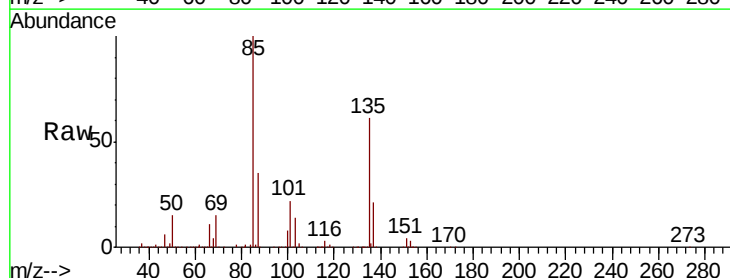
Acq: 17 Oct 2019 15:22

Tgt Ion: 85 Resp: 1551425

Ion Ratio Lower Upper

85 100

135 62.5 50.2 75.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V

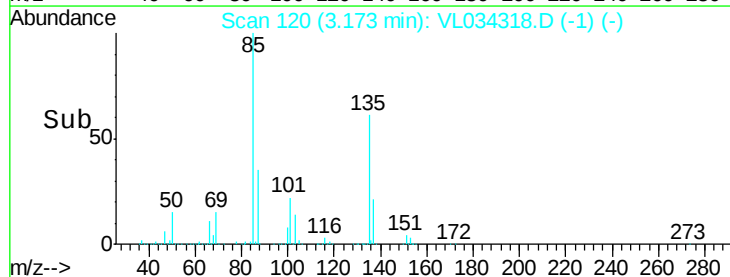
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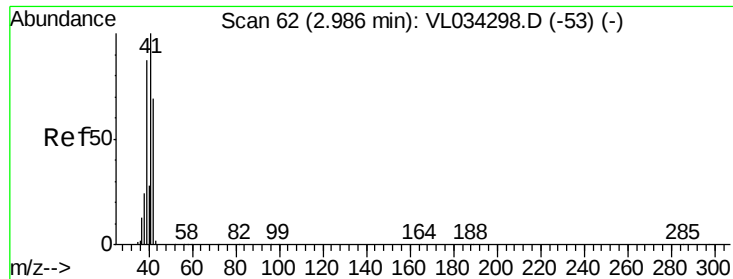
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500000

0

Time-->





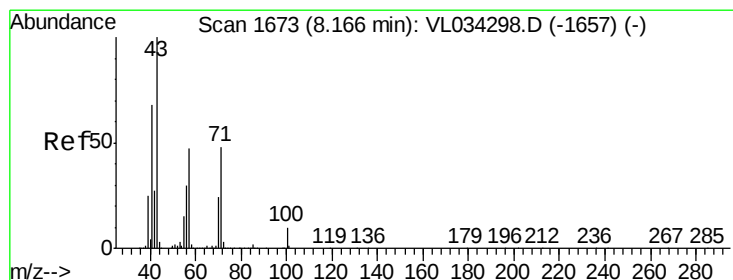
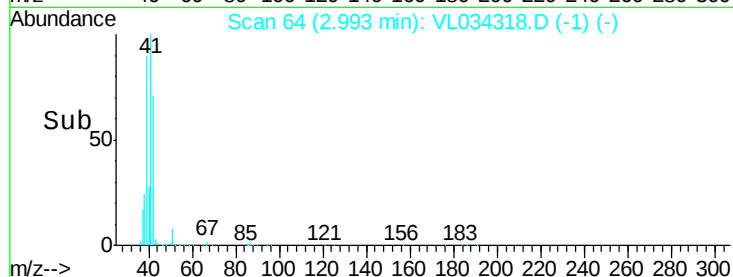
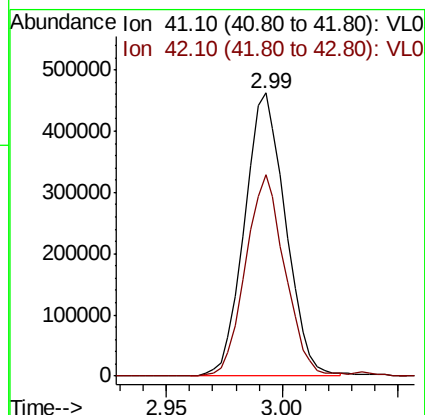
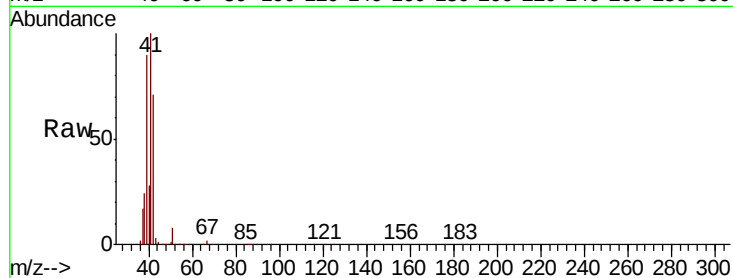
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 Propene  
 Concen: 10.220 ppbv  
 RT: 2.99 min Scan# 64  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

| Tot Ion   | 41    | Resp  | 567799 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 41        | 100   |       |        |
| 42        | 69.1  | 53.9  | 80.9   |

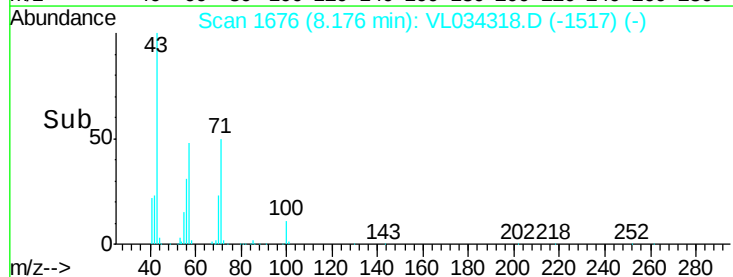
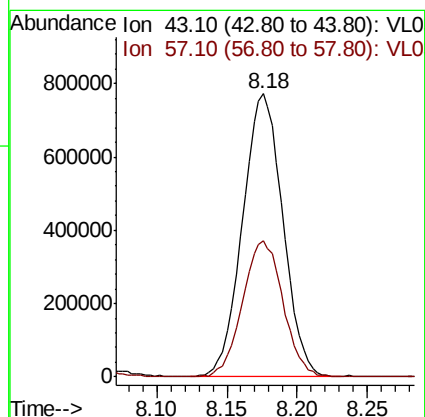
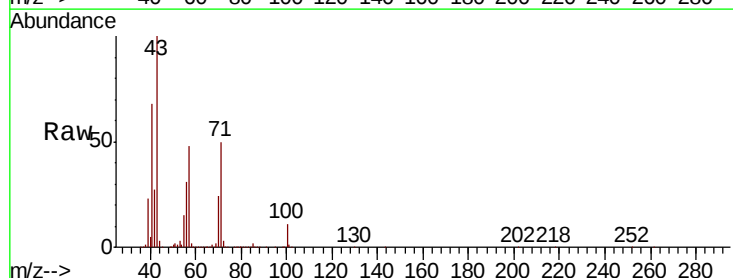
Manual Integrations  
 APPROVED

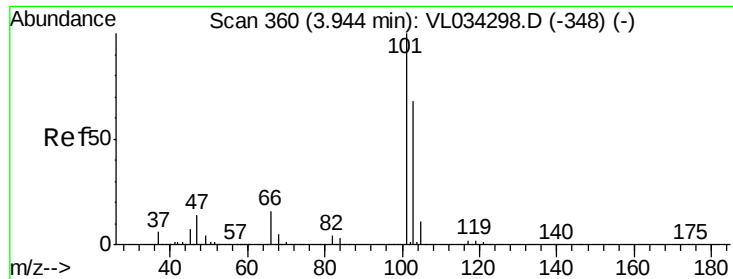
MMDadoda  
 10/22/2019 2:54:36 PM



#10  
 Heptane  
 Concen: 10.804 ppbv  
 RT: 8.18 min Scan# 1676  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

| Tgt Ion   | 43    | Resp  | 1540594 |
|-----------|-------|-------|---------|
| Ion Ratio | Lower | Upper |         |
| 43        | 100   |       |         |
| 57        | 48.3  | 39.5  | 59.3    |





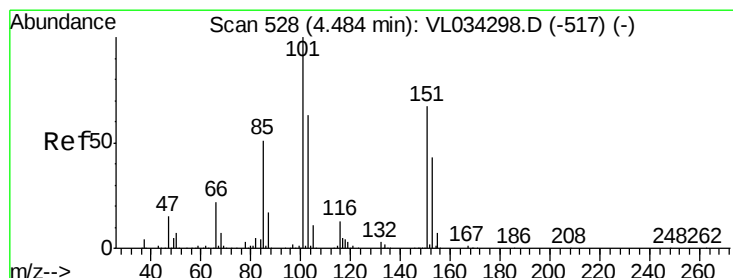
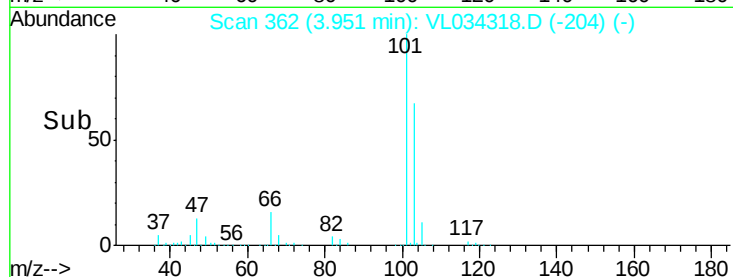
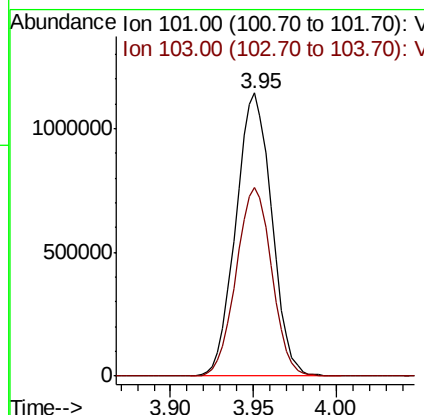
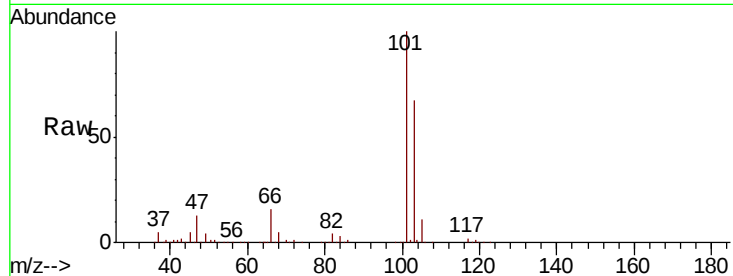
#11  
 Trichlorofluoromethane  
 Concen: 9.863 ppbv  
 RT: 3.95 min Scan# 362  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

Tot Ion:101 Resp: 1726099  
 Ion Ratio Lower Upper  
 101 100  
 103 66.8 54.5 81.7

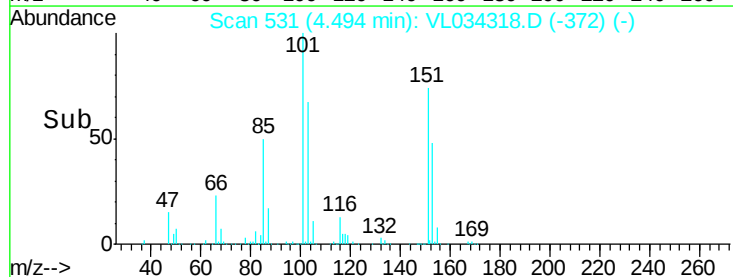
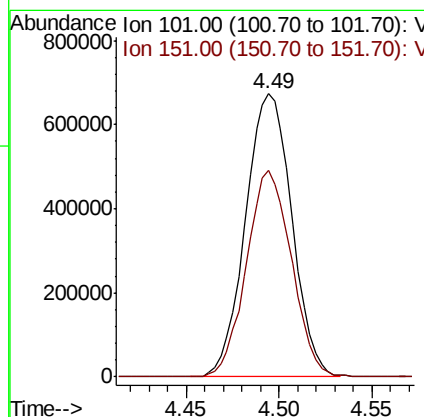
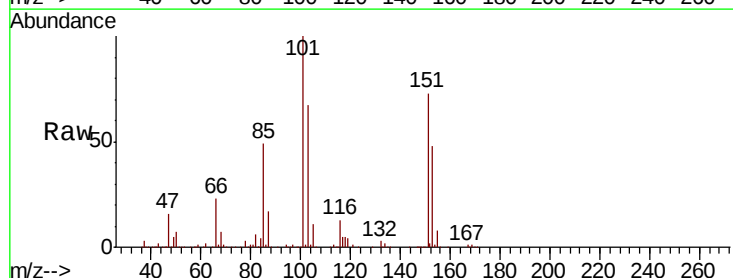
Manual Integrations  
 APPROVED

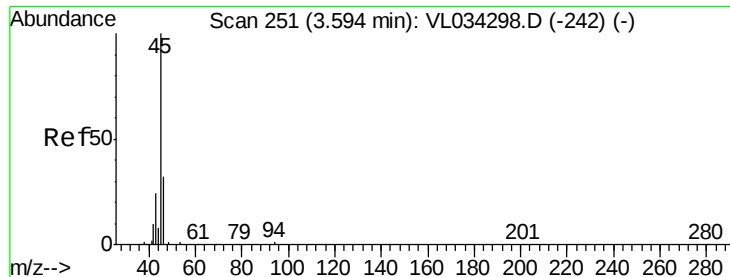
MMDadoda  
 10/22/2019 2:54:36 PM



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 10.182 ppbv  
 RT: 4.49 min Scan# 531  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Tgt Ion:101 Resp: 1167431  
 Ion Ratio Lower Upper  
 101 100  
 151 71.3 57.4 86.2





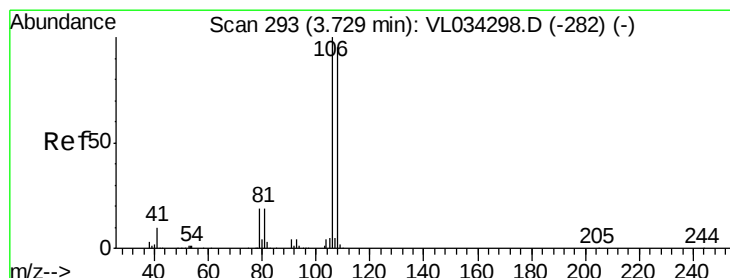
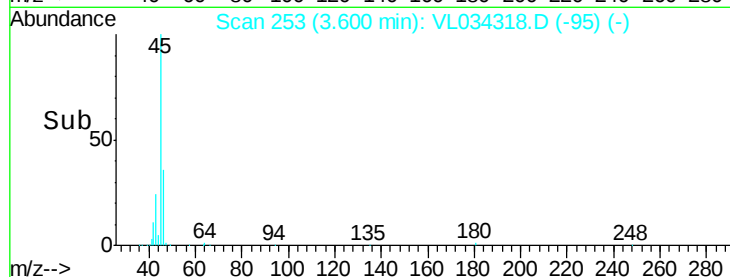
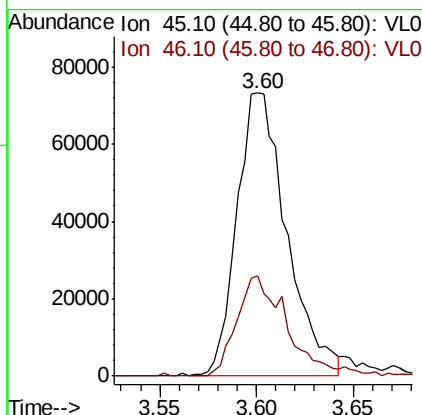
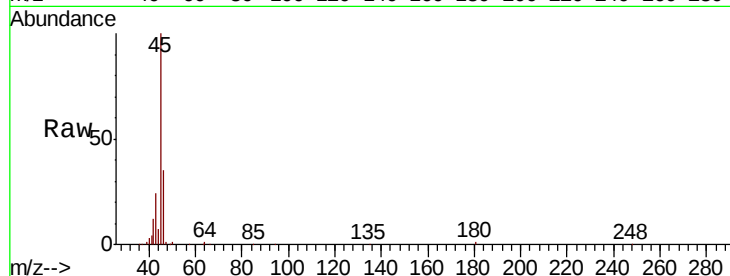
#13  
Ethanol  
Concen: 10.558 ppbv  
RT: 3.60 min Scan# 253  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

| Tot Ion | 45  | 46   | Ratio | Lower | Upper |
|---------|-----|------|-------|-------|-------|
| 131336  | 100 | 36.6 |       | 15.8  | 63.2  |

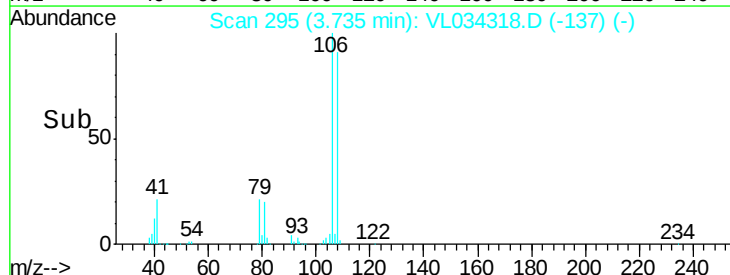
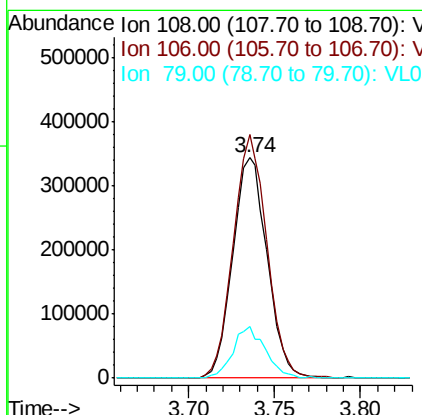
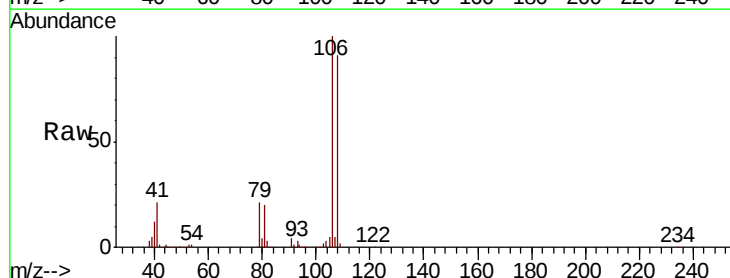
Manual Integrations  
APPROVED

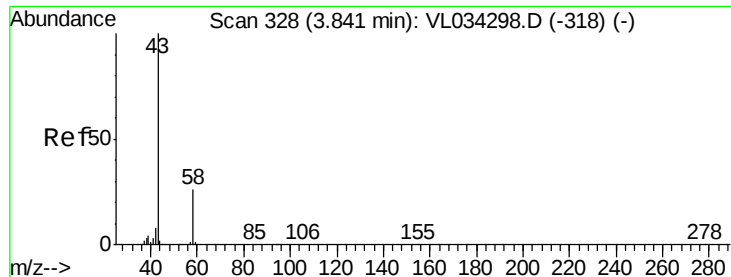
MMDadoda  
10/22/2019 2:54:36 PM



#14  
Bromoethene  
Concen: 10.620 ppbv  
RT: 3.74 min Scan# 295  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

| Tgt Ion | 108 | 106   | 79   | Ratio | Lower | Upper |
|---------|-----|-------|------|-------|-------|-------|
| 479407  | 100 | 107.8 | 22.2 |       | 84.8  | 127.2 |





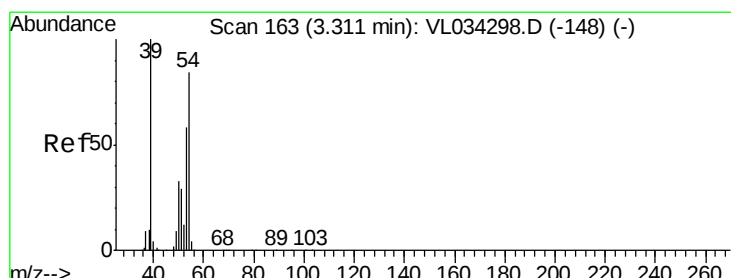
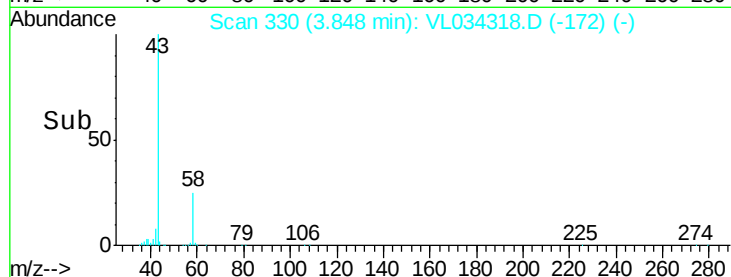
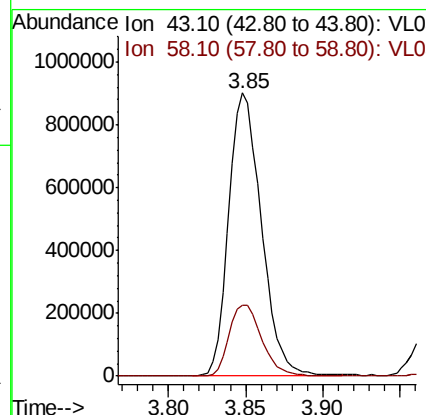
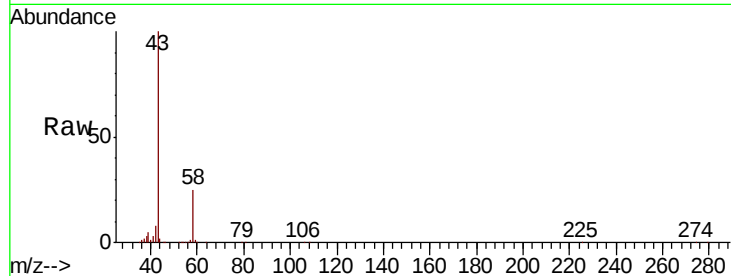
#15  
Acetone  
Concen: 8.635 ppbv  
RT: 3.85 min Scan# 330  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

| Tot Ion | 43  | 58   | Ratio | Lower | Upper |
|---------|-----|------|-------|-------|-------|
| 1320632 | 100 | 25.5 |       | 20.4  | 30.6  |

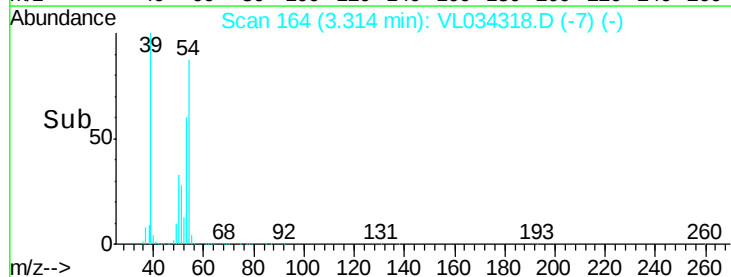
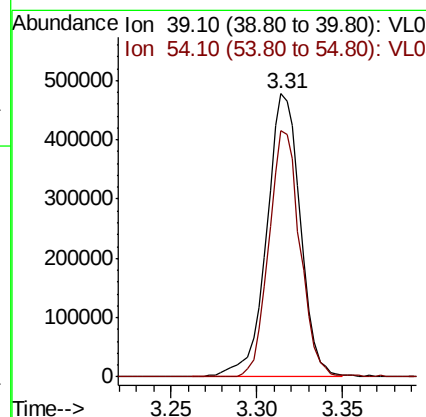
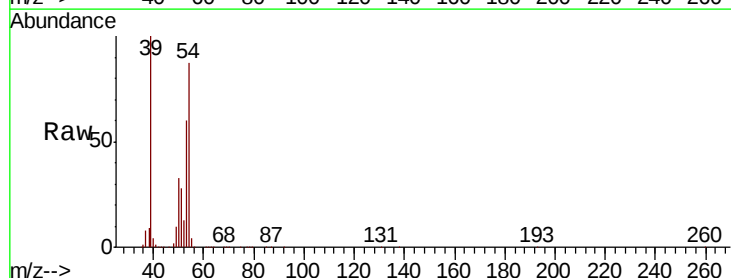
Manual Integrations  
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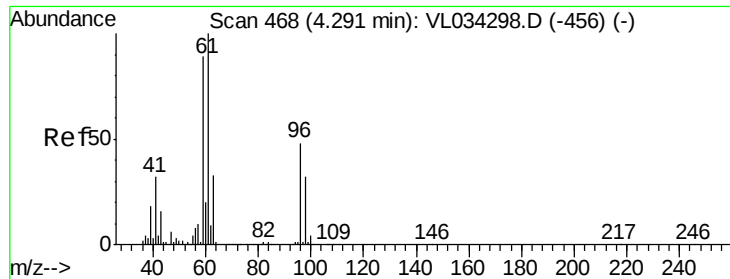
MMDadoda  
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#16  
1,3-Butadiene  
Concen: 10.438 ppbv  
RT: 3.31 min Scan# 164  
Delta R.T. 0.00 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

| Tgt Ion | 39  | 54   | Ratio | Lower | Upper |
|---------|-----|------|-------|-------|-------|
| 648616  | 100 | 81.1 |       | 63.9  | 95.9  |





#17

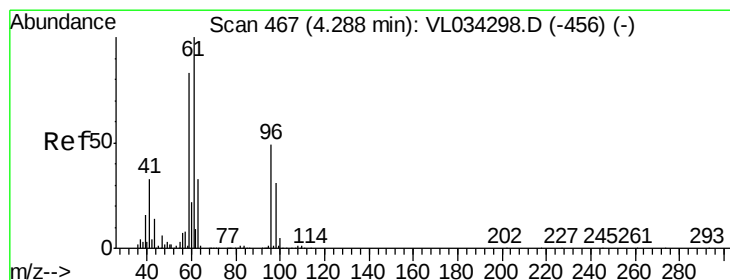
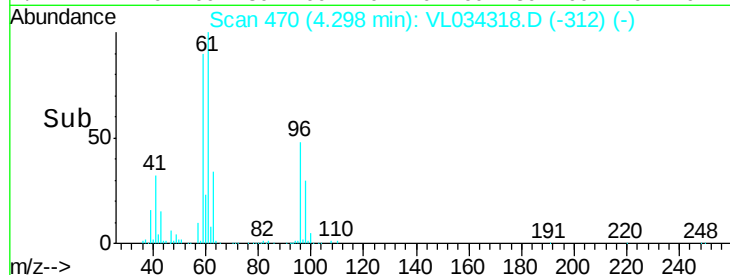
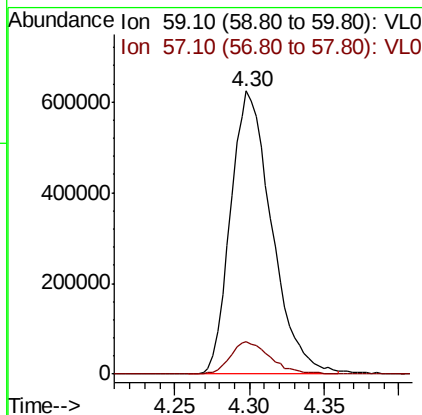
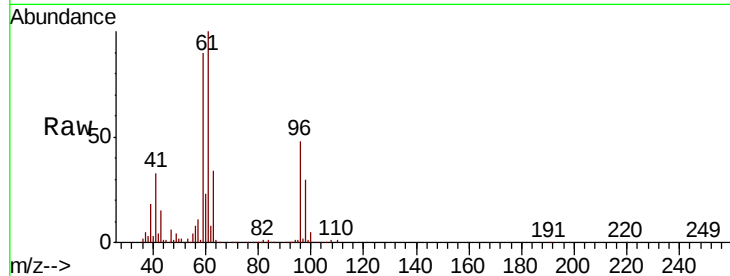
tert-Butyl alcohol  
Concen: 12.216 ppbv  
RT: 4.30 min Scan# 470  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

Tot Ion: 59 Resp: 1192438  
Ion Ratio Lower Upper  
59 100  
57 11.2 8.8 13.2

Manual Integrations  
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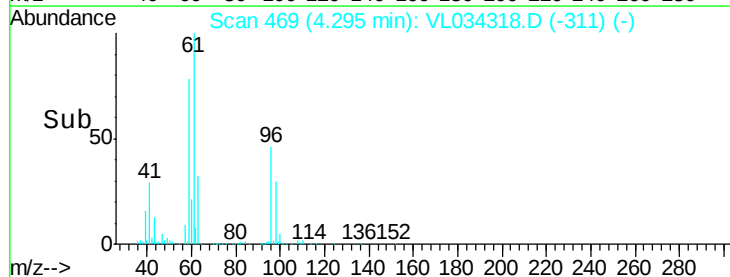
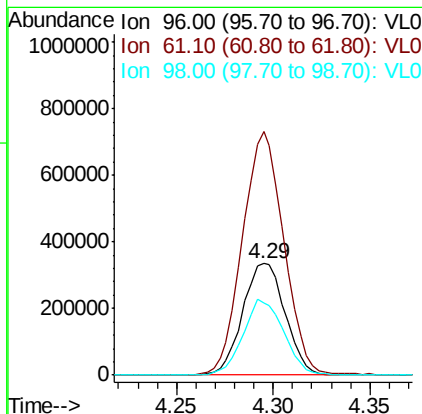
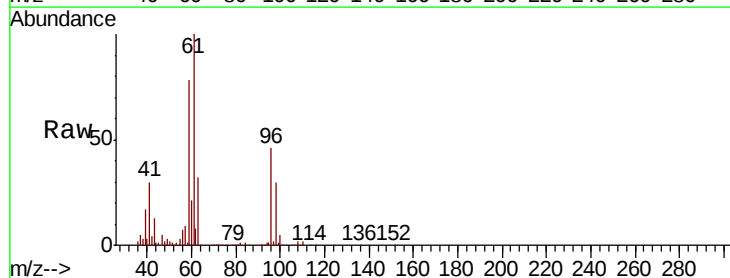
MMDadoda  
10/22/2019 2:54:36 PM

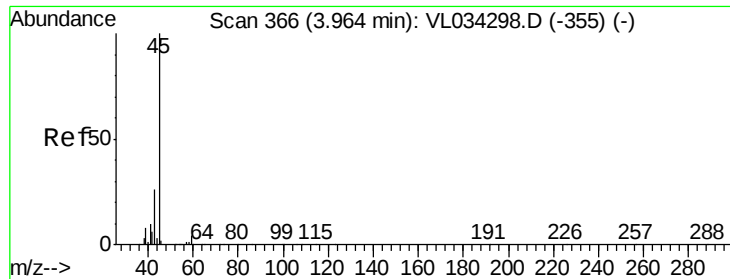


#18

1,1-Dichloroethene  
Concen: 10.221 ppbv  
RT: 4.29 min Scan# 469  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Tgt Ion: 96 Resp: 513133  
Ion Ratio Lower Upper  
96 100  
61 218.0 164.5 246.7  
98 64.5 51.7 77.5





#19

Isopropyl Alcohol

Concen: 12.020 ppbv

RT: 3.97 min Scan# 368

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion: 45 Resp: 1025527

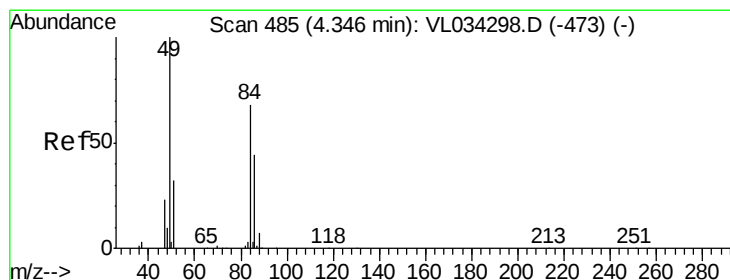
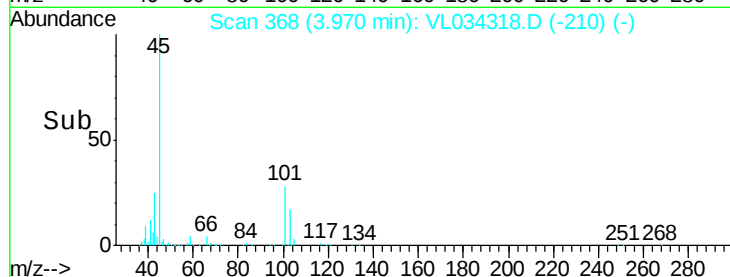
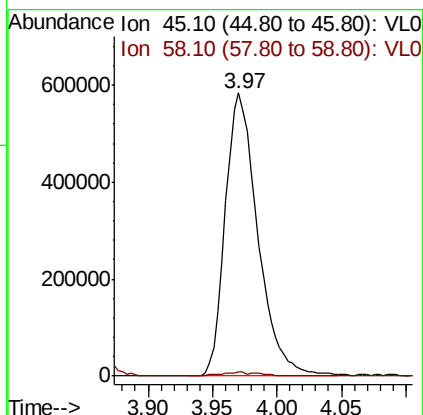
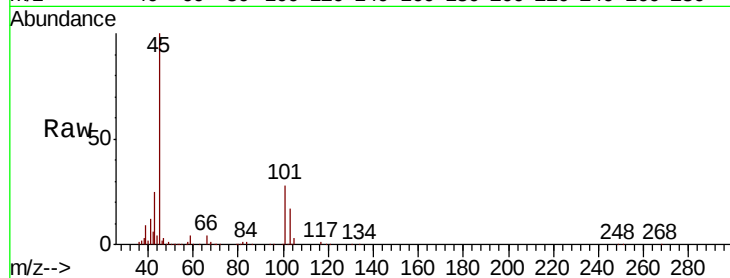
Ion Ratio Lower Upper

45 100

58 1.9 1.4 2.2

Manual Integrations  
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#20

Methylene Chloride

Concen: 8.345 ppbv

RT: 4.35 min Scan# 487

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Tgt Ion: 84 Resp: 461412

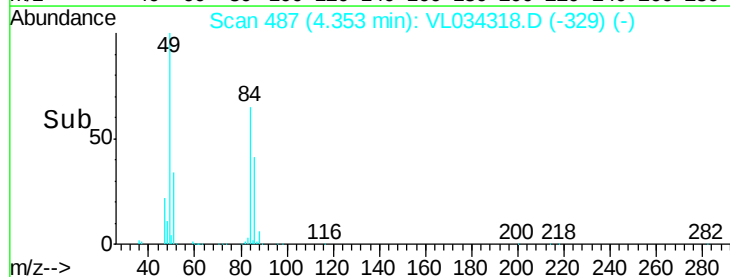
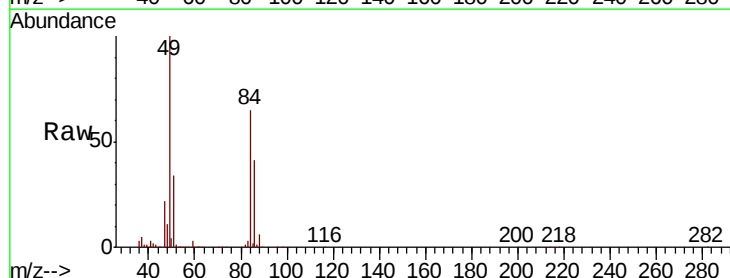
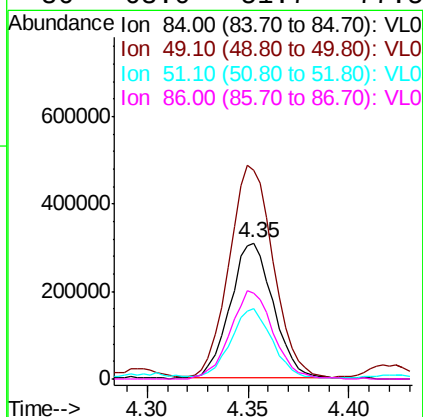
Ion Ratio Lower Upper

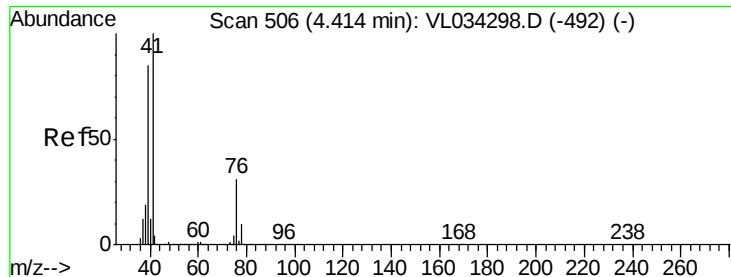
84 100

49 152.9 118.5 177.7

51 51.5 38.8 58.2

86 63.0 51.7 77.5





#21

Allvl Chloride

Concen: 10.839 ppbv

RT: 4.42 min Scan# 508

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

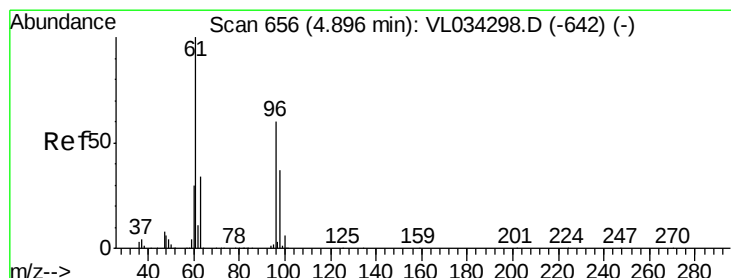
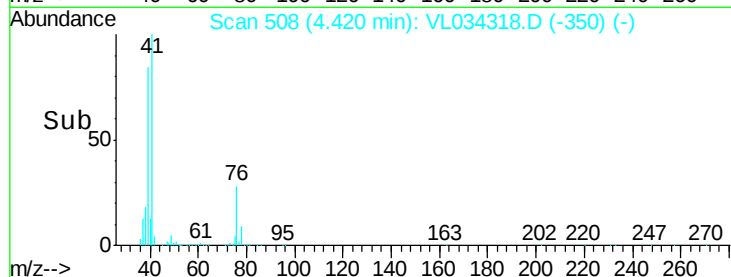
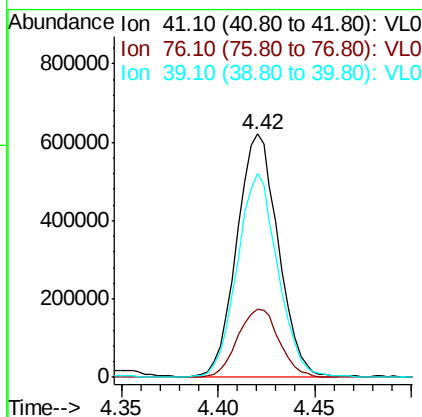
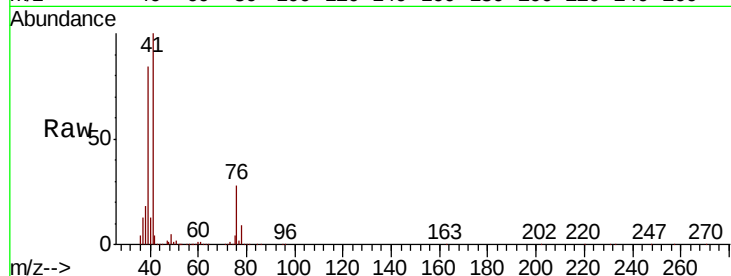
ClientSampleId :

VL1017ABS01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 41    | Resp: | 916477 |
| Ion Ratio | Lower | Upper |        |
| 41        | 100   |       |        |
| 76        | 28.5  | 22.8  | 34.2   |
| 39        | 82.8  | 66.0  | 99.0   |

Manual Integrations  
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#22

trans-1,2-Dichloroethene

Concen: 10.610 ppbv

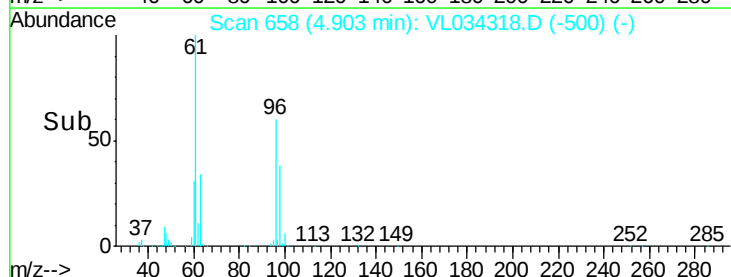
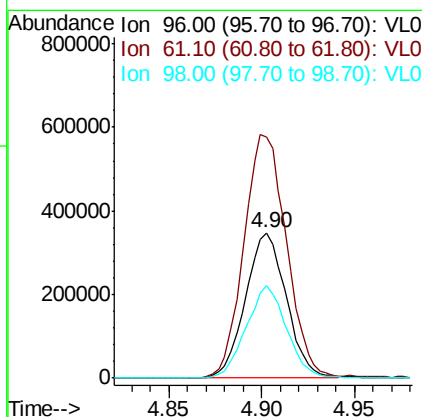
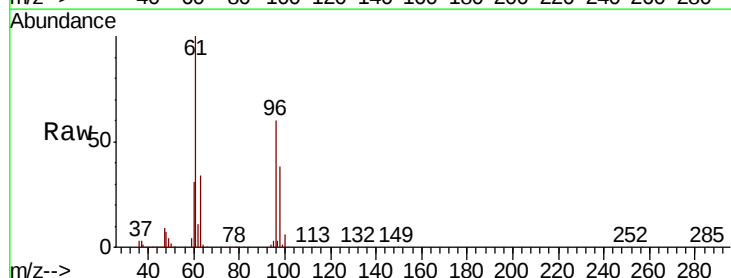
RT: 4.90 min Scan# 658

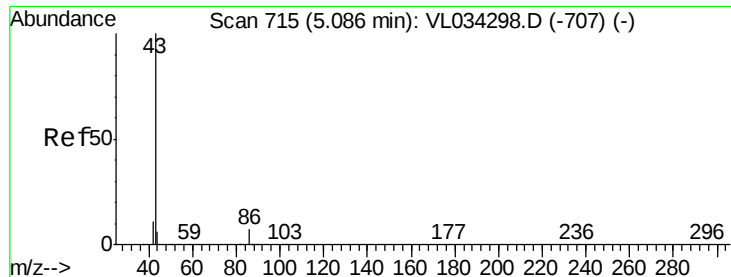
Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 96    | Resp: | 531298 |
| Ion Ratio | Lower | Upper |        |
| 96        | 100   |       |        |
| 61        | 165.4 | 133.8 | 200.6  |
| 98        | 63.5  | 49.4  | 74.0   |





#23

Vinyl Acetate

Concen: 10.757 ppbv

RT: 5.09 min Scan# 717

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion: 43 Resp: 2054565

Ion Ratio Lower Upper

43 100

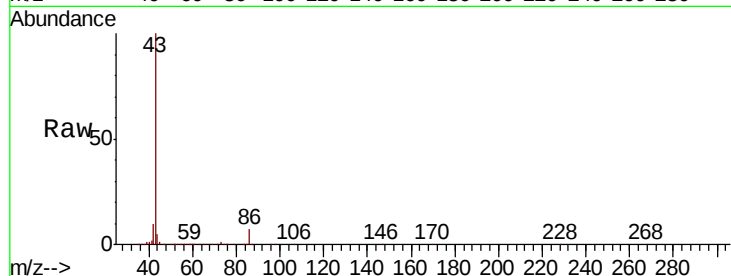
86 6.7 5.0 7.4

42 9.8 8.6 13.0

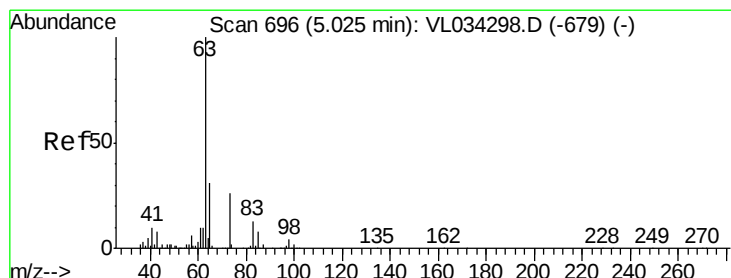
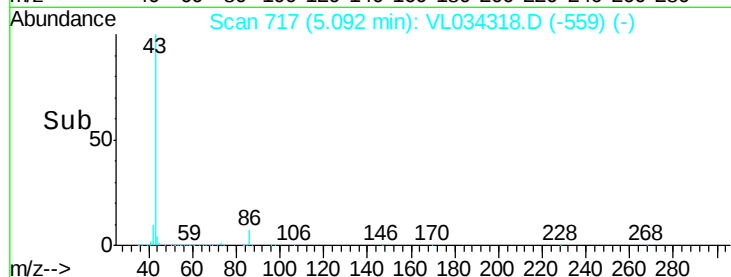
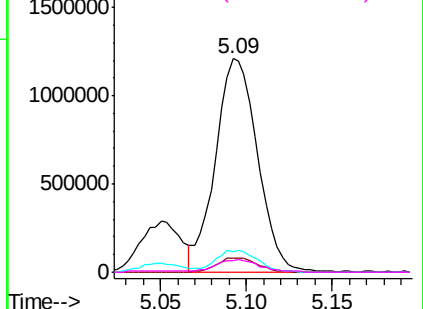
44 5.3 4.8 7.2

Manual Integrations  
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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: 10.088 ppbv

RT: 5.03 min Scan# 698

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

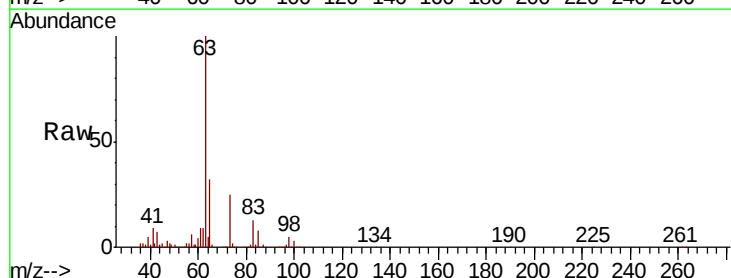
Tgt Ion: 63 Resp: 1430002

Ion Ratio Lower Upper

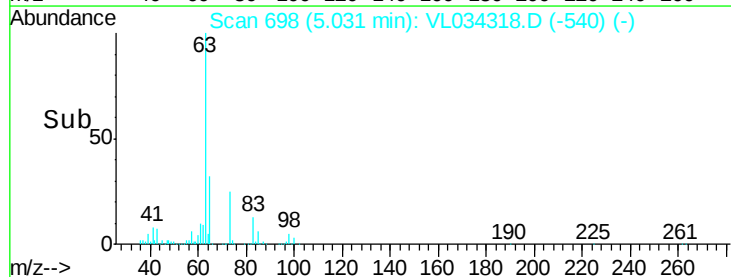
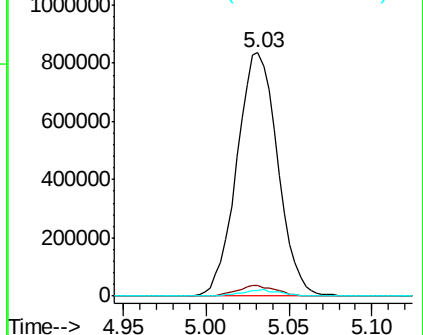
63 100

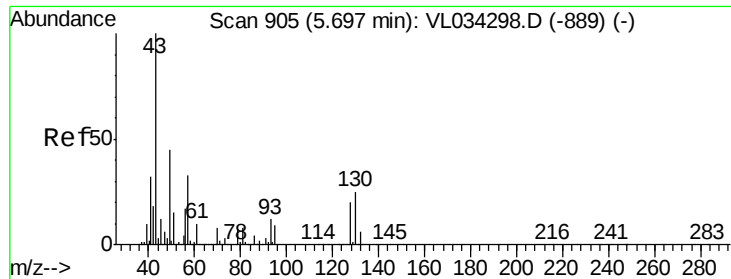
98 4.4 2.0 6.0

100 2.5 1.1 3.5



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





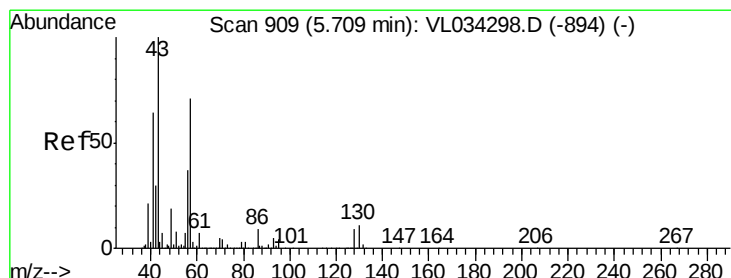
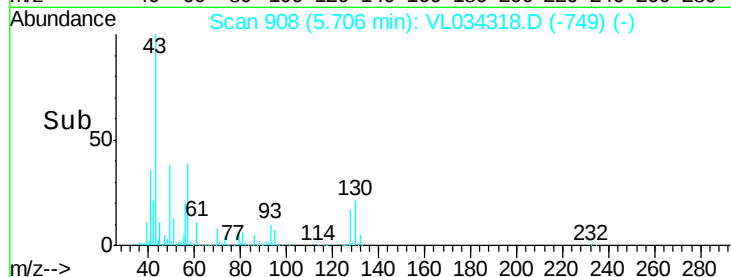
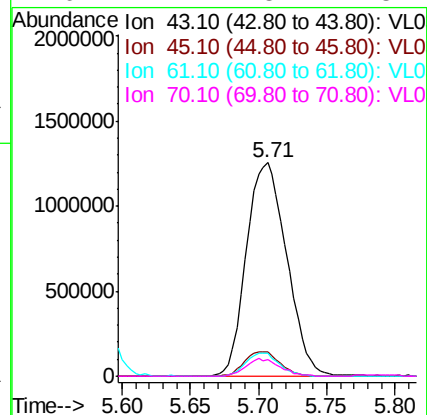
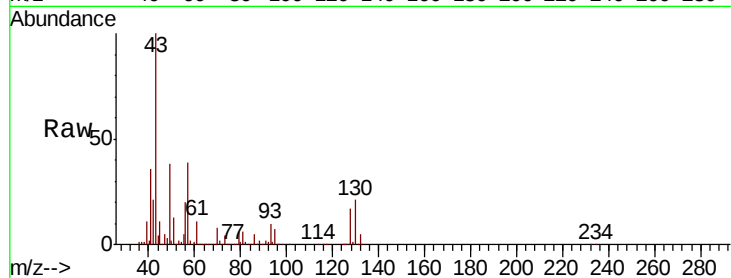
#25  
Ethyl Acetate  
Concen: 9.953 ppbv  
RT: 5.71 min Scan# 908  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 45      | 10.3  | 8.3   | 12.5  |
| 61      | 9.3   | 7.7   | 11.5  |
| 70      | 7.1   | 5.4   | 8.2   |

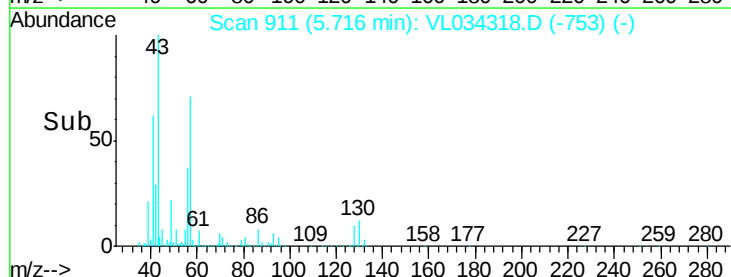
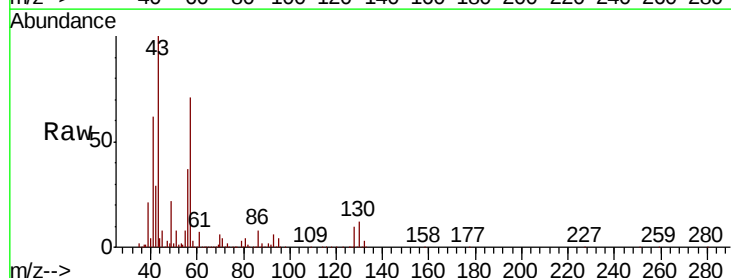
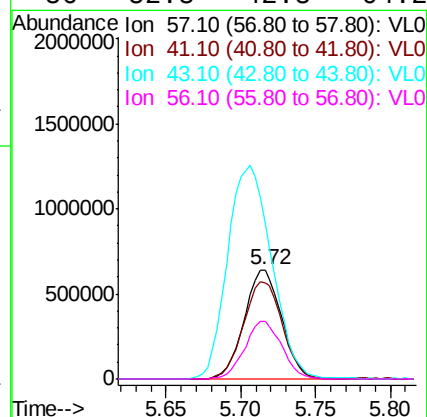
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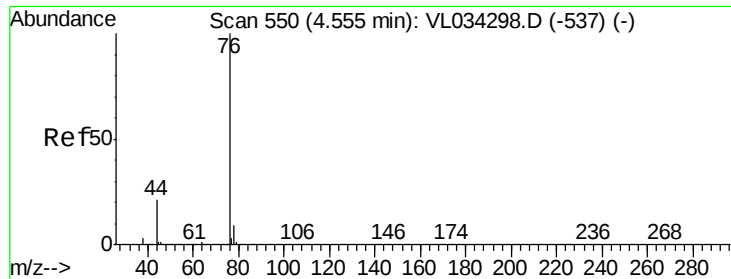
MMDadoda  
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#26  
Hexane  
Concen: 10.076 ppbv  
RT: 5.72 min Scan# 911  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 93.7  | 76.5  | 114.7 |
| 43      | 233.2 | 188.5 | 282.7 |
| 56      | 52.8  | 42.8  | 64.2  |





#27

Carbon Disulfide

Concen: 11.816 ppbv

RT: 4.56 min Scan# 552

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion: 76 Resp: 1350065

Ion Ratio Lower Upper

76 100

44 20.5 17.3 25.9

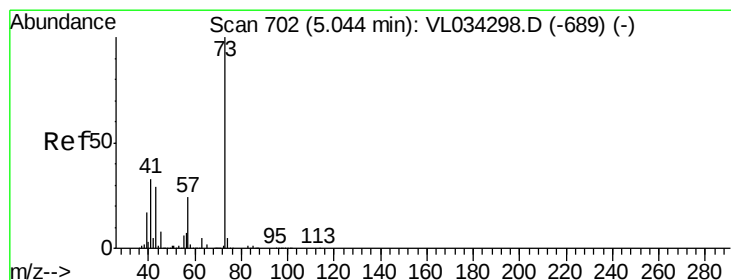
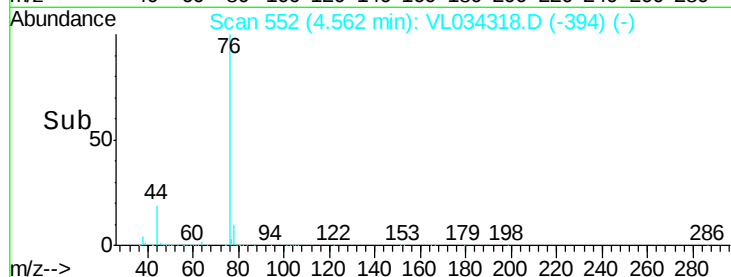
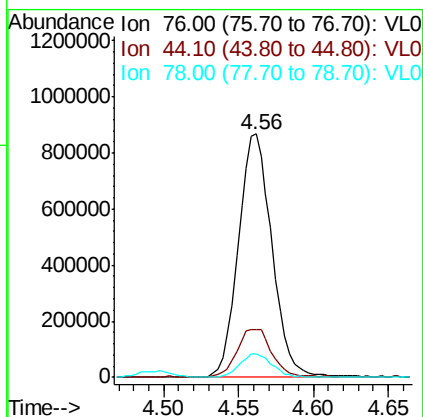
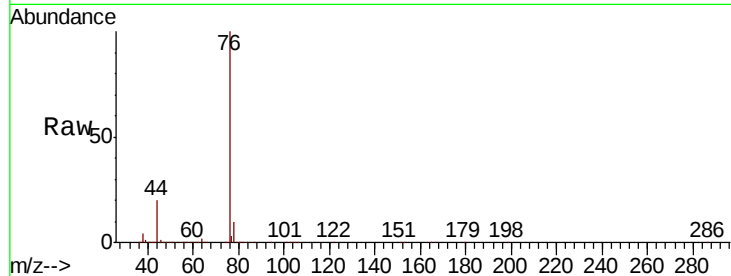
78 9.3 7.8 11.6

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#28

Methyl tert-Butyl Ether

Concen: 10.638 ppbv

RT: 5.05 min Scan# 704

Delta R.T. 0.01 min

Lab File: VL034318.D

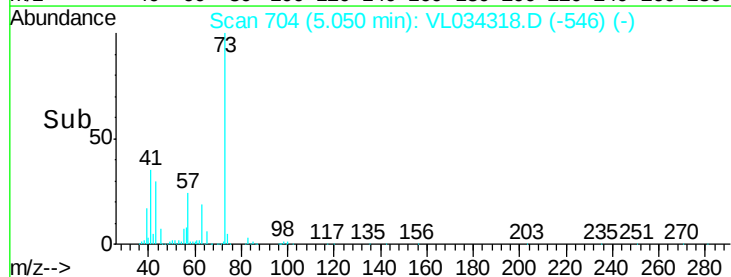
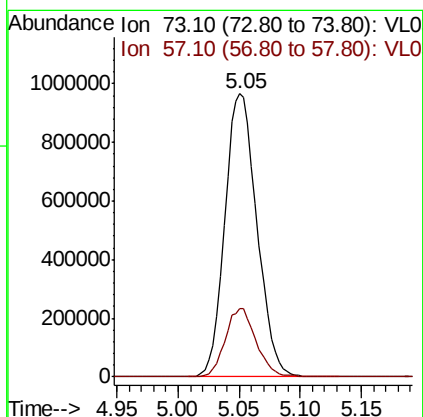
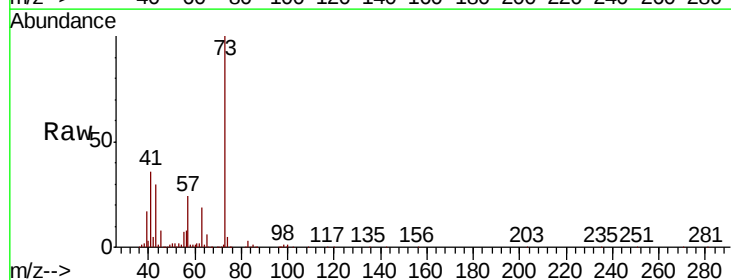
Acq: 17 Oct 2019 15:22

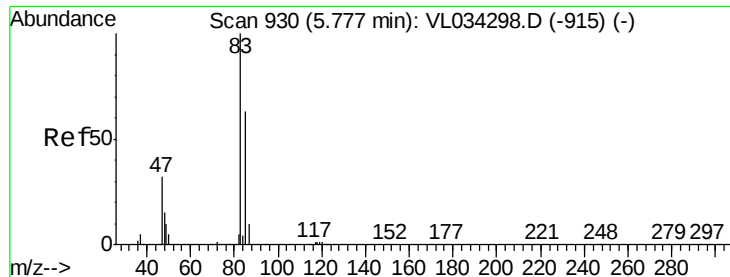
Tgt Ion: 73 Resp: 1771927

Ion Ratio Lower Upper

73 100

57 23.5 19.2 28.8





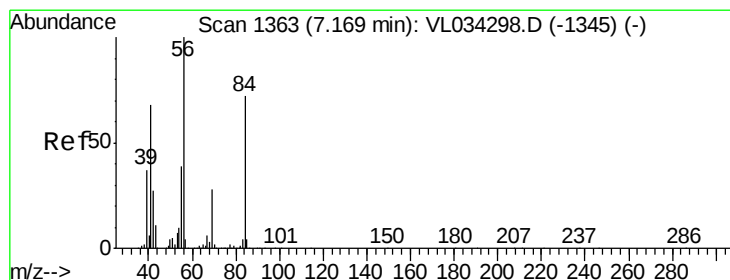
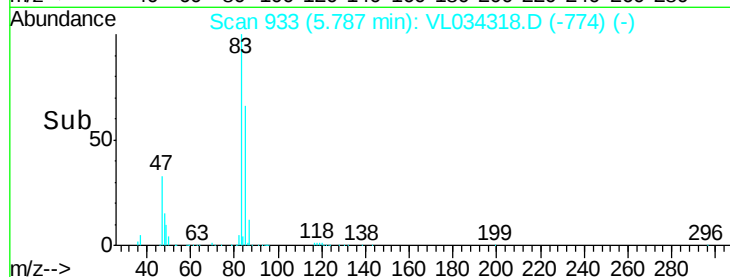
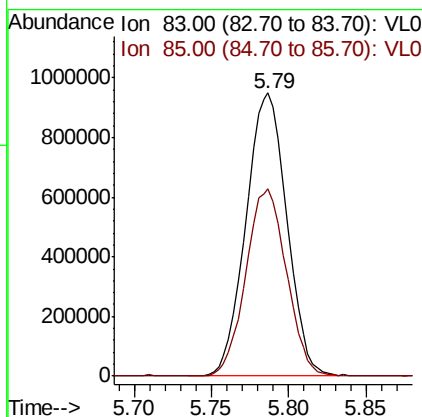
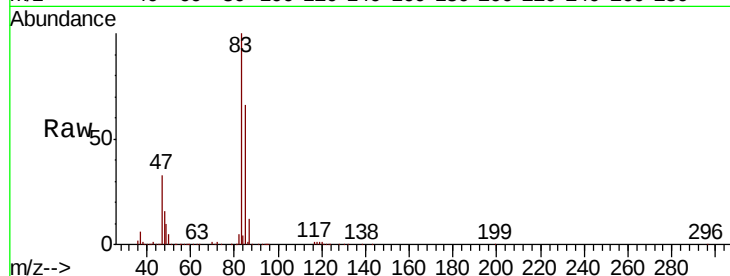
#29  
Chloroform  
Concen: 10.043 ppbv  
RT: 5.79 min Scan# 933  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

Tot Ion: 83 Resp: 1748309  
Ion Ratio Lower Upper  
83 100  
85 66.2 50.5 75.7

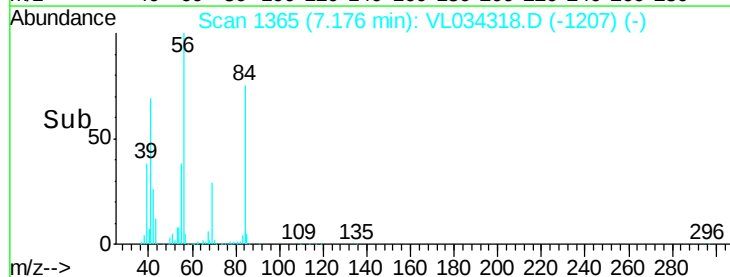
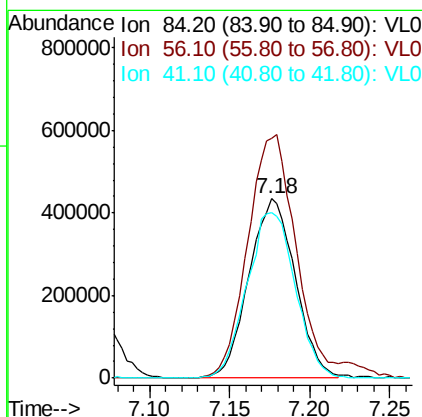
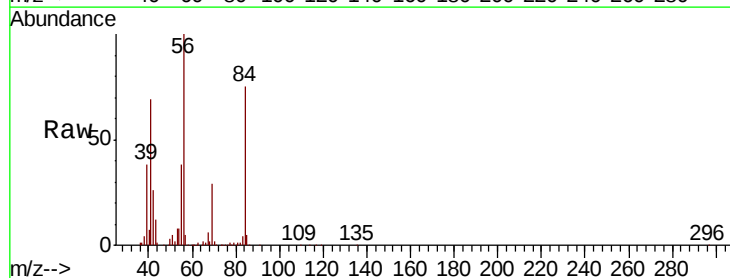
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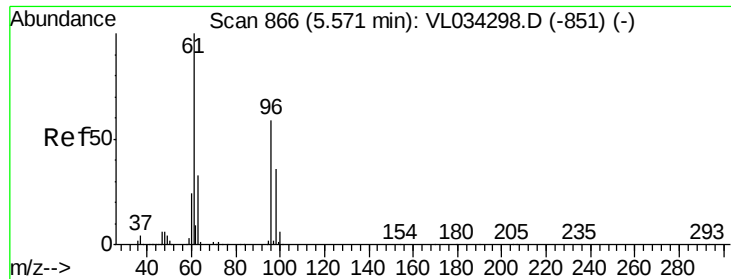
MMDadoda  
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#30  
Cyclohexane  
Concen: 10.692 ppbv  
RT: 7.18 min Scan# 1365  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Tgt Ion: 84 Resp: 865364  
Ion Ratio Lower Upper  
84 100  
56 146.6 119.4 179.0  
41 96.8 78.7 118.1





#31

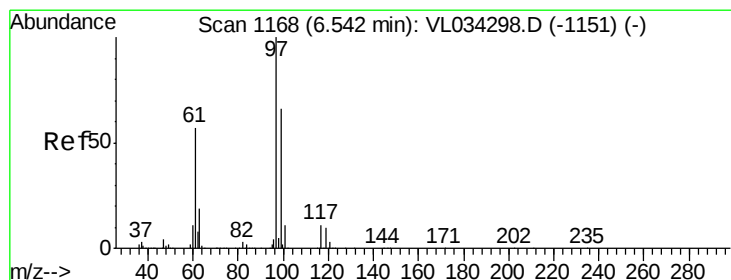
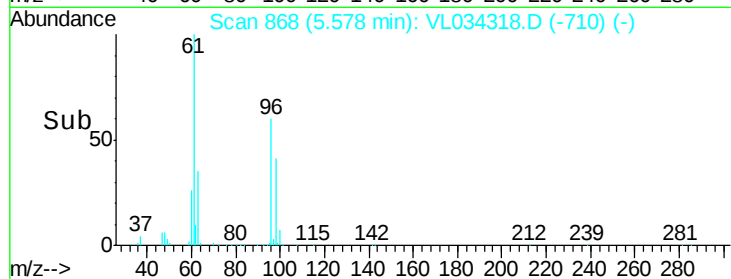
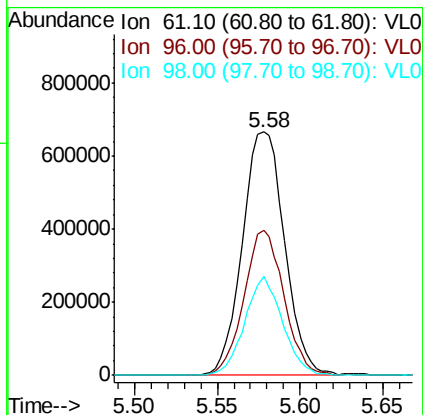
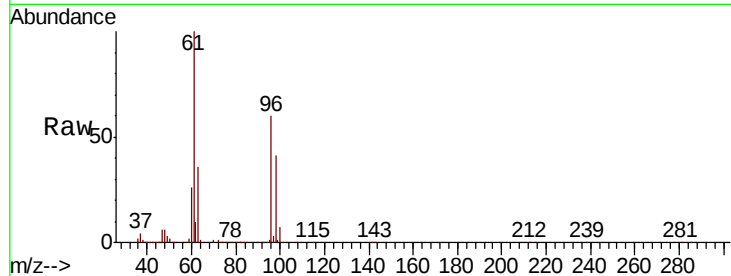
cis-1,2-Dichloroethene  
 Concen: 10.574 ppbv  
 RT: 5.58 min Scan# 868  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 59.5  | 47.5  | 71.3  |
| 98      | 40.5  | 28.8  | 43.2  |

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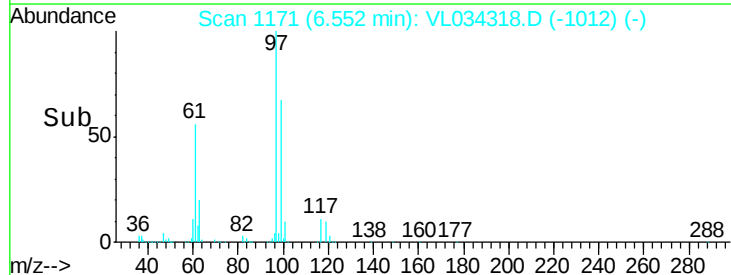
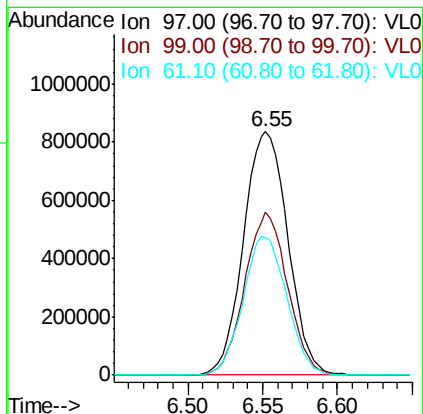
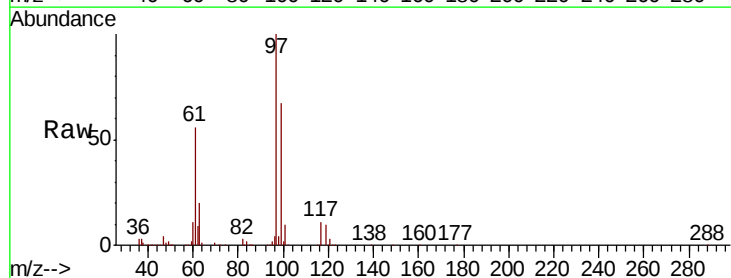
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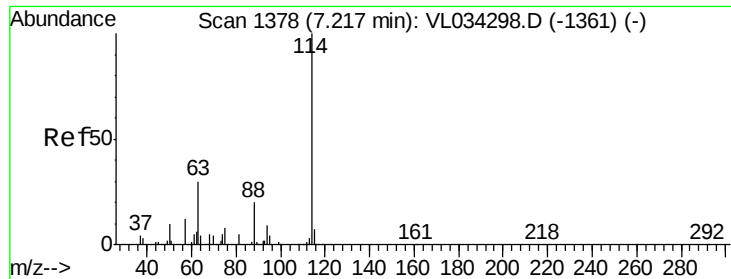


#32

1,1,1-Trichloroethane  
 Concen: 10.203 ppbv  
 RT: 6.55 min Scan# 1171  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 64.3  | 52.6  | 78.8  |
| 61      | 56.2  | 44.5  | 66.7  |





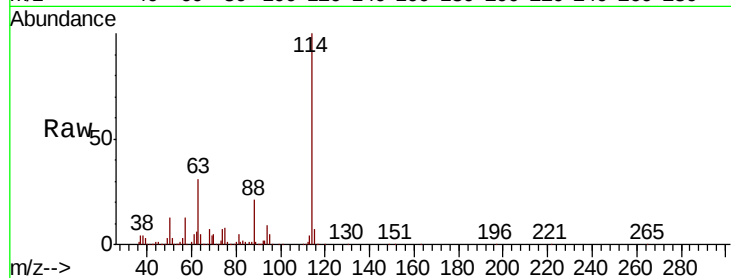
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.22 min Scan# 1380  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

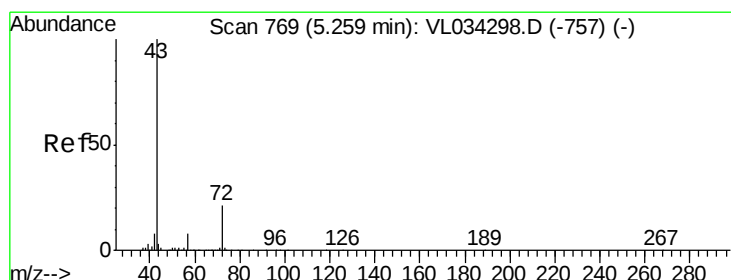
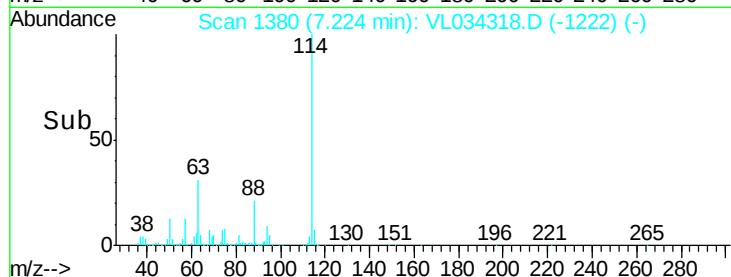
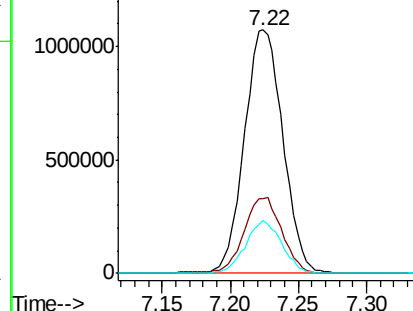
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 31.0  | 25.2  | 37.8  |
| 88      | 20.3  | 16.0  | 24.0  |

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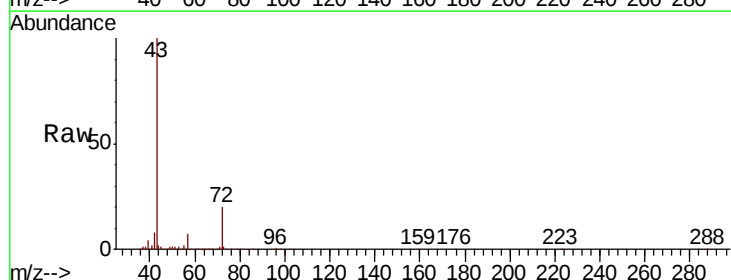


Abundance Ion 114.10 (113.80 to 114.80): VL0  
 Ion 63.10 (62.80 to 63.80): VL0  
 Ion 88.10 (87.80 to 88.80): VL0

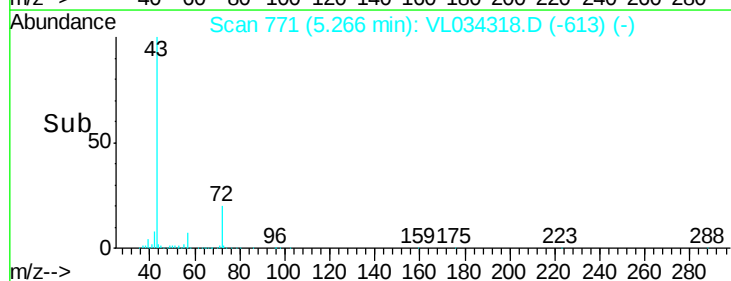
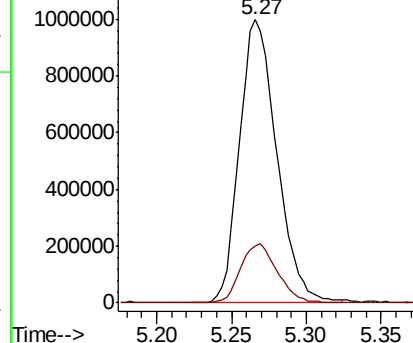


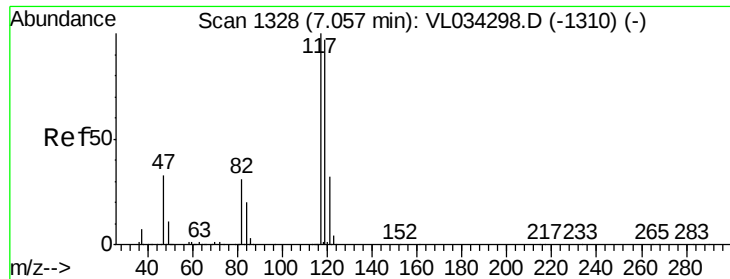
#34  
 2-Butanone  
 Concen: 10.034 ppbv  
 RT: 5.27 min Scan# 771  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 20.8  | 16.3  | 24.5  |



Abundance Ion 43.10 (42.80 to 43.80): VL0  
 Ion 72.10 (71.80 to 72.80): VL0





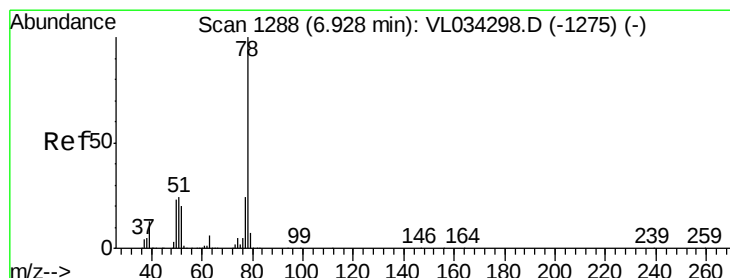
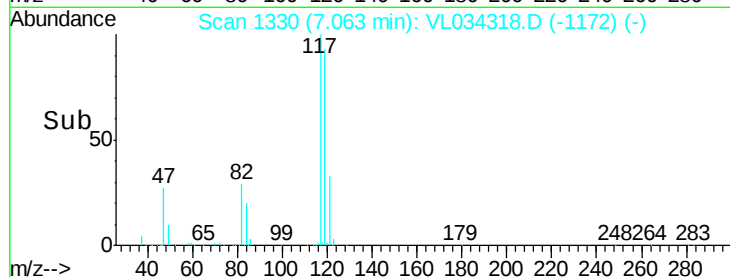
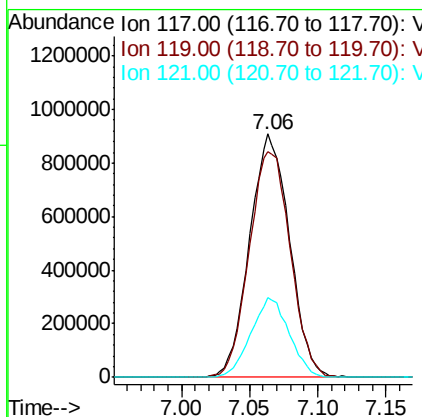
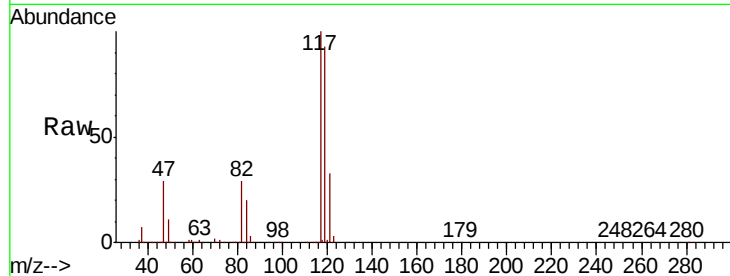
#35  
Carbon Tetrachloride  
Concen: 10.044 ppbv  
RT: 7.06 min Scan# 1330  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

| Tot Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 117     | 100  |       |       |       |
| 119     | 92.5 | 77.3  | 115.9 |       |
| 121     | 32.6 | 25.5  | 38.3  |       |

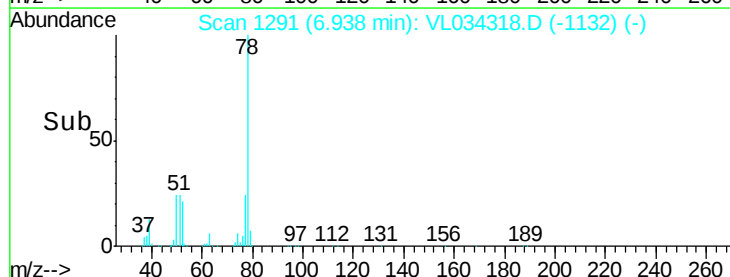
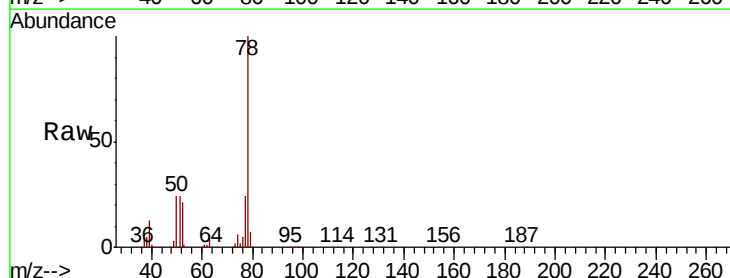
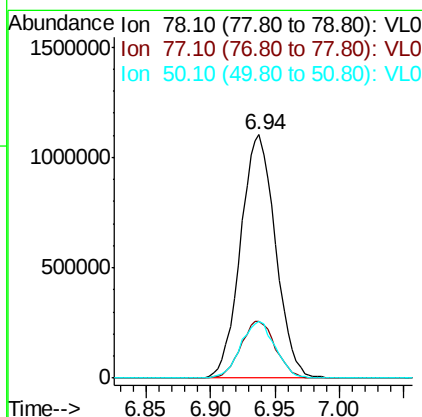
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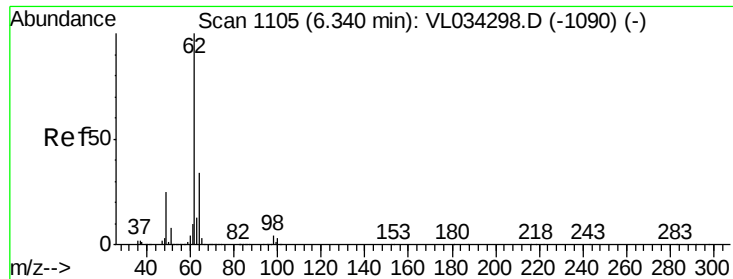
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#36  
Benzene  
Concen: 10.308 ppbv  
RT: 6.94 min Scan# 1291  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

| Tgt Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 78      | 100  |       |       |       |
| 77      | 23.5 | 19.0  | 28.4  |       |
| 50      | 23.5 | 18.6  | 27.8  |       |





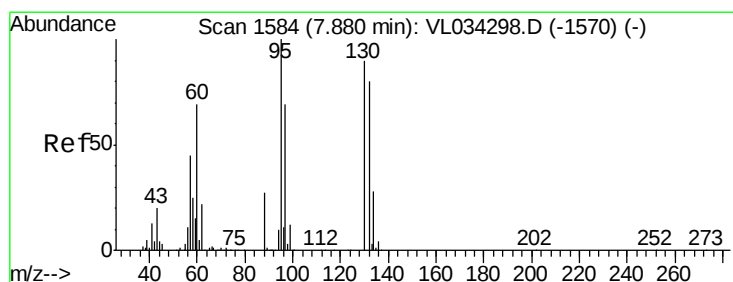
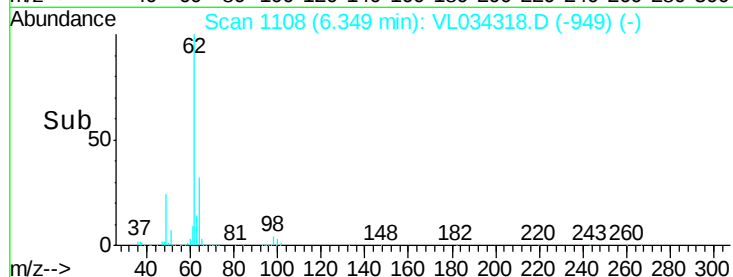
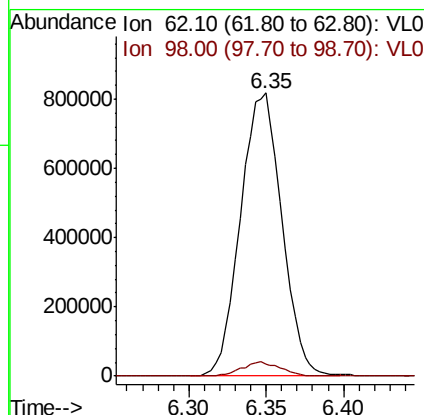
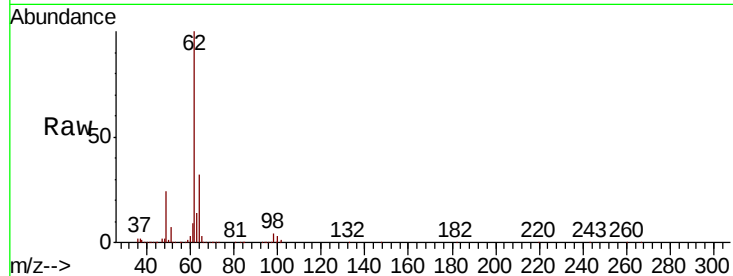
#37  
 1,2-Dichloroethane  
 Concen: 10.116 ppbv  
 RT: 6.35 min Scan# 1108  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

Tot Ion: 62 Resp: 1522600  
 Ion Ratio Lower Upper  
 62 100  
 98 4.8 3.8 5.6

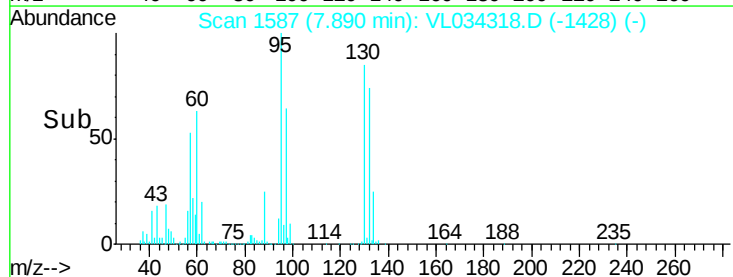
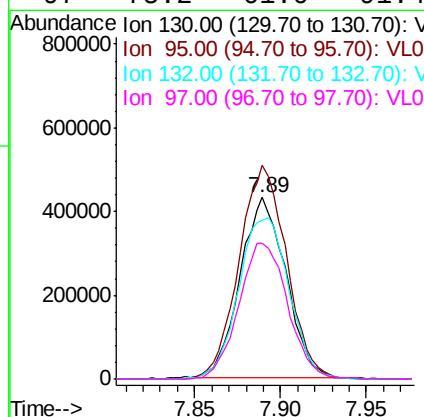
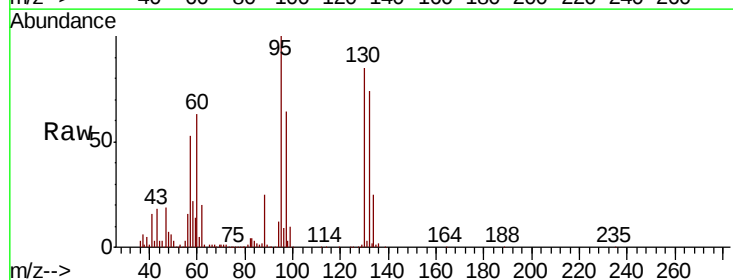
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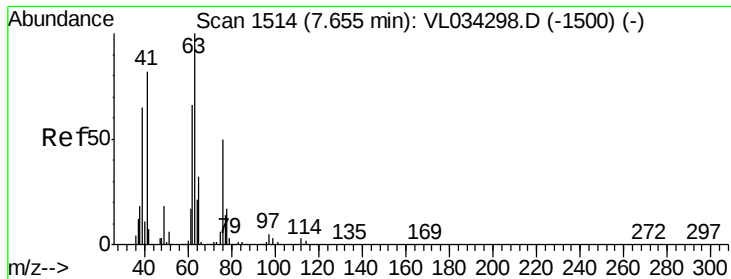
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#38  
 Trichloroethene  
 Concen: 9.856 ppbv  
 RT: 7.89 min Scan# 1587  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Tgt Ion: 130 Resp: 798776  
 Ion Ratio Lower Upper  
 130 100  
 95 117.9 88.6 132.8  
 132 87.8 71.2 106.8  
 97 75.2 61.0 91.4





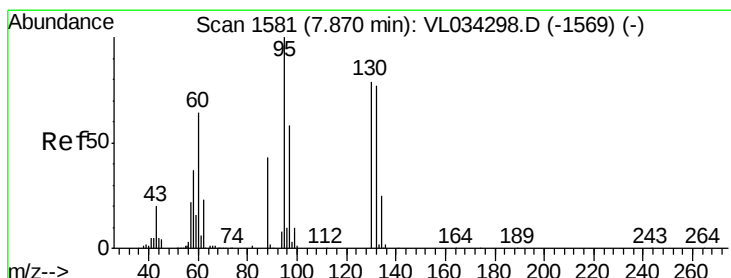
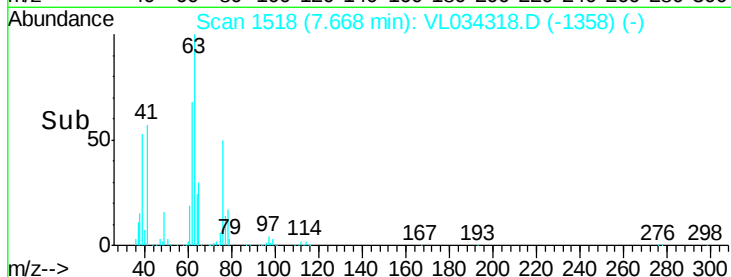
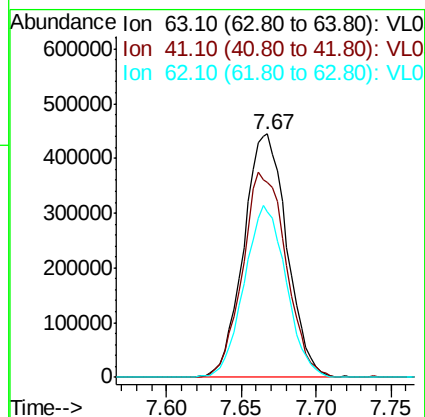
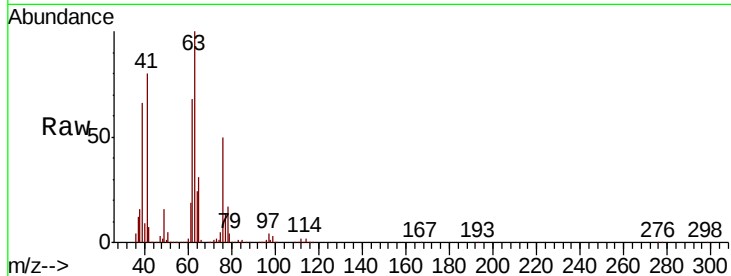
#39  
 1,2-Dichloropropane  
 Concen: 10.275 ppbv  
 RT: 7.67 min Scan# 1518  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 80.2  | 65.6  | 98.4  |
| 62      | 67.8  | 53.0  | 79.6  |

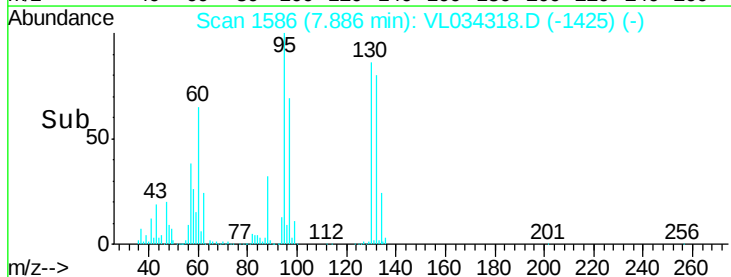
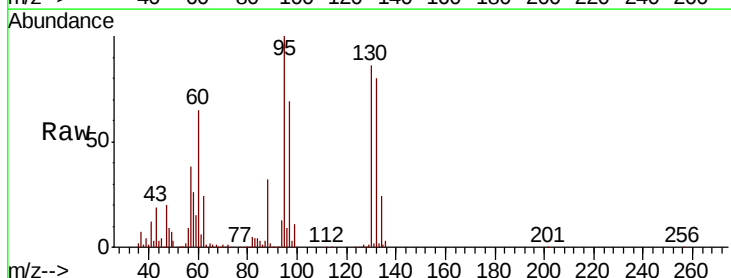
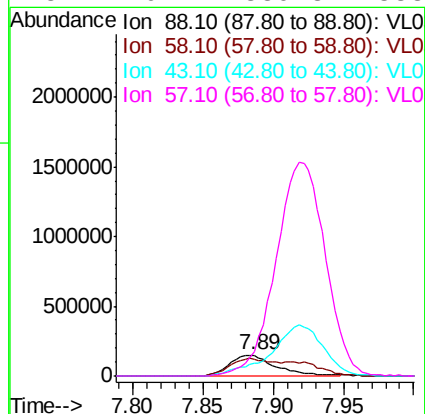
Manual Integrations  
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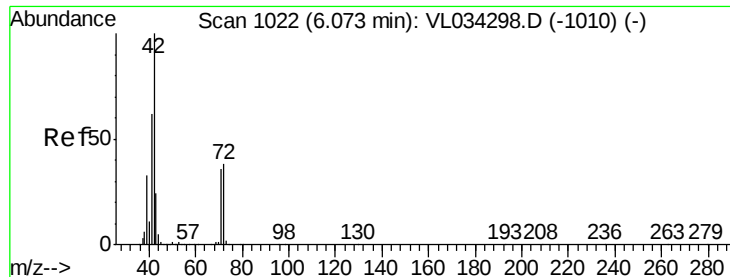
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#40  
 1,4-Dioxane  
 Concen: 11.120 ppbv  
 RT: 7.89 min Scan# 1586  
 Delta R.T. 0.02 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

| Tgt Ion | Ratio  | Lower | Upper  |
|---------|--------|-------|--------|
| 88      | 100    |       |        |
| 58      | 136.8  | 110.3 | 165.5  |
| 43      | 277.1  | 228.1 | 342.1  |
| 57      | 1102.1 | 889.3 | 1333.9 |





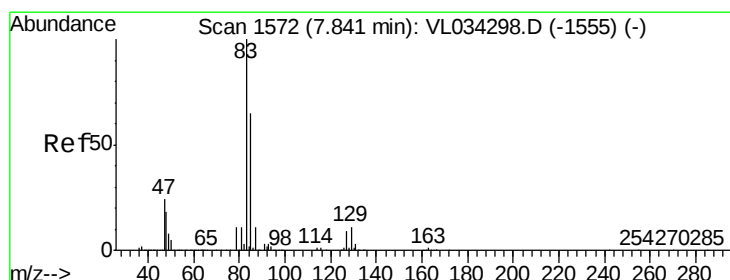
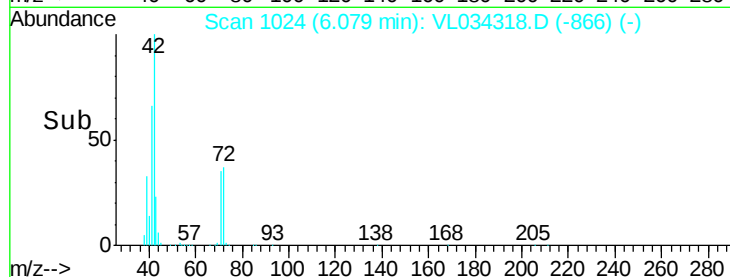
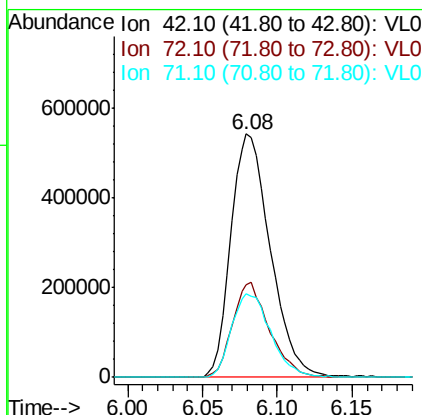
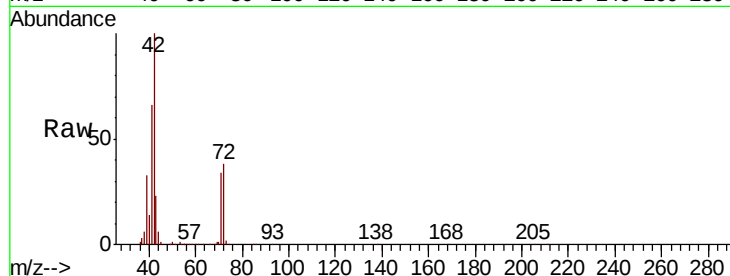
#41  
Tetrahydrofuran  
Concen: 10.426 ppbv  
RT: 6.08 min Scan# 1024  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 42      | 100   |            |       |
| 72      | 36.5  | 28.0       | 42.0  |
| 71      | 34.4  | 27.3       | 40.9  |

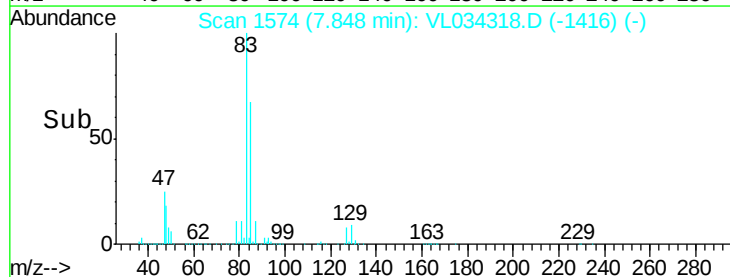
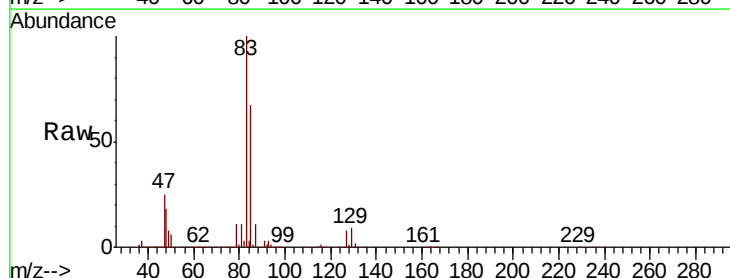
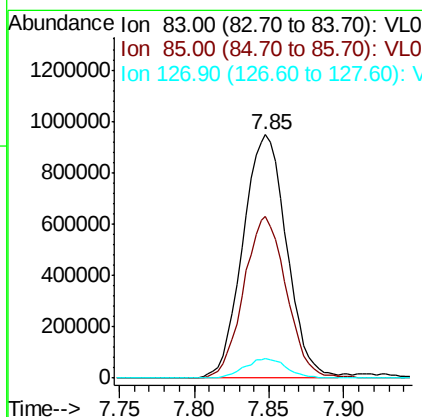
Manual Integrations  
APPROVED

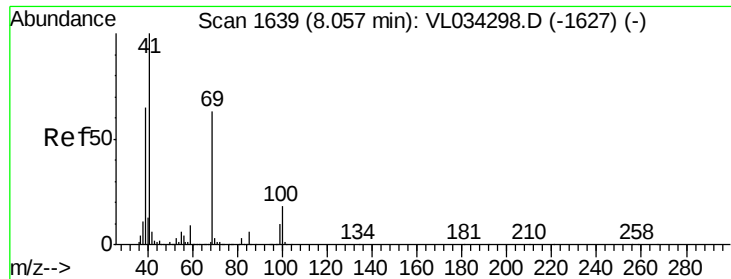
MMDadoda  
10/22/2019 2:54:36 PM



#42  
Bromodichloromethane  
Concen: 10.423 ppbv  
RT: 7.85 min Scan# 1574  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 83      | 100   |            |       |
| 85      | 66.6  | 51.8       | 77.6  |
| 127     | 8.1   | 7.0        | 10.6  |





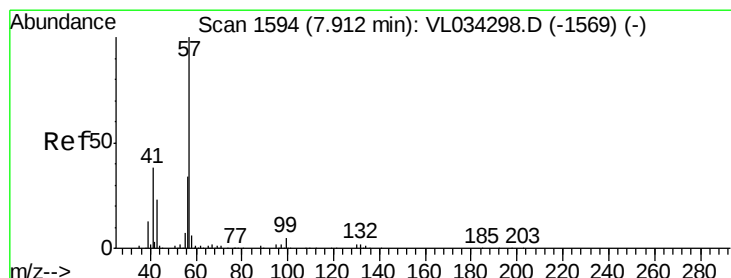
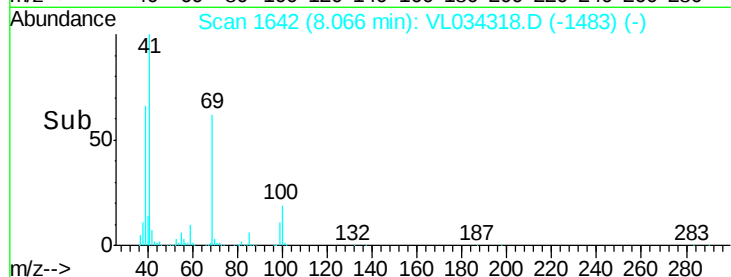
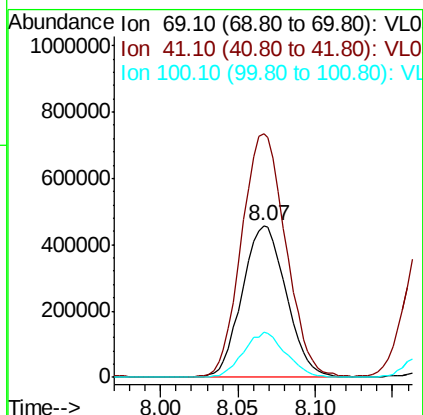
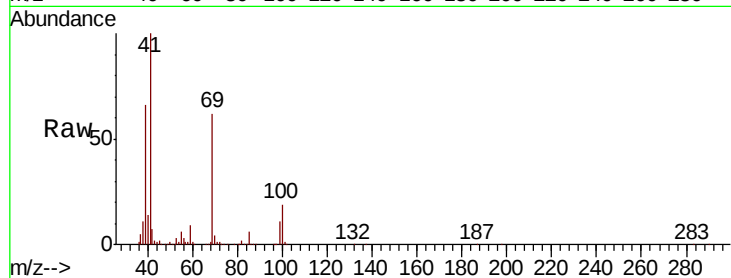
#43  
Methvl Methacrvlate  
Concen: 10.833 ppbv  
RT: 8.07 min Scan# 1642  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 69      | 100   |       |       |
| 41      | 161.9 | 132.1 | 198.1 |
| 100     | 29.0  | 23.2  | 34.8  |

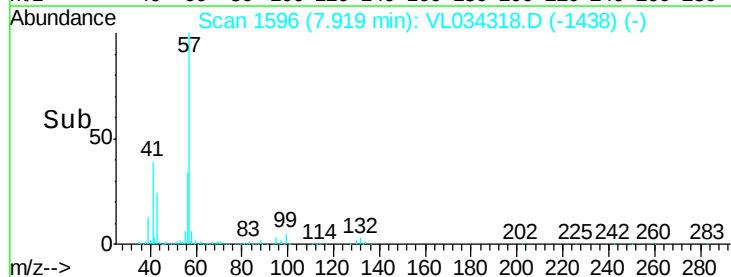
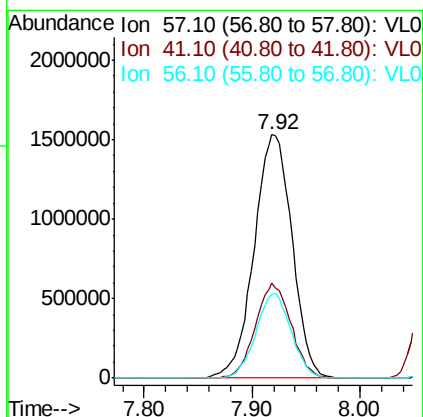
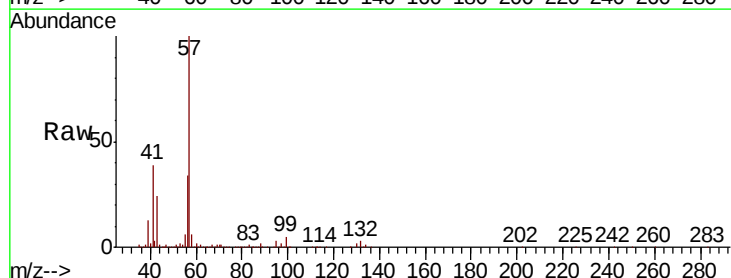
Manual Integrations  
APPROVED

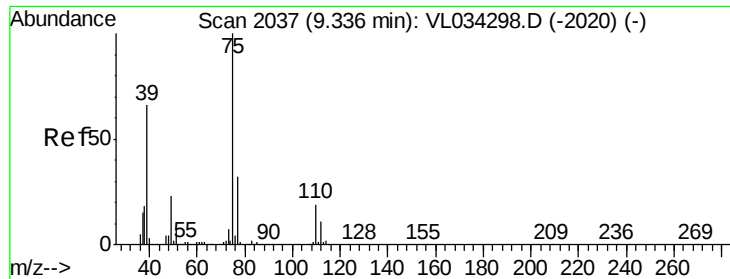
MMDadoda  
10/22/2019 2:54:36 PM



#44  
2,2,4-Trimethylpentane  
Concen: 10.000 ppbv  
RT: 7.92 min Scan# 1596  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 36.6  | 29.3  | 43.9  |
| 56      | 32.3  | 25.3  | 37.9  |





#45

t-1,3-Dichloropropene

Concen: 11.958 ppbv

RT: 9.34 min Scan# 2039

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion: 75 Resp: 1216871

Ion Ratio Lower Upper

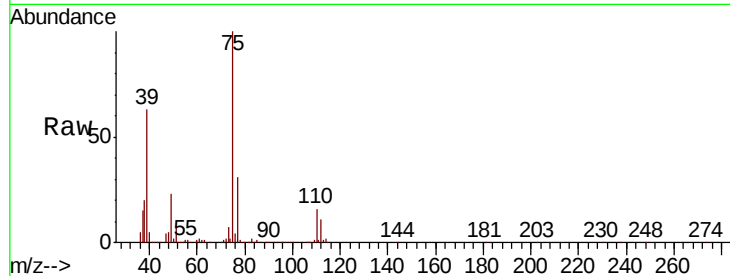
75 100

77 30.7 25.6 38.4

Manual Integrations  
APPROVED

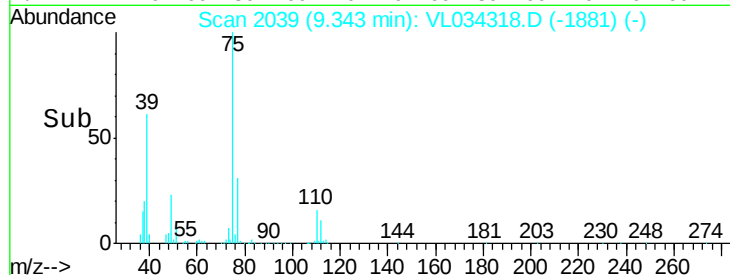
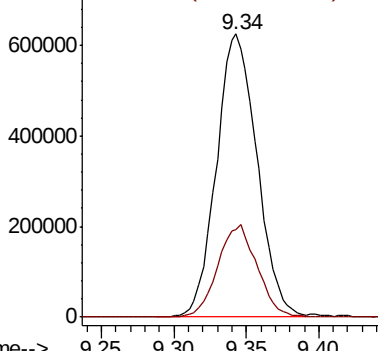
MMDadoda

10/22/2019 2:54:36 PM

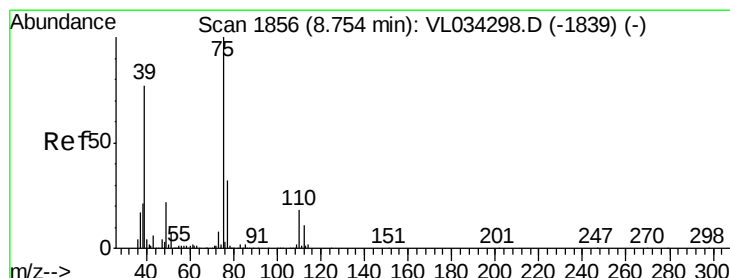


Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



Time-->



#46

cis-1,3-Dichloropropene

Concen: 11.600 ppbv

RT: 8.76 min Scan# 1859

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

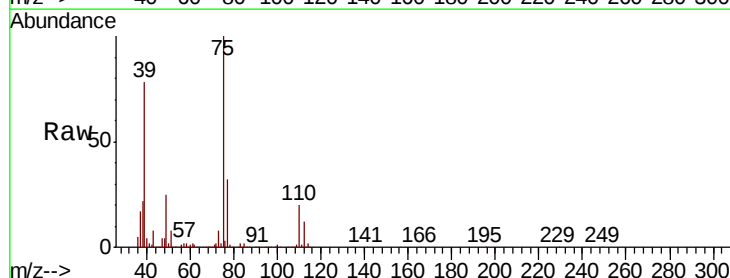
Tgt Ion: 75 Resp: 1356232

Ion Ratio Lower Upper

75 100

39 78.0 61.2 91.8

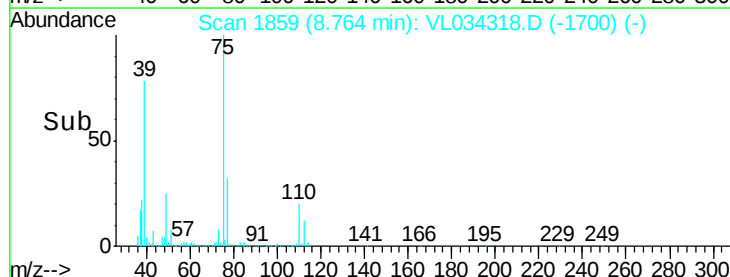
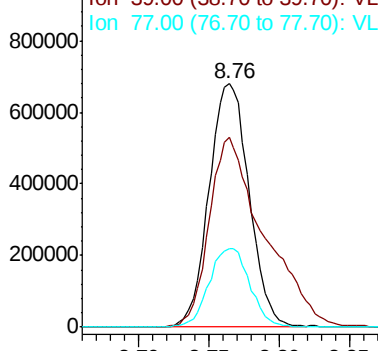
77 32.5 25.9 38.9



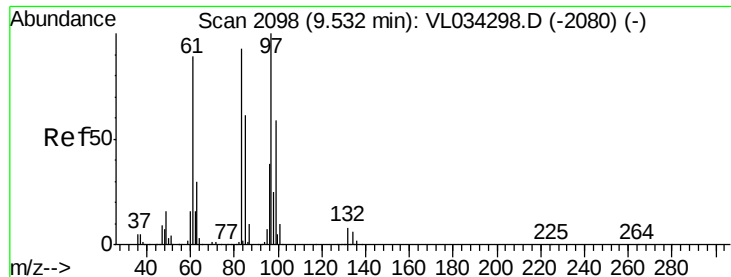
Abundance Ion 75.00 (74.70 to 75.70): VL0

Ion 39.00 (38.70 to 39.70): VL0

Ion 77.00 (76.70 to 77.70): VL0



Time-->



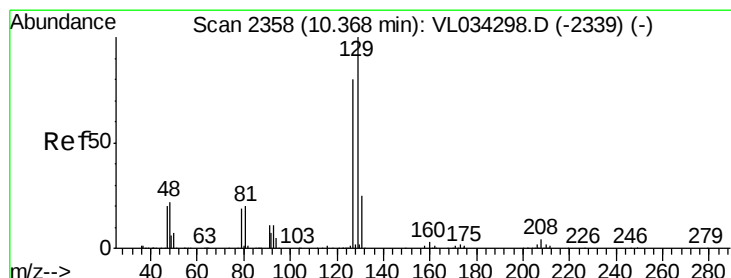
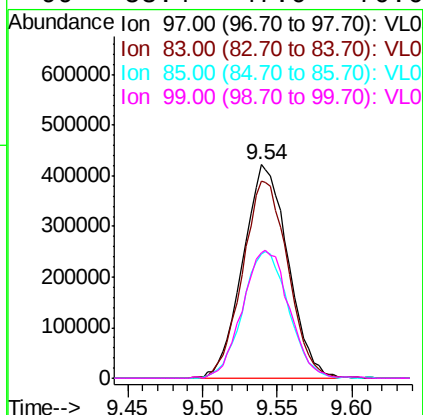
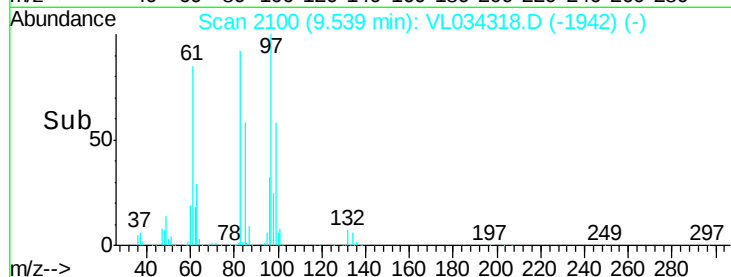
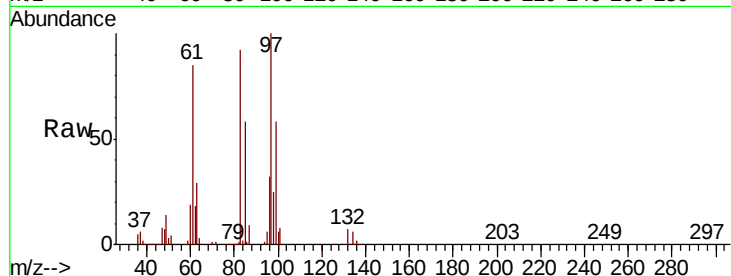
#47  
 1,1,2-Trichloroethane  
 Concen: 10.058 ppbv  
 RT: 9.54 min Scan# 2100  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 97      | 100  |       | 885973 |       |       |
| 83      | 92.1 | 74.2  | 111.2  |       |       |
| 85      | 58.2 | 48.6  | 73.0   |       |       |
| 99      | 58.4 | 47.0  | 70.6   |       |       |

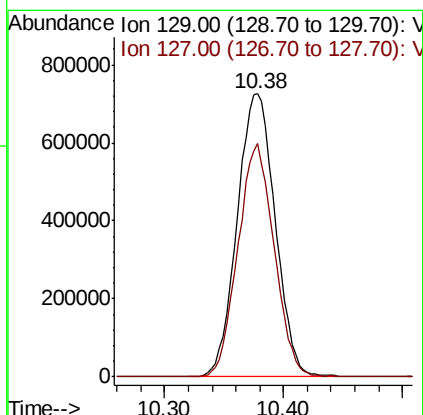
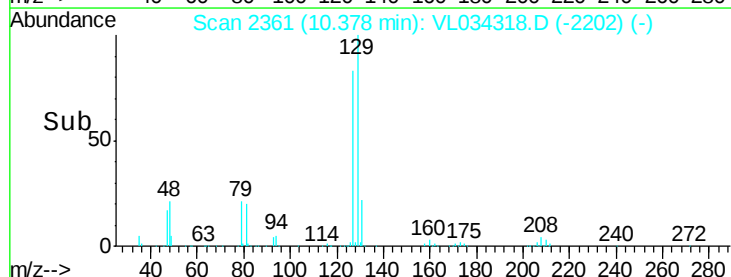
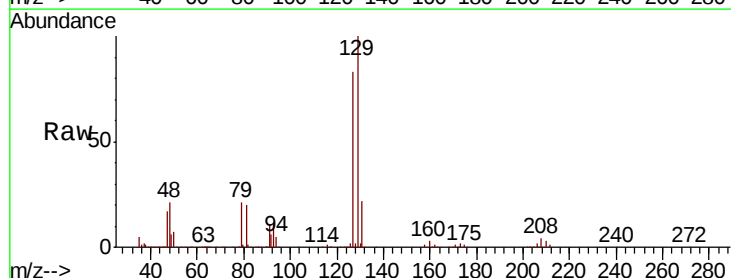
Manual Integrations  
 APPROVED

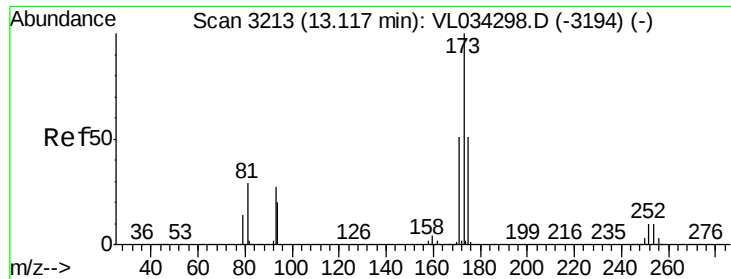
MMDadoda  
 10/22/2019 2:54:36 PM



#48  
 Dibromochloromethane  
 Concen: 11.098 ppbv  
 RT: 10.38 min Scan# 2361  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

| Tgt Ion | Ion  | Ratio | Resp    | Lower | Upper |
|---------|------|-------|---------|-------|-------|
| 129     | 100  |       | 1603544 |       |       |
| 127     | 78.9 | 39.7  | 119.1   |       |       |





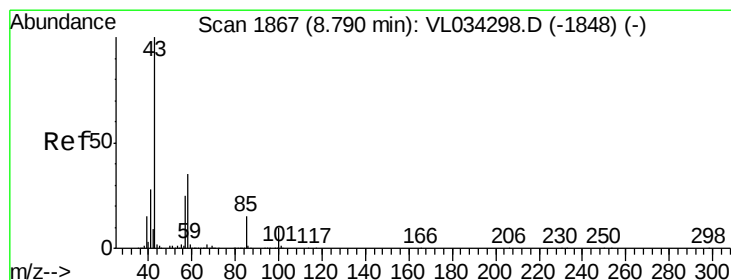
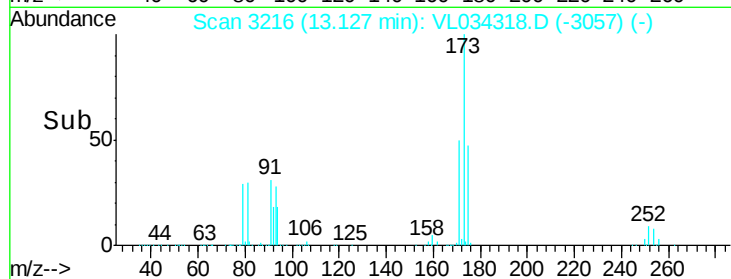
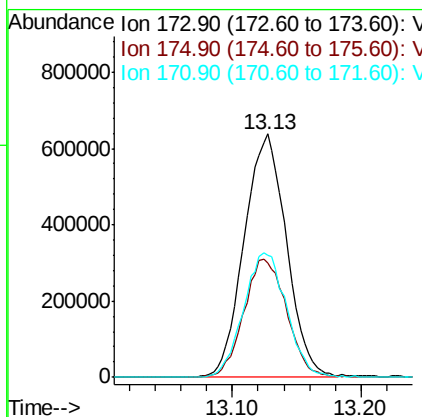
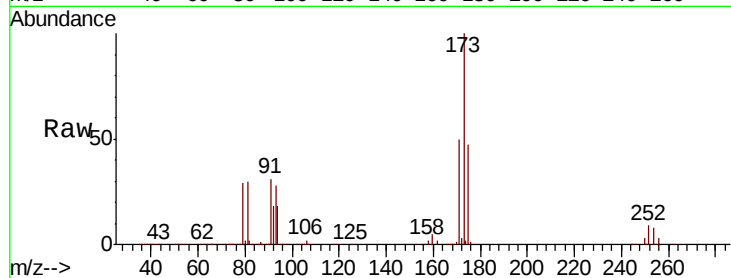
#49  
Bromoform  
Concen: 11.387 ppbv  
RT: 13.13 min Scan# 3216  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

Tot Ion:173 Resp: 1457926  
Ion Ratio Lower Upper  
173 100  
175 49.3 39.8 59.6  
171 51.9 41.8 62.6

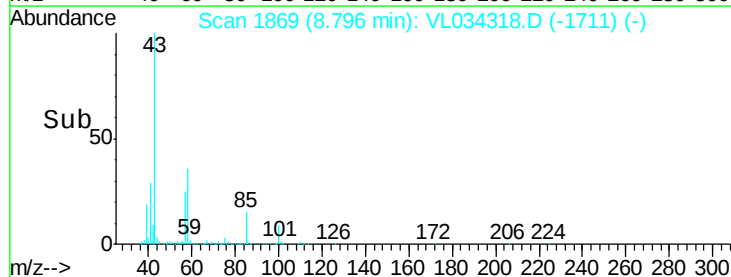
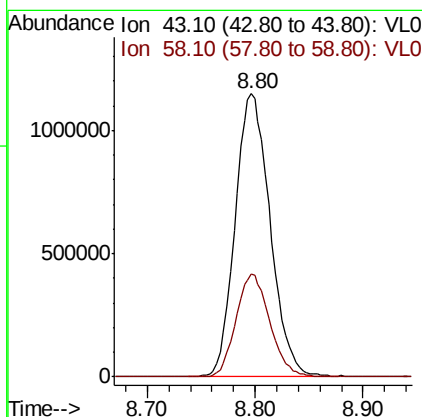
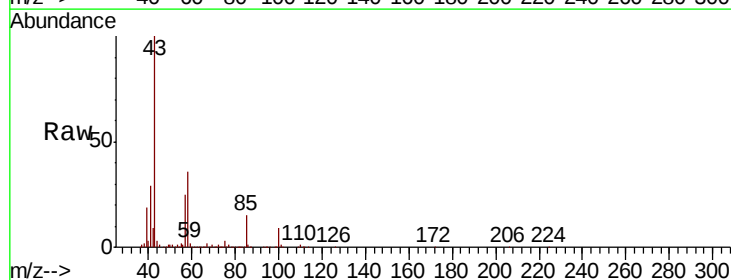
Manual Integrations  
APPROVED

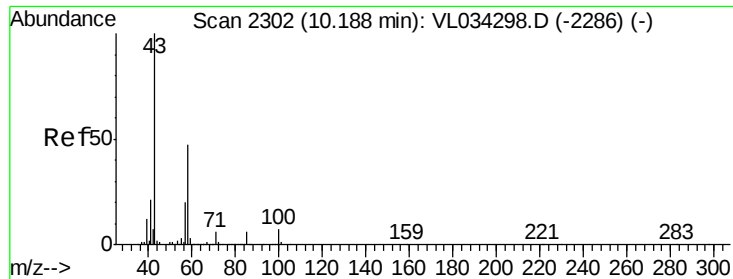
MMDadoda  
10/22/2019 2:54:36 PM



#50  
4-Methyl-2-Pentanone  
Concen: 10.514 ppbv  
RT: 8.80 min Scan# 1869  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Tgt Ion: 43 Resp: 2589516  
Ion Ratio Lower Upper  
43 100  
58 35.3 27.6 41.4





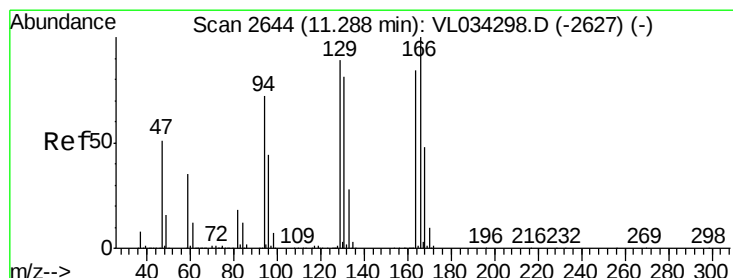
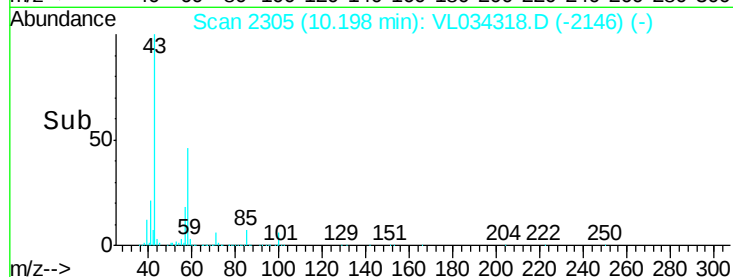
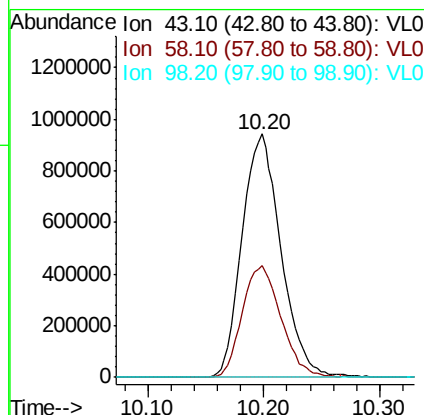
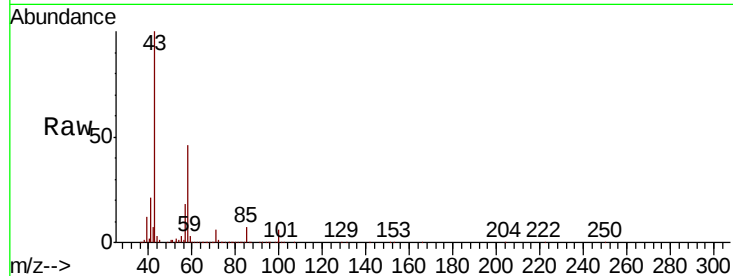
#51  
2-Hexanone  
Concen: 10.873 ppbv  
RT: 10.20 min Scan# 2305  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

Tot Ion: 43 Resp: 2195323  
Ion Ratio Lower Upper  
43 100  
58 46.1 37.0 55.6  
98 0.2 0.2 0.2

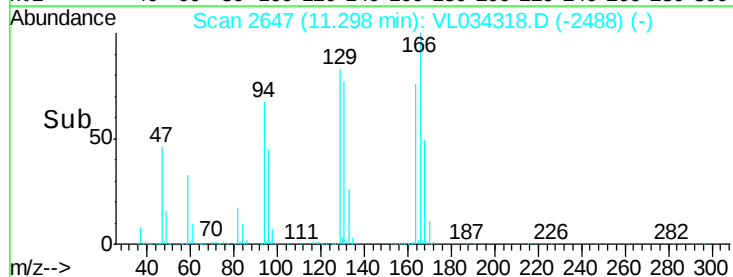
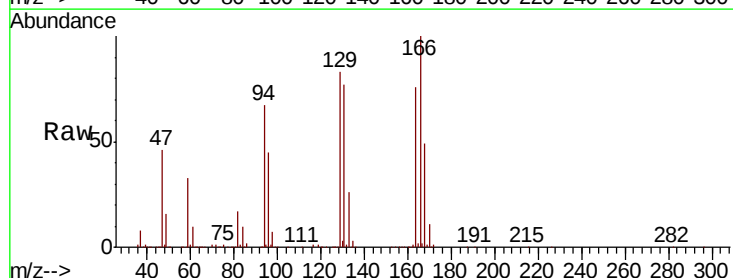
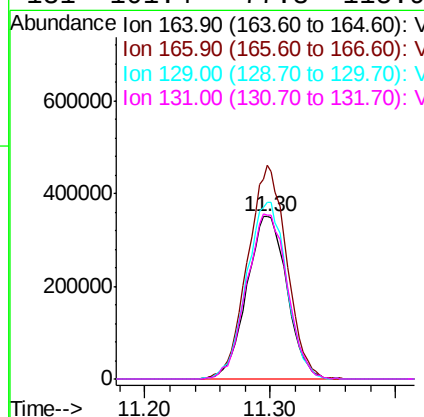
Manual Integrations  
APPROVED

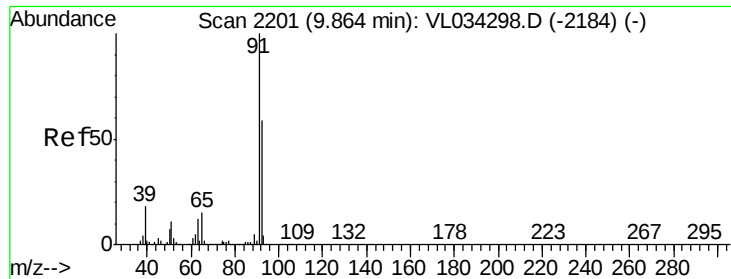
MMDadoda  
10/22/2019 2:54:36 PM



#52  
Tetrachloroethene  
Concen: 9.834 ppbv  
RT: 11.30 min Scan# 2647  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Tgt Ion: 164 Resp: 778468  
Ion Ratio Lower Upper  
164 100  
166 131.7 95.3 142.9  
129 108.9 84.5 126.7  
131 101.4 77.3 115.9





#53

Toluene

Concen: 10.798 ppbv

RT: 9.87 min Scan# 2204

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion: 91 Resp: 2406644

Ion Ratio Lower Upper

91 100

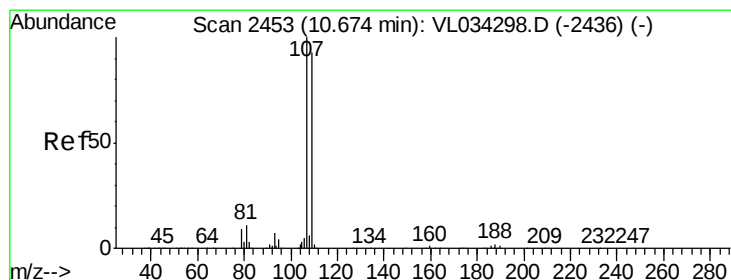
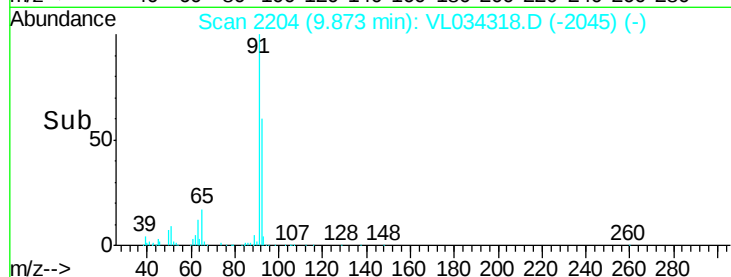
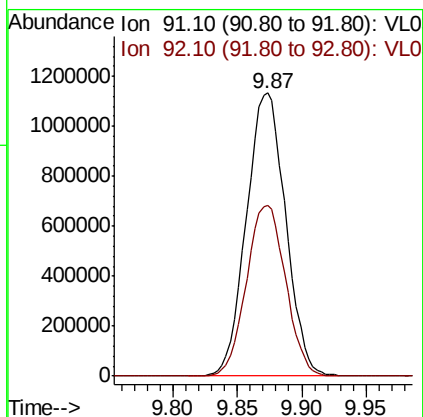
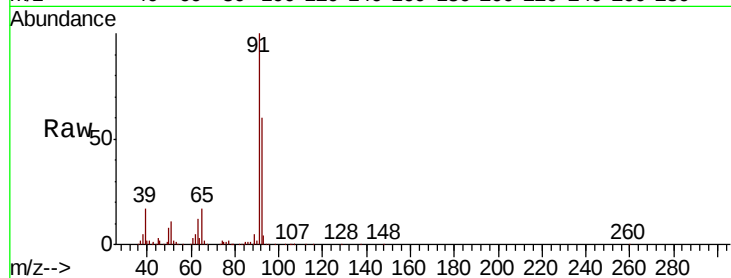
92 60.4 48.4 72.6

Manual Integrations

APPROVED

MMDadoda

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#54

1,2-Dibromoethane

Concen: 10.307 ppbv

RT: 10.68 min Scan# 2456

Delta R.T. 0.01 min

Lab File: VL034318.D

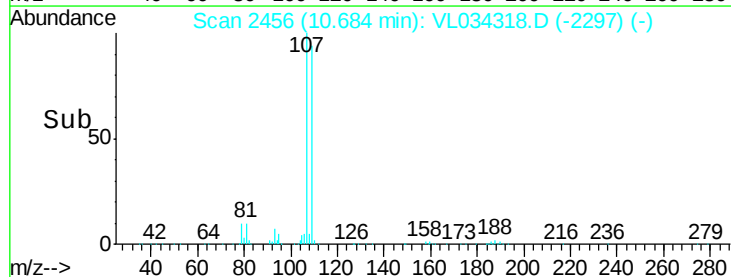
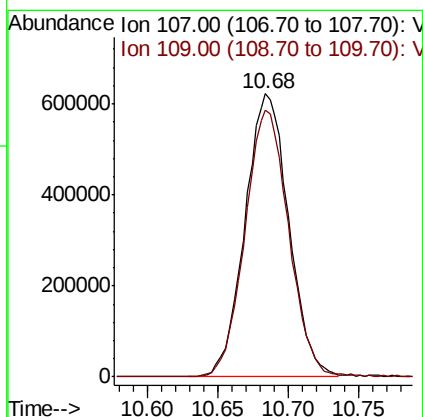
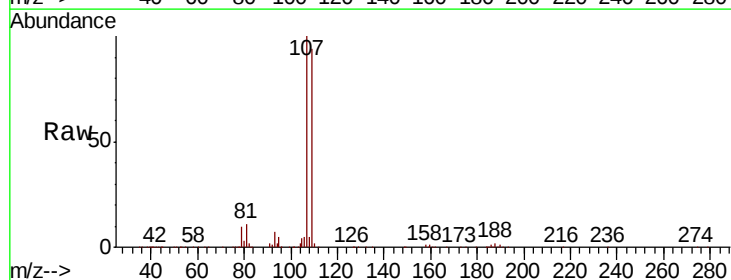
Acq: 17 Oct 2019 15:22

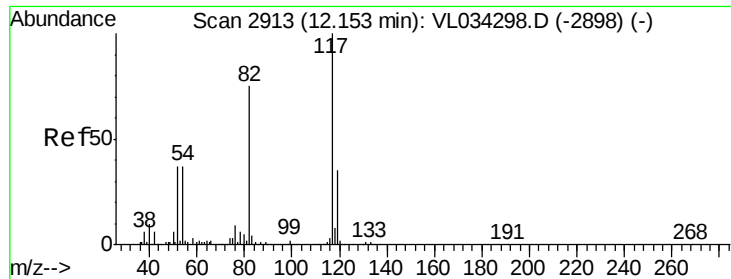
Tgt Ion: 107 Resp: 1345612

Ion Ratio Lower Upper

107 100

109 94.2 74.6 112.0





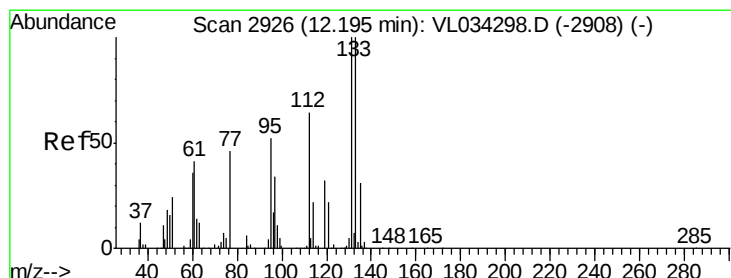
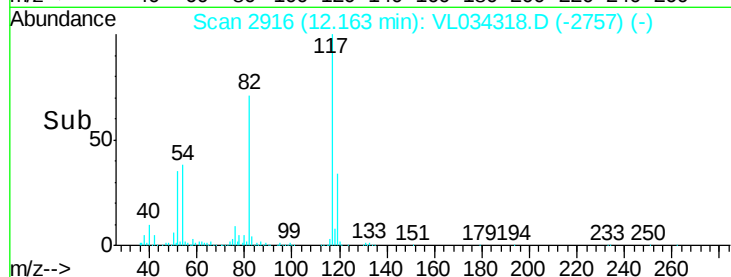
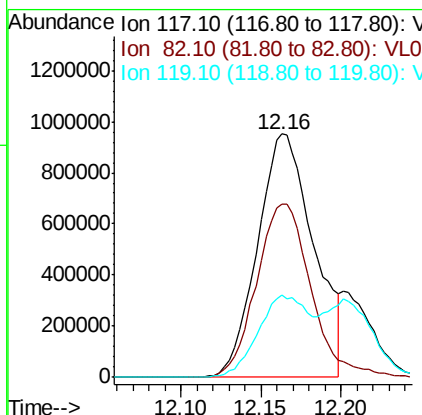
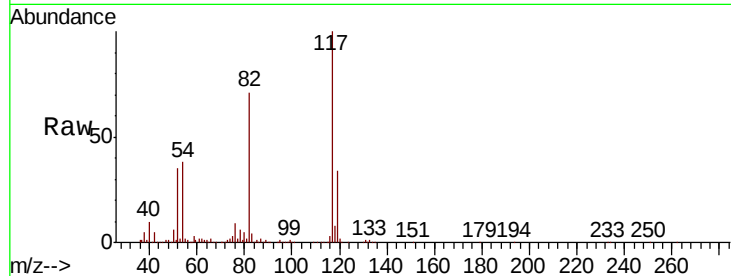
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.16 min Scan# 2916  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 69.6  | 55.5  | 83.3  |
| 119     | 31.4  | 26.5  | 39.7  |

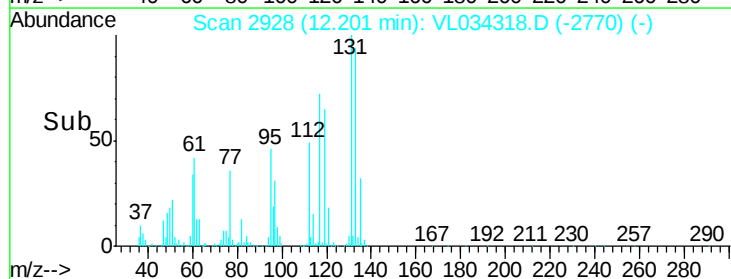
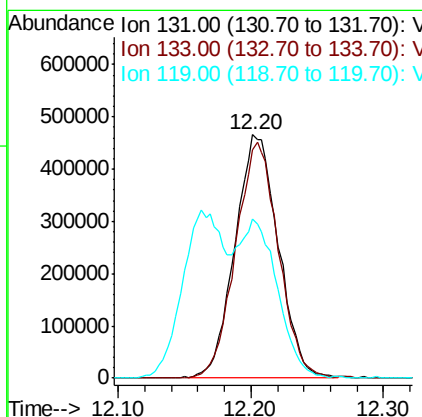
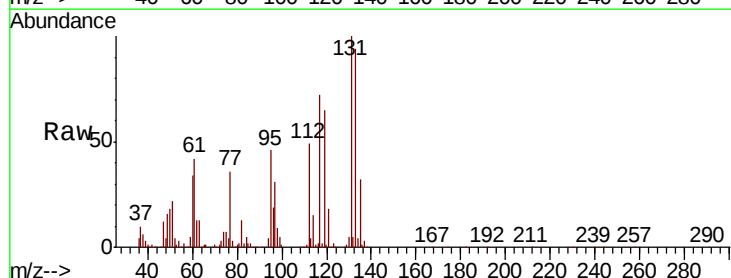
Manual Integrations  
APPROVED

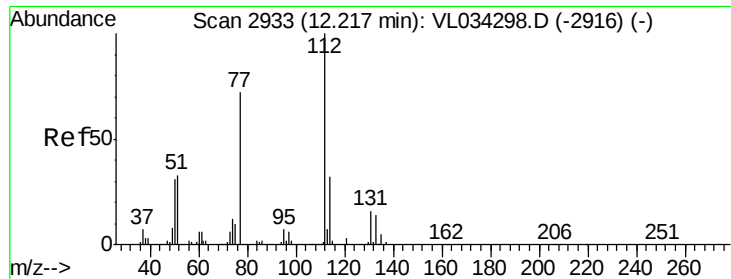
MMDadoda  
10/22/2019 2:54:36 PM



#56  
1,1,1,2-Tetrachloroethane  
Concen: 9.793 ppbv  
RT: 12.20 min Scan# 2928  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 131     | 100   |       |       |
| 133     | 97.1  | 77.1  | 115.7 |
| 119     | 59.5  | 49.0  | 73.4  |





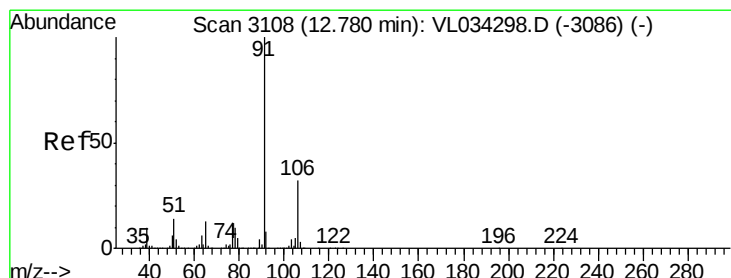
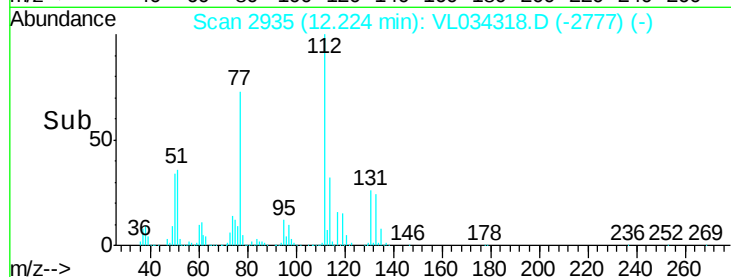
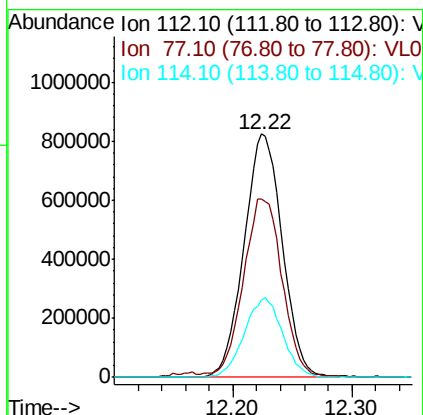
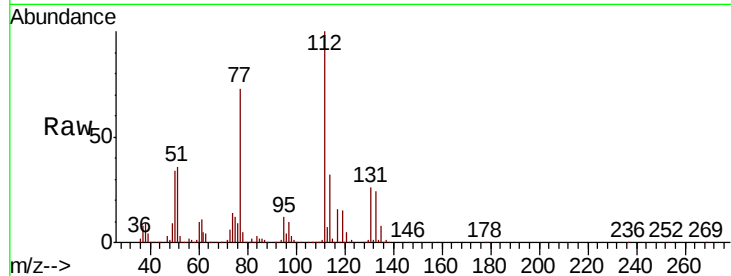
#57  
Chlorobenzene  
Concen: 9.475 ppbv  
RT: 12.22 min Scan# 2935  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 77      | 72.5  | 58.6  | 88.0  |
| 114     | 31.8  | 28.6  | 35.0  |

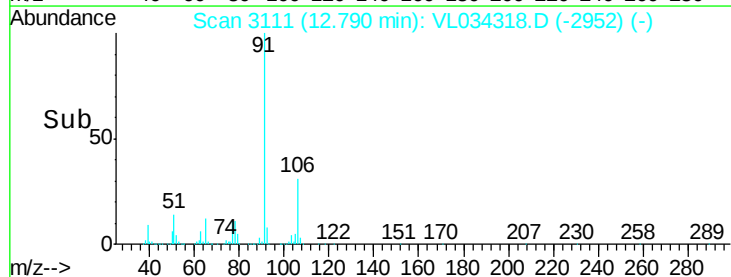
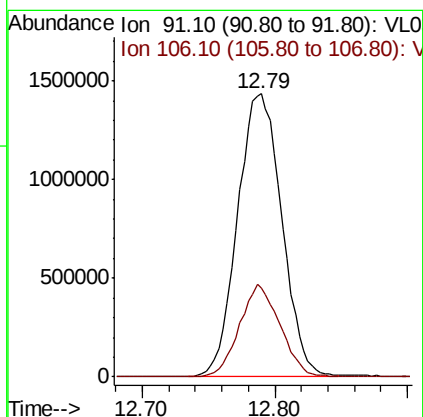
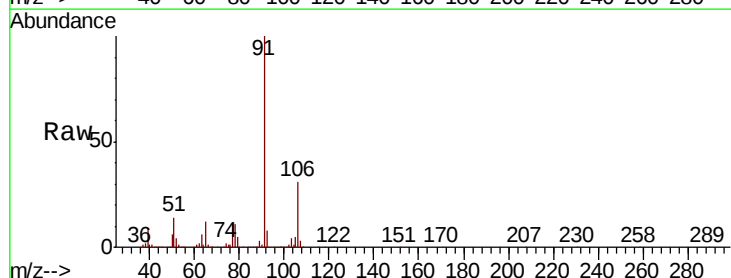
Manual Integrations  
APPROVED

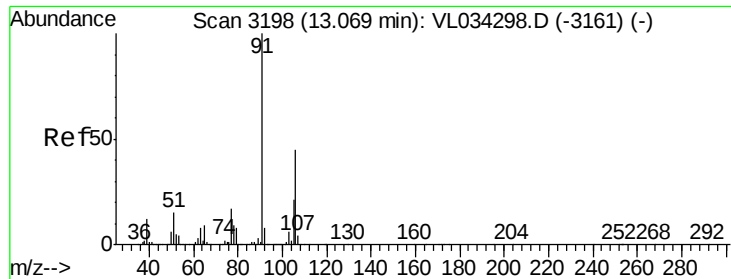
MMDadoda  
10/22/2019 2:54:36 PM



#58  
Ethyl Benzene  
Concen: 10.248 ppbv  
RT: 12.79 min Scan# 3111  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 106     | 31.2  | 25.3  | 37.9  |





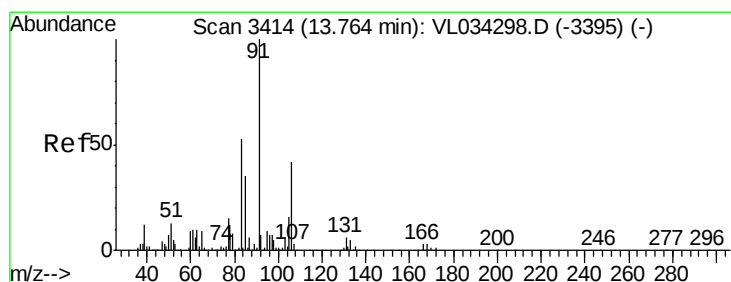
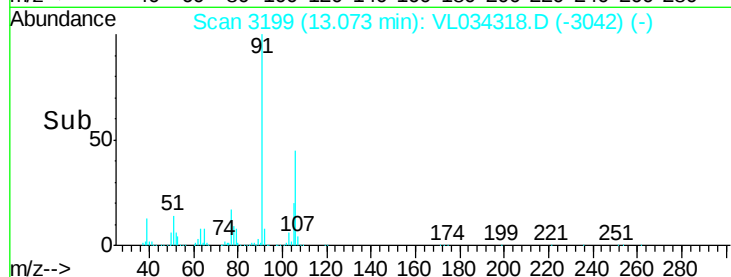
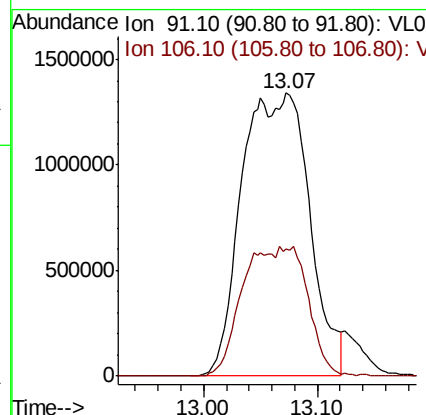
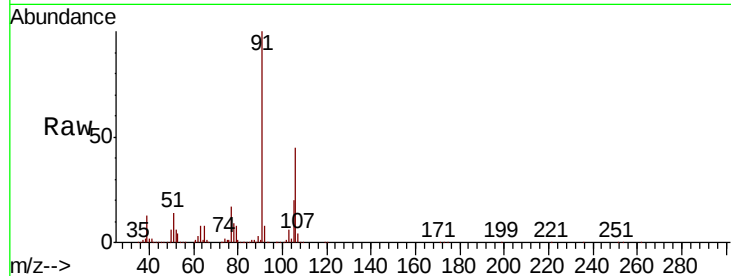
#59  
m/p-Xylene  
Concen: 19.727 ppbv m  
RT: 13.07 min Scan# 3199  
Delta R.T. 0.00 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

Tot Ion: 91 Resp: 5539360  
Ion Ratio Lower Upper  
91 100  
106 44.0 35.4 53.2

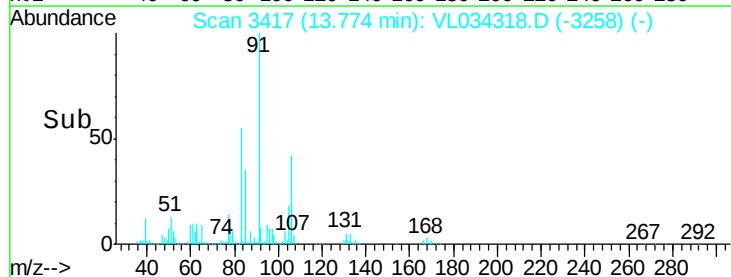
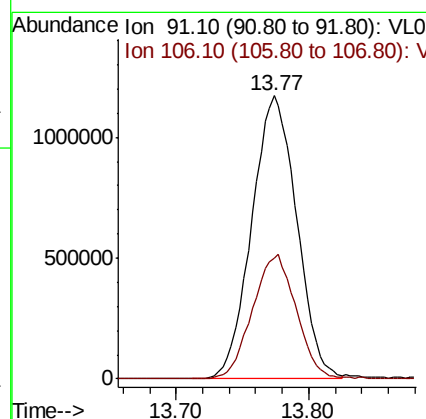
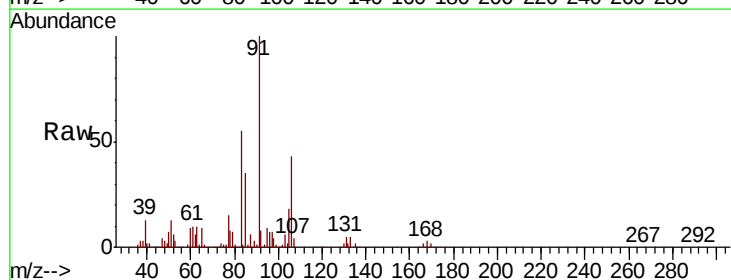
Manual Integrations  
APPROVED

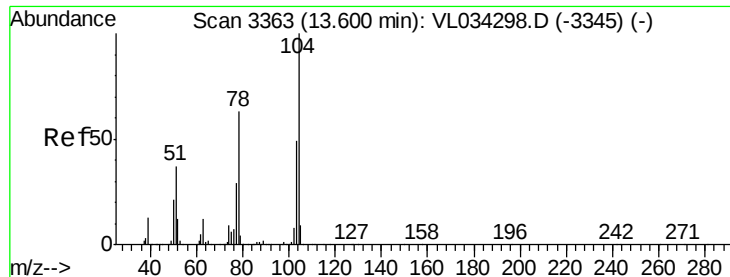
MMDadoda  
10/22/2019 2:54:36 PM



#60  
o-Xylene  
Concen: 9.862 ppbv  
RT: 13.77 min Scan# 3417  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Tgt Ion: 91 Resp: 2757552  
Ion Ratio Lower Upper  
91 100  
106 43.0 21.6 64.6





#61

Stvrene

Concen: 10.577 ppbv

RT: 13.61 min Scan# 3366

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion:104 Resp: 2082178

Ion Ratio Lower Upper

104 100

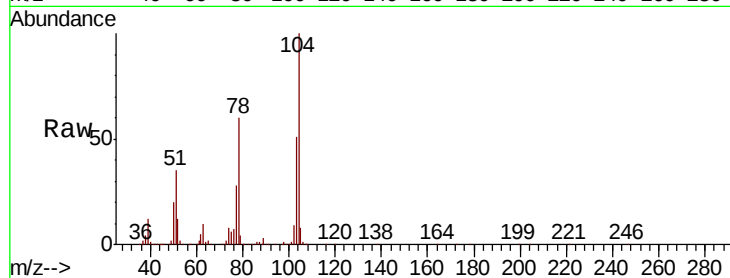
78 59.6 47.8 71.8

103 48.6 39.0 58.6

Manual Integrations  
APPROVED

MMDadoda

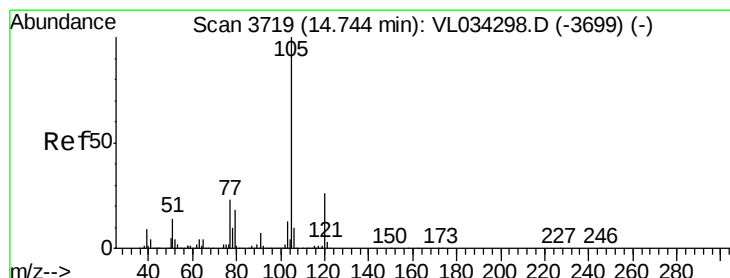
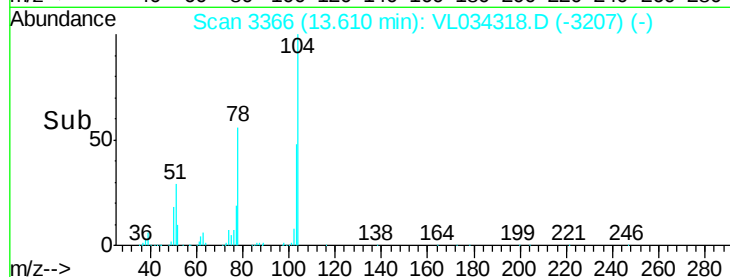
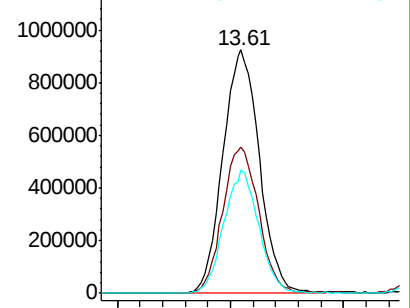
10/22/2019 2:54:36 PM



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 9.771 ppbv

RT: 14.75 min Scan# 3721

Delta R.T. 0.01 min

Lab File: VL034318.D

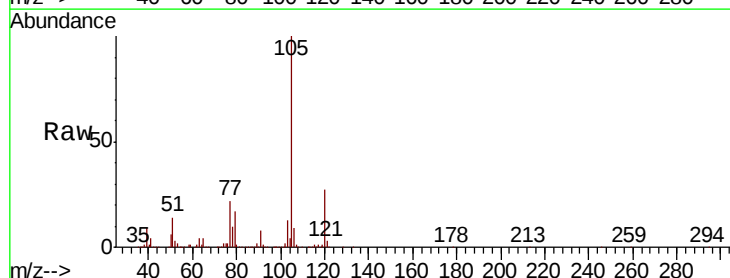
Acq: 17 Oct 2019 15:22

Tgt Ion:105 Resp: 3606821

Ion Ratio Lower Upper

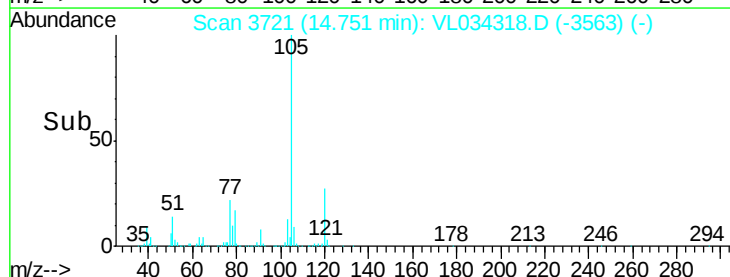
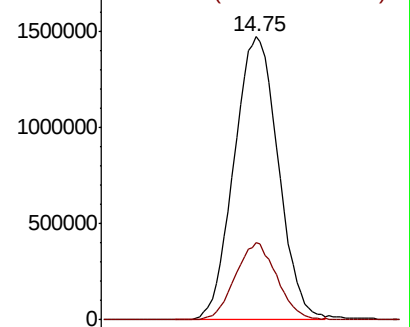
105 100

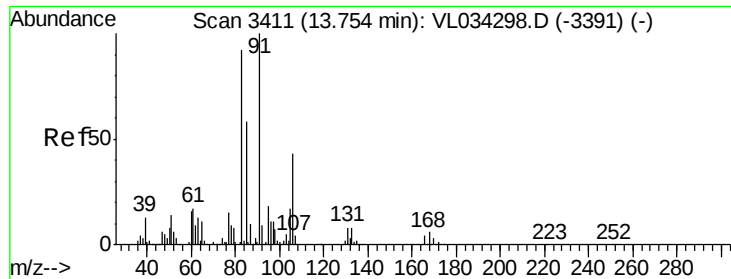
120 26.1 20.8 31.2



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#63

1,1,2,2-Tetrachloroethane

Concen: 8.886 ppbv

RT: 13.76 min Scan# 3414

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion: 83 Resp: 1996648

Ion Ratio Lower Upper

83 100

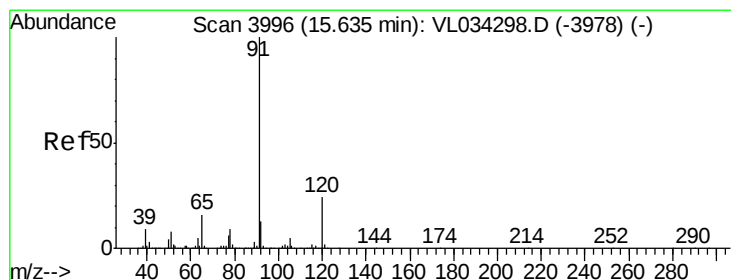
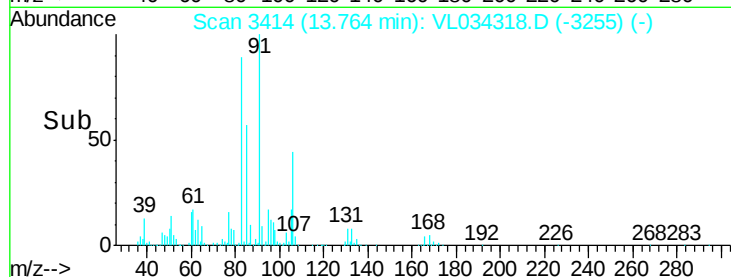
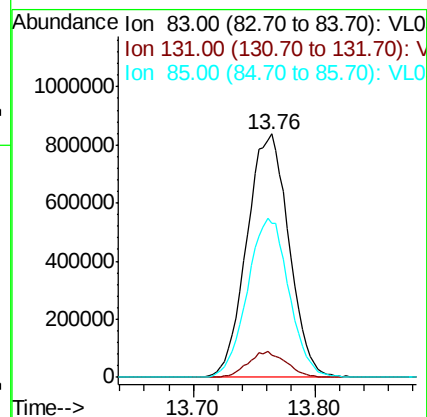
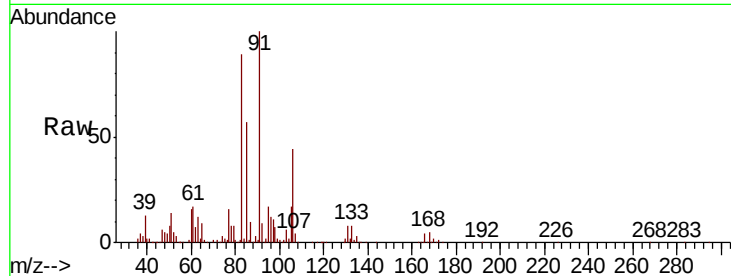
131 9.7 4.8 14.4

85 64.7 32.5 97.4

Manual Integrations  
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#64

n-propylbenzene

Concen: 10.228 ppbv

RT: 15.65 min Scan# 4000

Delta R.T. 0.01 min

Lab File: VL034318.D

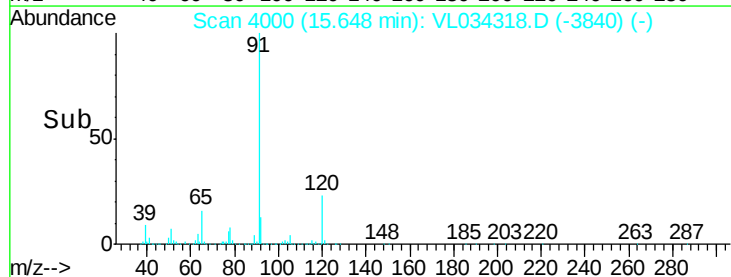
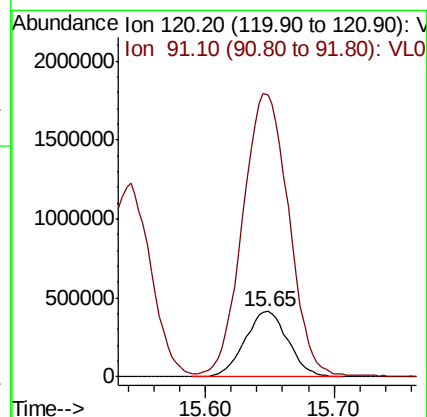
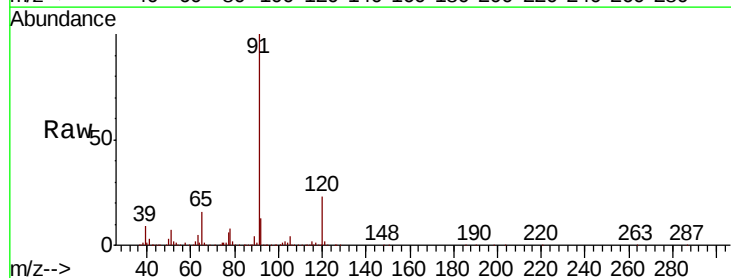
Acq: 17 Oct 2019 15:22

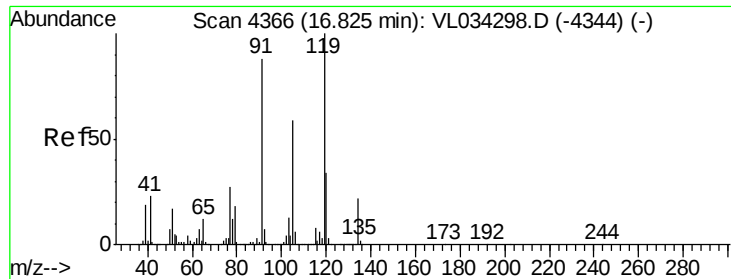
Tgt Ion:120 Resp: 968865

Ion Ratio Lower Upper

120 100

91 464.3 374.9 562.3





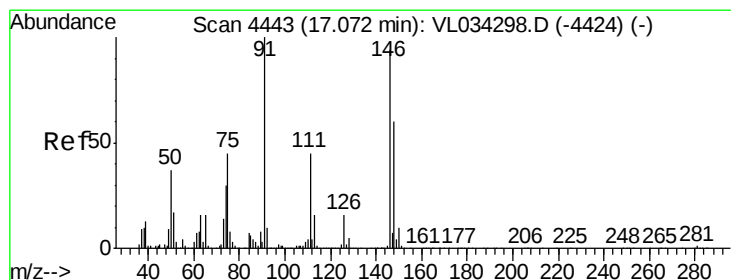
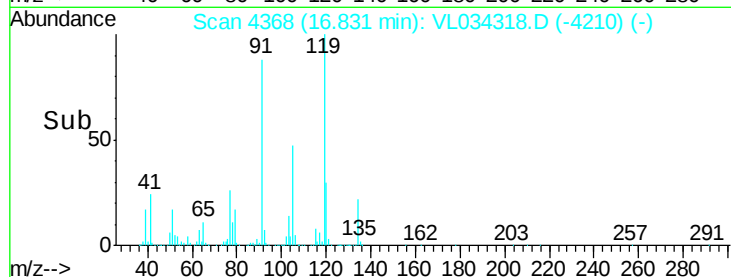
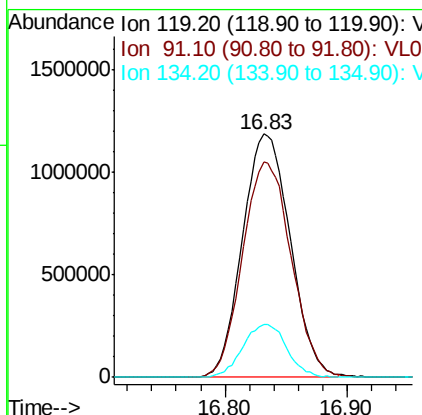
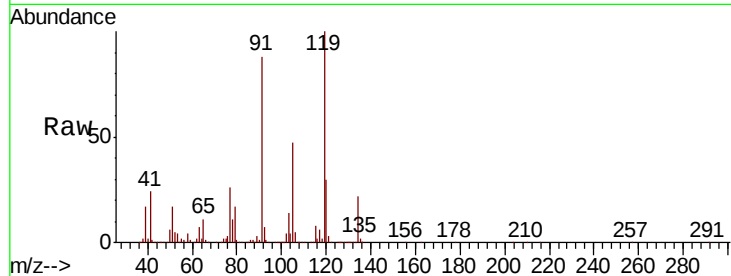
#65  
tert-Butylbenzene  
Concen: 9.828 ppbv  
RT: 16.83 min Scan# 4368  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

Tot Ion:119 Resp: 3215202  
Ion Ratio Lower Upper  
119 100  
91 90.4 71.4 107.0  
134 20.1 15.9 23.9

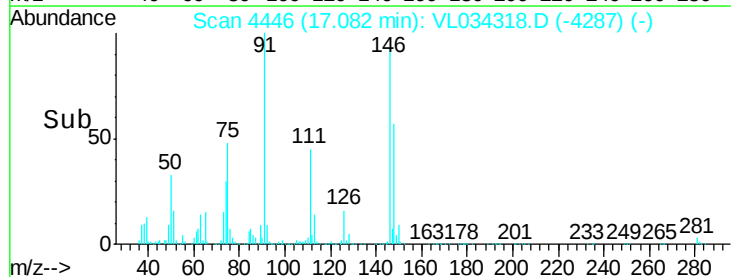
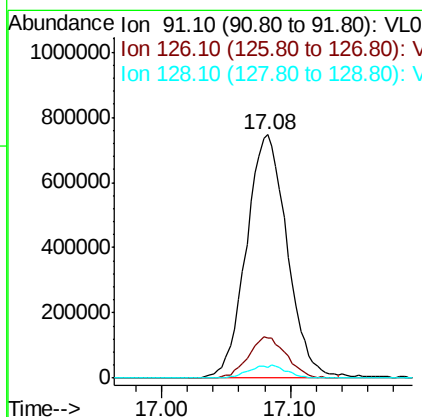
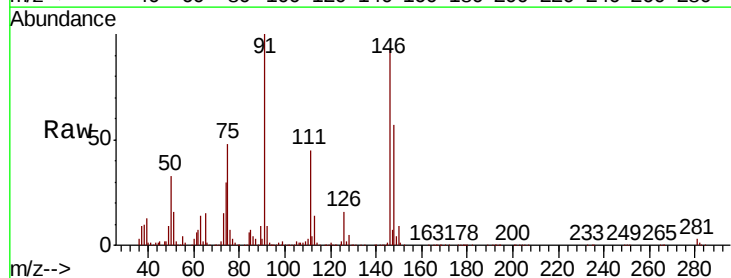
Manual Integrations  
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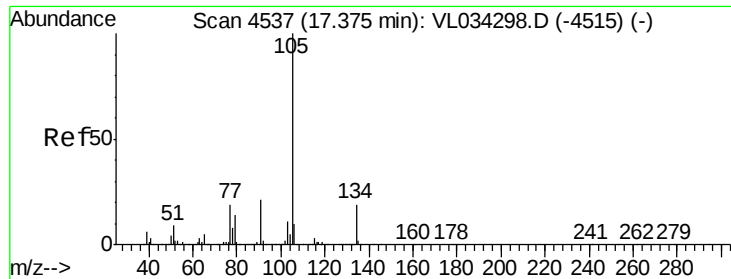
MMDadoda  
10/22/2019 2:54:36 PM



#66  
Benzyl Chloride  
Concen: 12.716 ppbv  
RT: 17.08 min Scan# 4446  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Tgt Ion: 91 Resp: 1643031  
Ion Ratio Lower Upper  
91 100  
126 16.0 12.9 19.3  
128 5.1 4.3 6.5





#67

sec-Butylbenzene

Concen: 9.789 ppbv

RT: 17.38 min Scan# 4540

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion: 105 Resp: 4506751

Ion Ratio Lower Upper

105 100

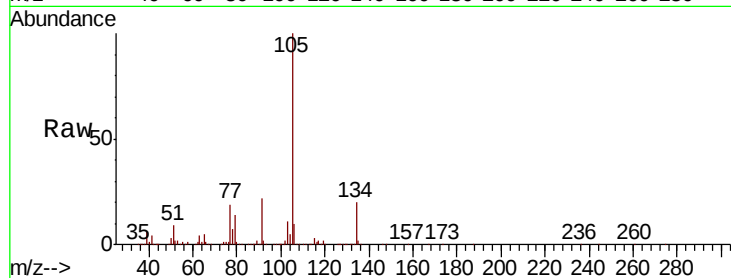
134 19.1 15.4 23.0

Manual Integrations

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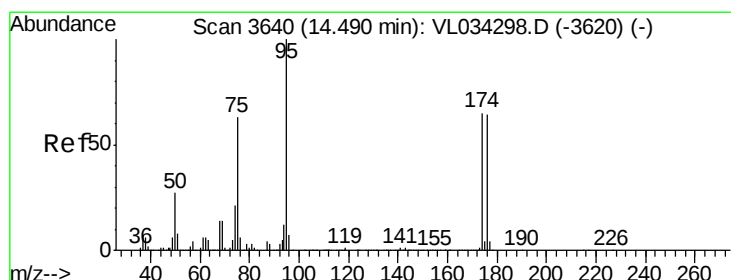
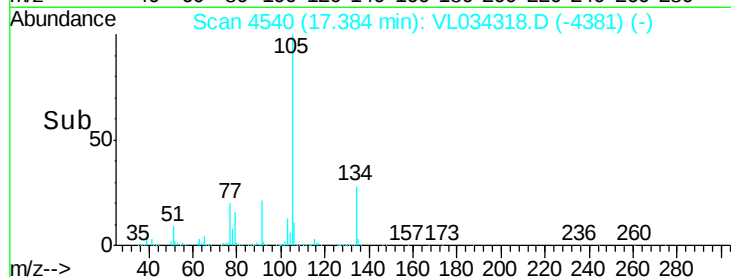
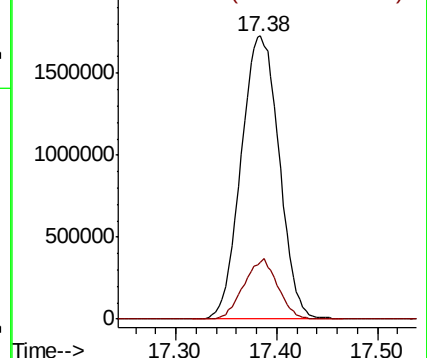
MMDadoda

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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: 9.523 ppbv

RT: 14.50 min Scan# 3644

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

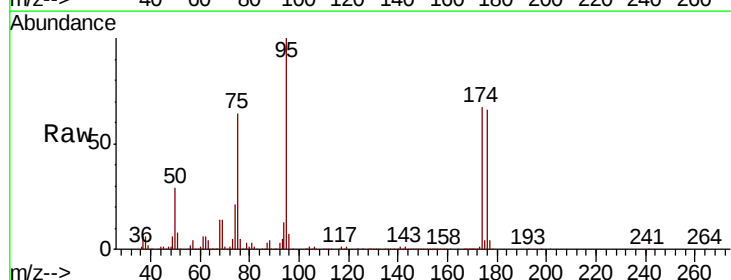
Tgt Ion: 95 Resp: 1869887

Ion Ratio Lower Upper

95 100

174 66.9 52.6 78.8

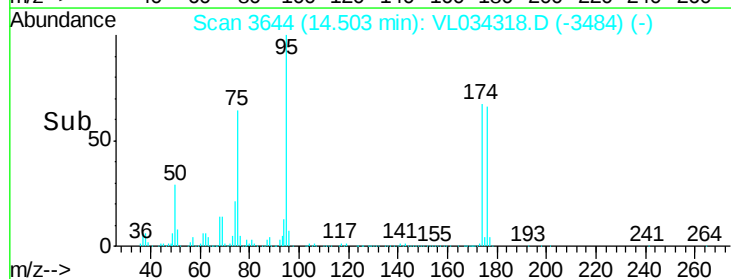
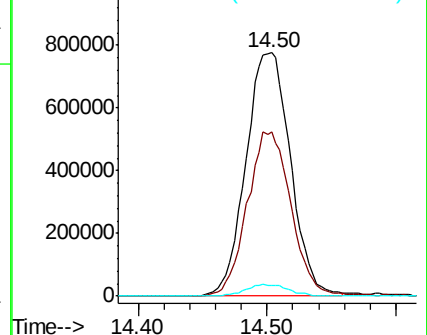
175 4.7 3.8 5.6

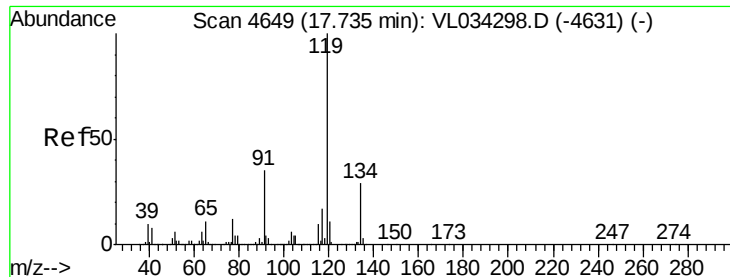


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





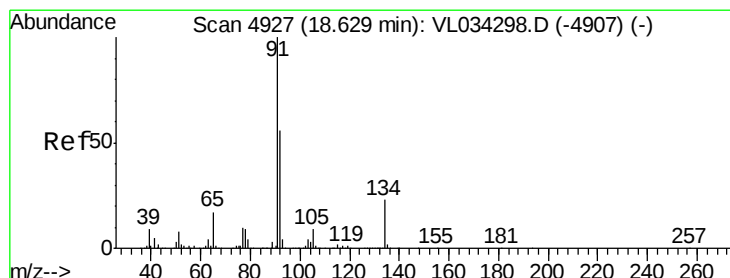
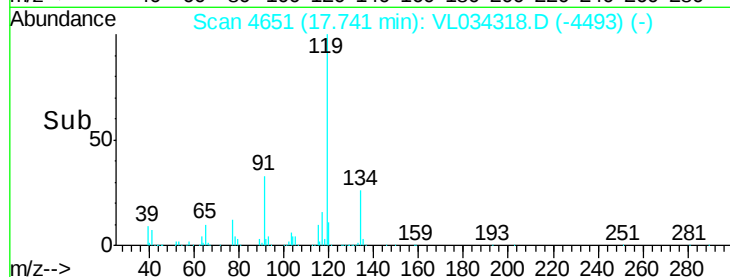
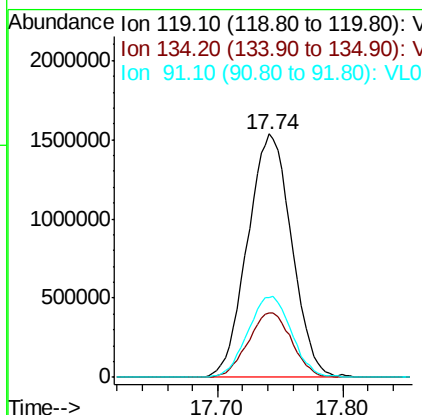
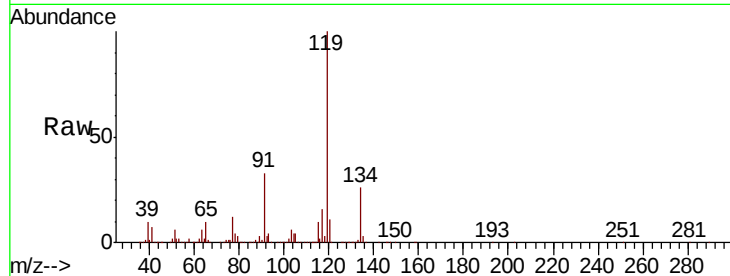
#69  
 p-Isopropyltoluene  
 Concen: 10.000 ppbv  
 RT: 17.74 min Scan# 4651  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 26.3  | 21.3  | 31.9  |
| 91      | 33.1  | 26.6  | 39.8  |

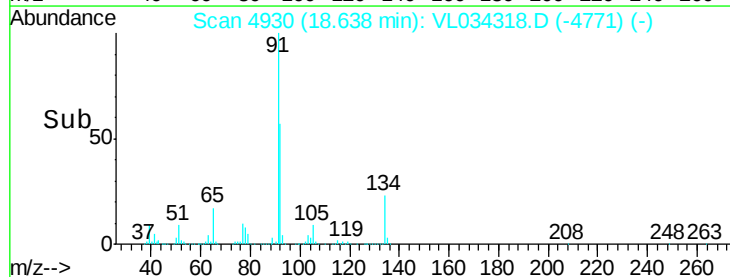
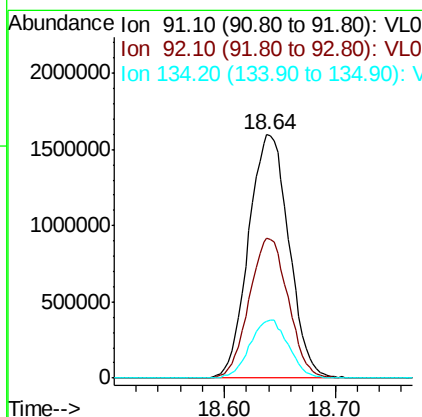
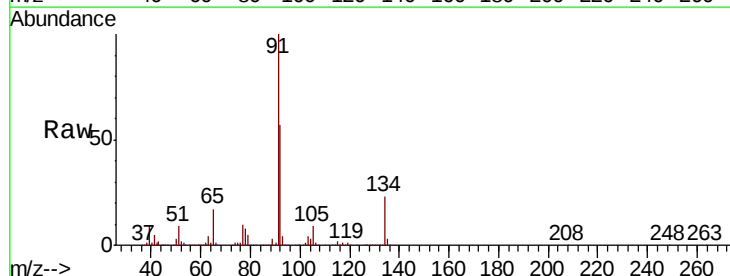
Manual Integrations  
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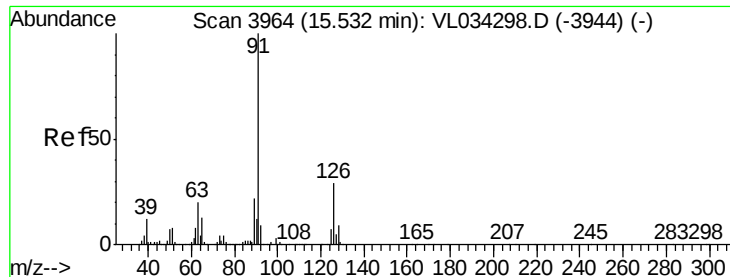
MMDadoda  
 10/22/2019 2:54:36 PM



#70  
 n-Butylbenzene  
 Concen: 9.900 ppbv  
 RT: 18.64 min Scan# 4930  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 55.7  | 44.5  | 66.7  |
| 134     | 22.8  | 18.2  | 27.2  |





#71

2-Chlorotoluene

Concen: 10.101 ppbv

RT: 15.54 min Scan# 3967

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Instrument :

MSVOA\_L

ClientSampleId :

VL1017ABS01

Tot Ion: 91 Resp: 2890878

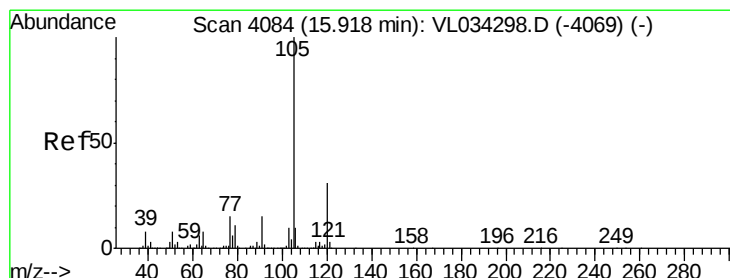
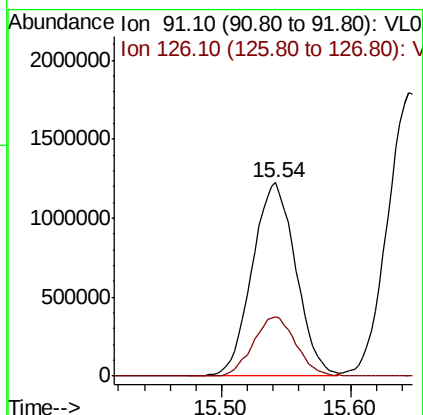
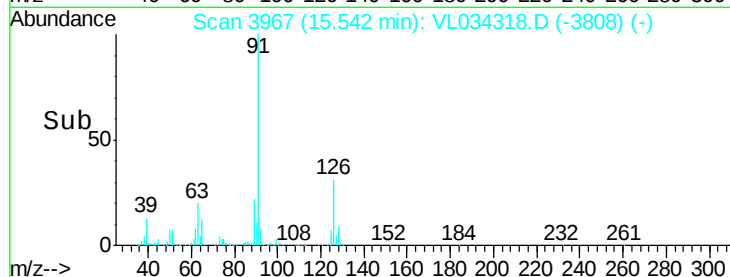
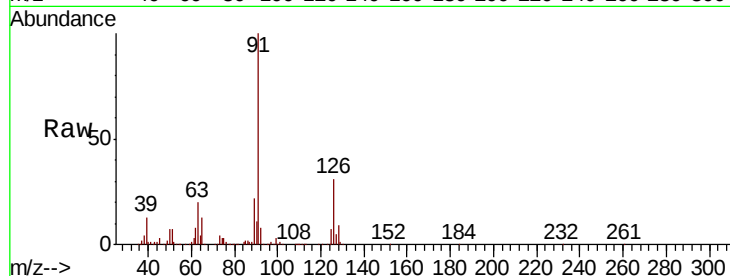
Ion Ratio Lower Upper

91 100

126 30.3 11.9 47.5

Manual Integrations  
APPROVED

MMDadoda  
10/22/2019 2:54:36 PM



#72

4-Ethyltoluene

Concen: 10.215 ppbv

RT: 15.92 min Scan# 4086

Delta R.T. 0.01 min

Lab File: VL034318.D

Acq: 17 Oct 2019 15:22

Tgt Ion: 105 Resp: 3210848

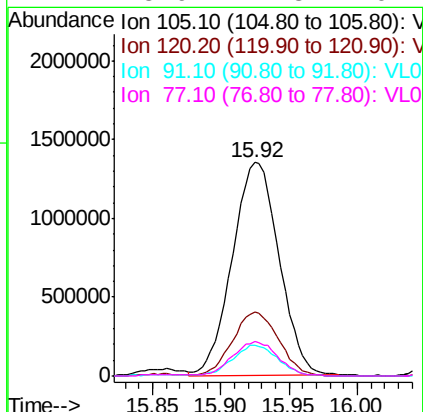
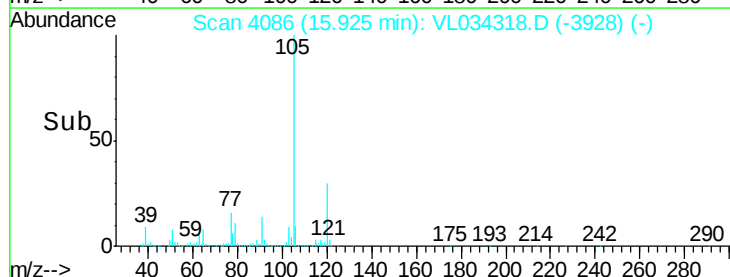
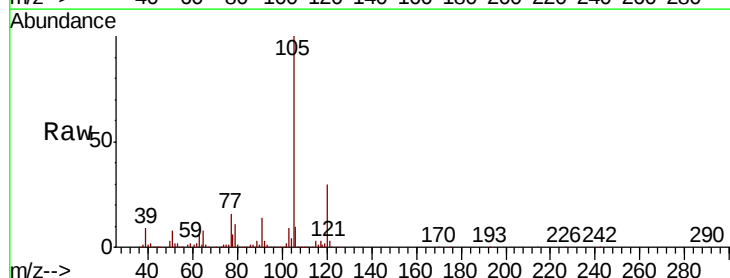
Ion Ratio Lower Upper

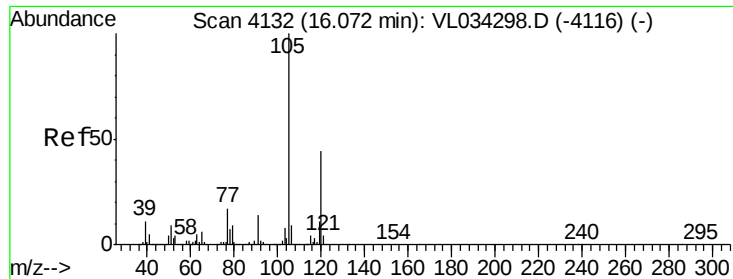
105 100

120 30.9 23.8 35.8

91 14.1 11.2 16.8

77 15.9 12.8 19.2





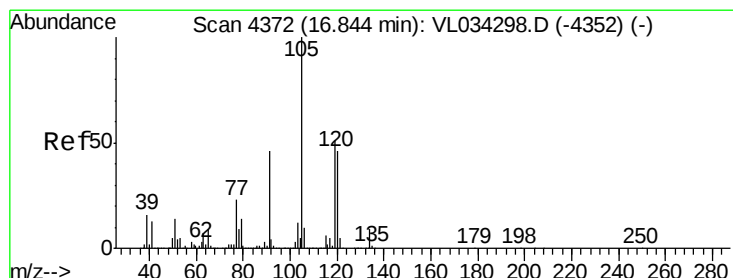
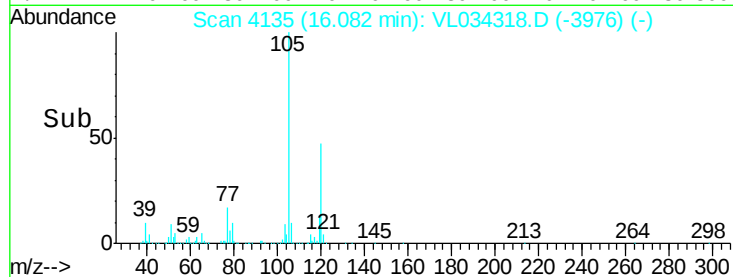
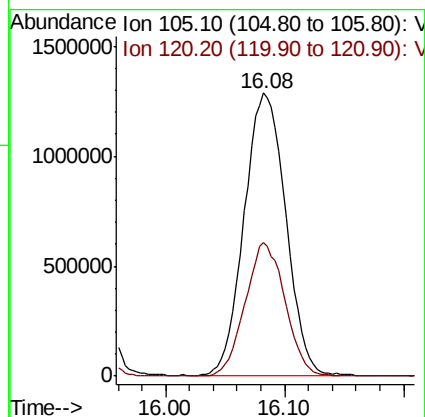
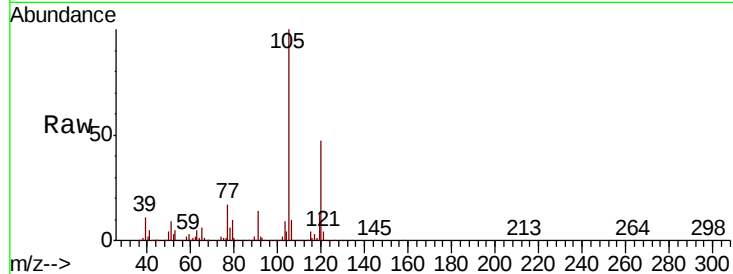
#73  
 1,3,5-Trimethylbenzene  
 Concen: 9.986 ppbv  
 RT: 16.08 min Scan# 4135  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

Tot Ion:105 Resp: 3109897  
 Ion Ratio Lower Upper  
 105 100  
 120 47.2 35.2 52.8

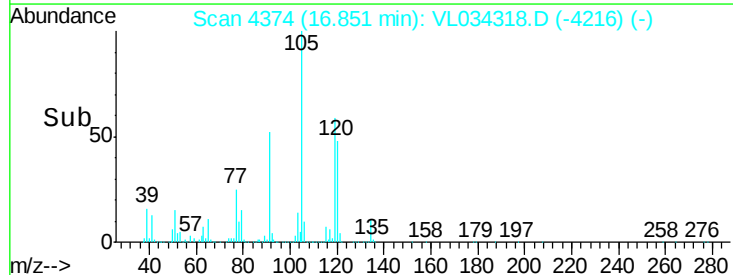
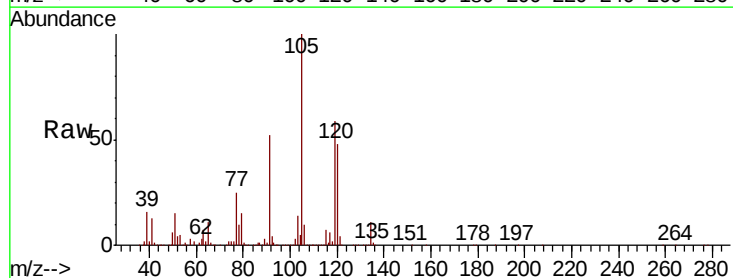
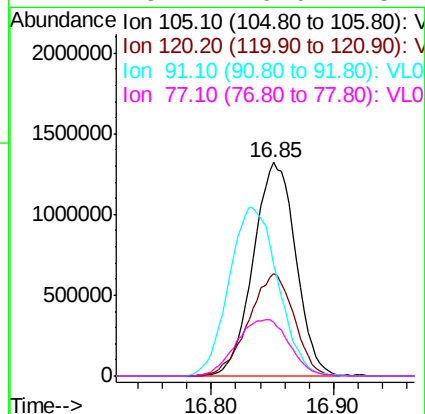
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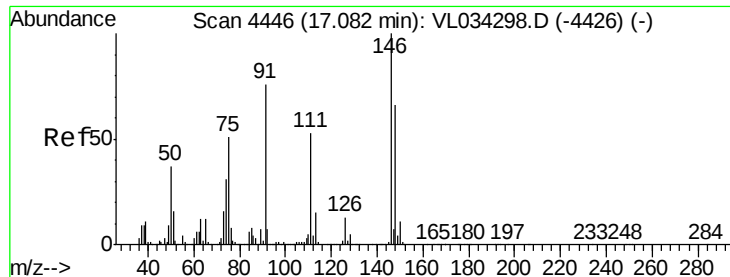
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#74  
 1,2,4-Trimethylbenzene  
 Concen: 9.809 ppbv  
 RT: 16.85 min Scan# 4374  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Tgt Ion:105 Resp: 3185761  
 Ion Ratio Lower Upper  
 105 100  
 120 47.6 37.0 55.6  
 91 51.7 38.2 57.2  
 77 25.2 19.0 28.4





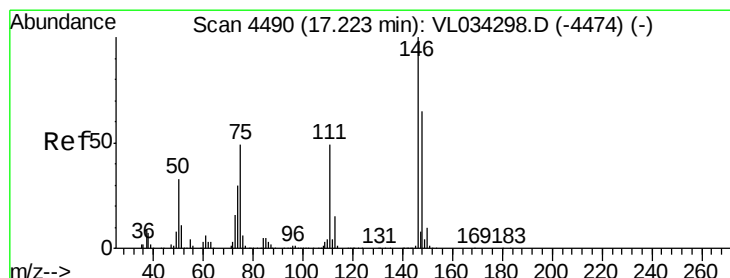
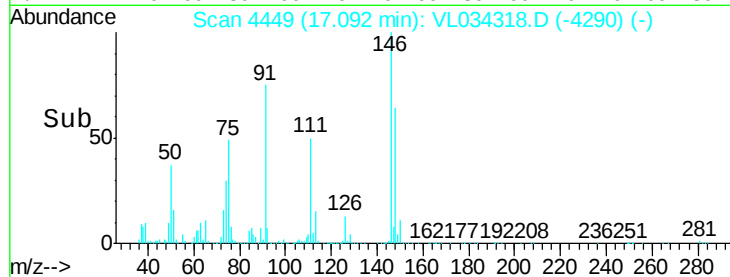
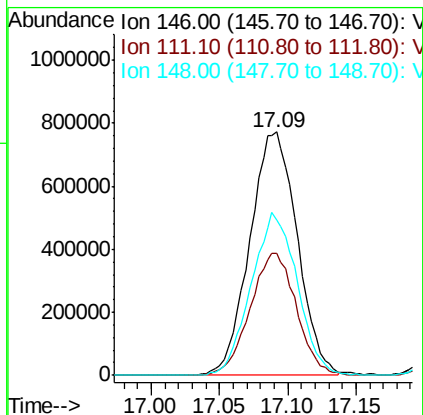
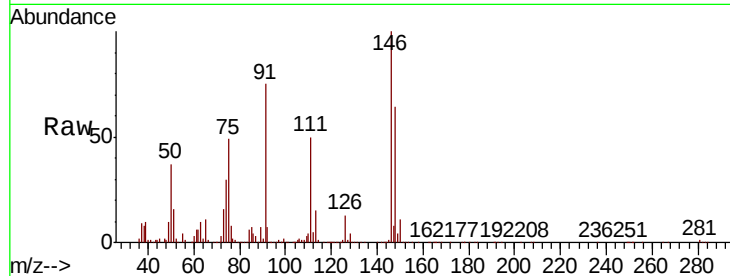
#75  
 1,3-Dichlorobenzene  
 Concen: 9.552 ppbv  
 RT: 17.09 min Scan# 4449  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 49.0  | 24.5  | 73.5  |
| 148     | 65.0  | 32.3  | 96.8  |

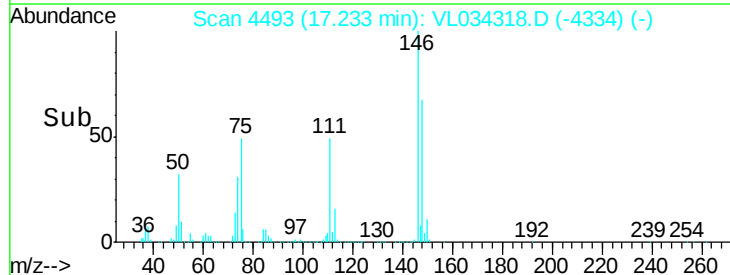
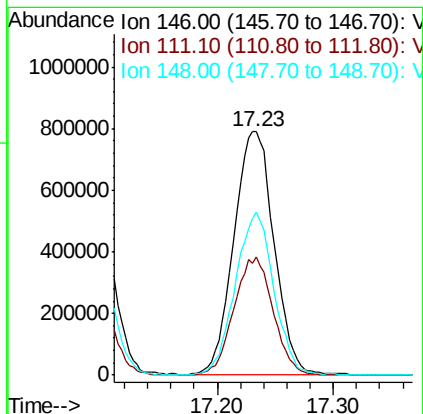
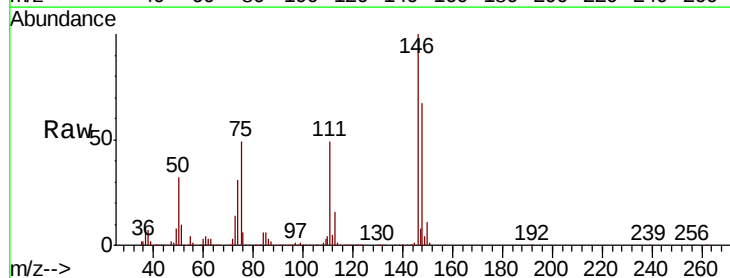
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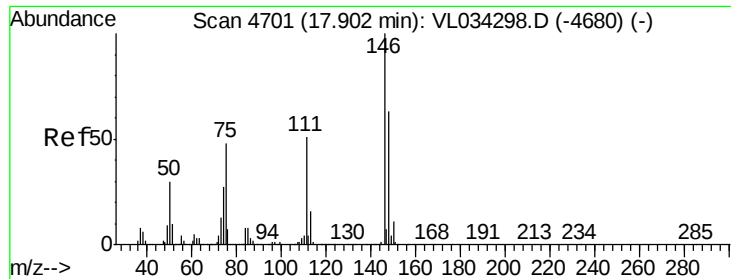
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#76  
 1,4-Dichlorobenzene  
 Concen: 9.896 ppbv  
 RT: 17.23 min Scan# 4493  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 47.7  | 23.9  | 71.7  |
| 148     | 64.8  | 33.1  | 99.2  |





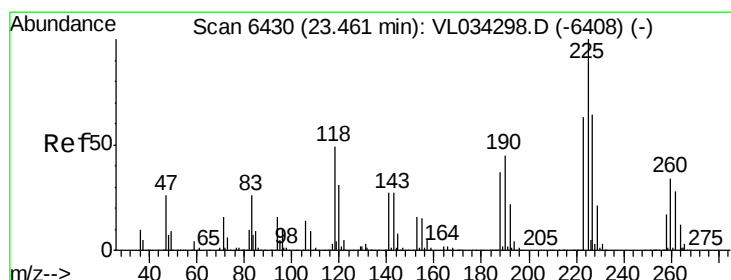
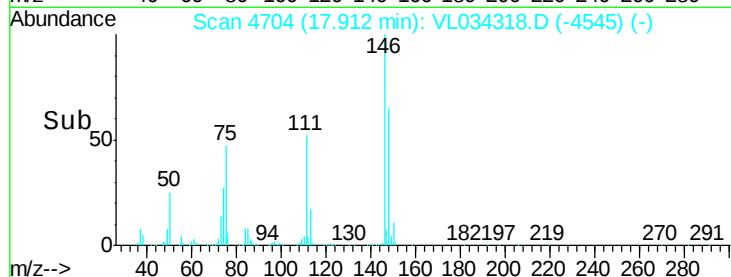
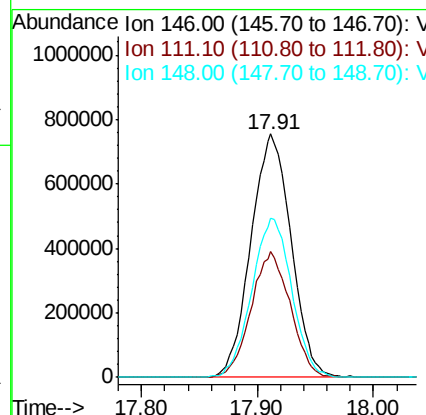
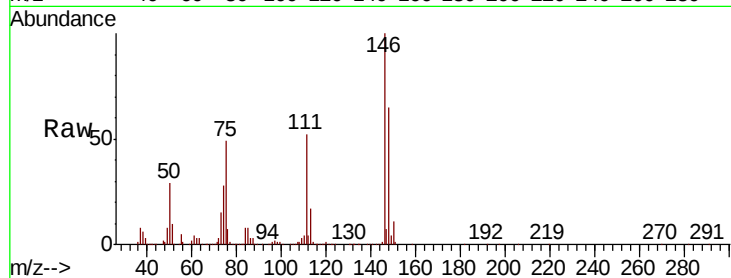
#77  
 1,2-Dichlorobenzene  
 Concen: 9.519 ppbv  
 RT: 17.91 min Scan# 4704  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 50.5  | 25.1  | 75.3  |
| 148     | 65.3  | 32.3  | 96.8  |

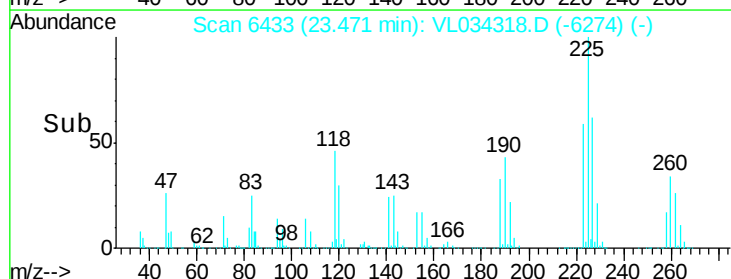
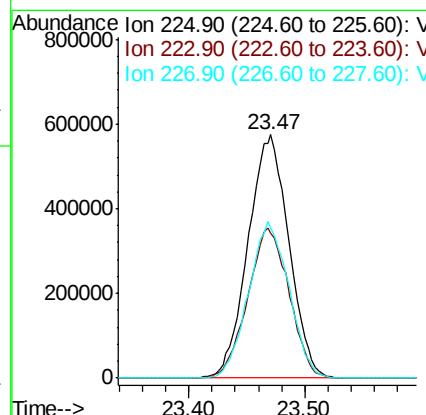
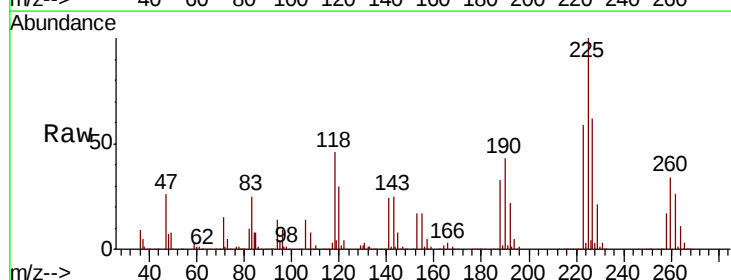
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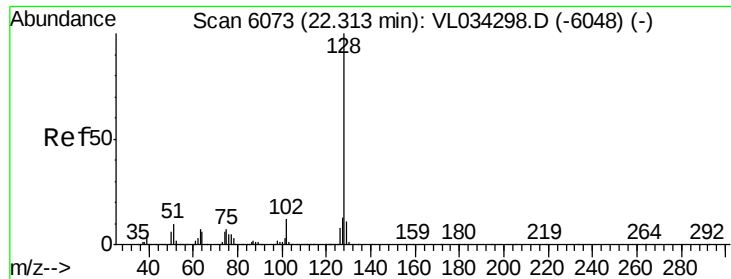
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#78  
 Hexachloro-1,3-Butadiene  
 Concen: 8.882 ppbv  
 RT: 23.47 min Scan# 6433  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 225     | 100   |       |       |
| 223     | 62.4  | 50.8  | 76.2  |
| 227     | 63.6  | 51.5  | 77.3  |





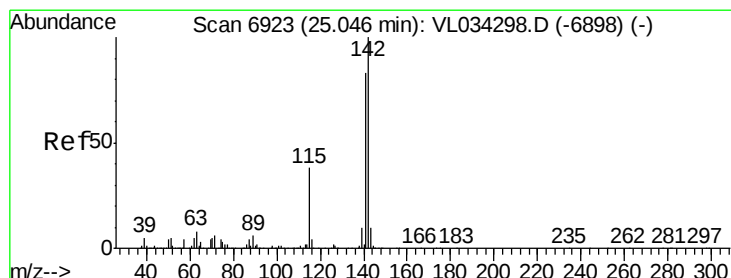
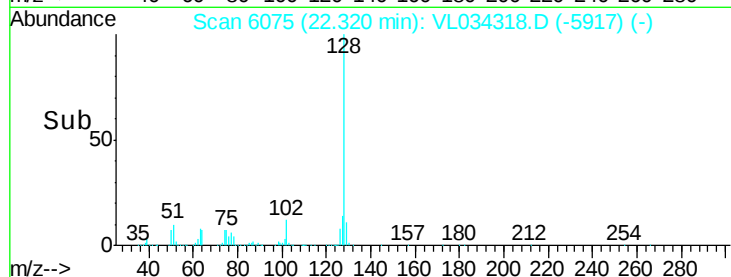
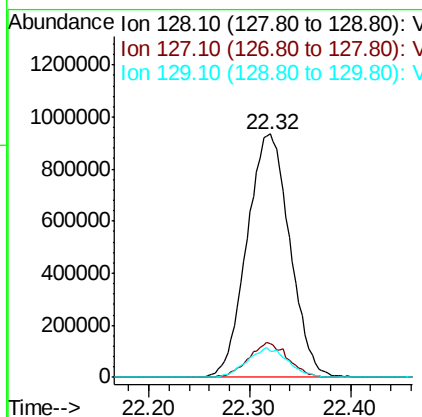
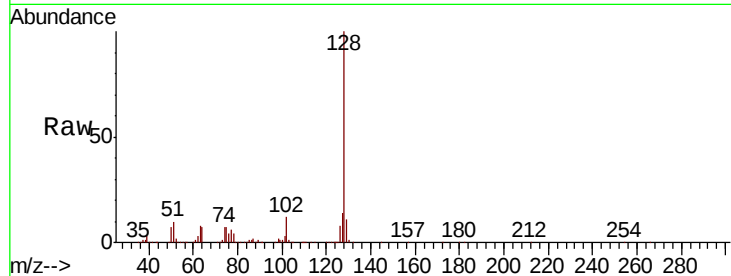
#79  
Naphthalene  
Concen: 11.608 ppbv  
RT: 22.32 min Scan# 6075  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL1017ABS01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 13.8  | 10.2  | 15.4  |
| 129     | 10.9  | 8.9   | 13.3  |

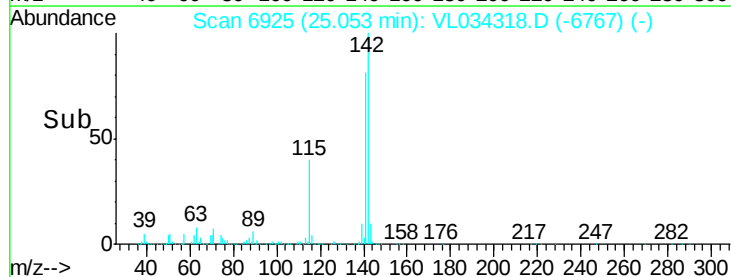
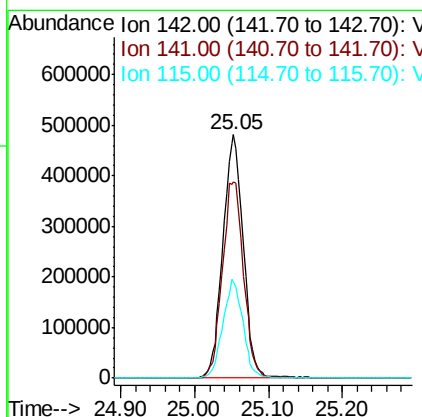
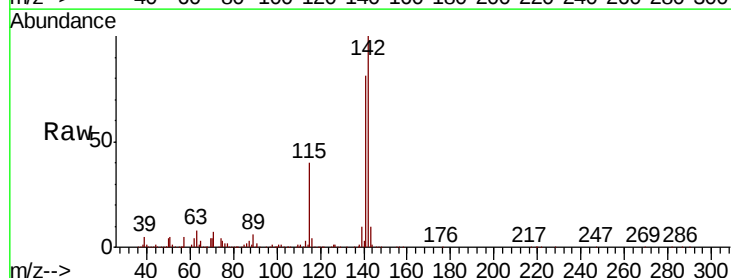
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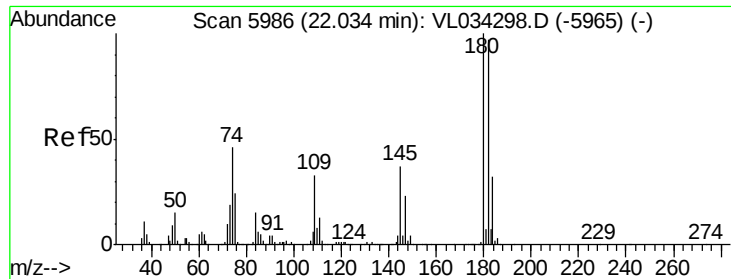
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#80  
Naphthalene, 2-methyl-  
Concen: 13.511 ppbv  
RT: 25.05 min Scan# 6925  
Delta R.T. 0.01 min  
Lab File: VL034318.D  
Acq: 17 Oct 2019 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 83.8  | 65.7  | 98.5  |
| 115     | 39.9  | 30.9  | 46.3  |





#81  
 1,2,4-Trichlorobenzene  
 Concen: 10.771 ppbv  
 RT: 22.04 min Scan# 5989  
 Delta R.T. 0.01 min  
 Lab File: VL034318.D  
 Acq: 17 Oct 2019 15:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL1017ABS01

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 180   | Resp: | 1669000 |
| Ion      | Ratio | Lower | Upper   |
| 180      | 100   |       |         |
| 182      | 95.7  | 77.8  | 116.8   |
| 184      | 31.2  | 25.4  | 38.2    |

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