

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD080119\  
 Data File : VD063297.D  
 Acq On : 1 Aug 2019 17:23  
 Operator : VA/AP  
 Sample : K4120-07  
 Misc : 5.13g/5ml/MSVOA D/SOIL  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 T3-1

Manual Integrations  
 APPROVED

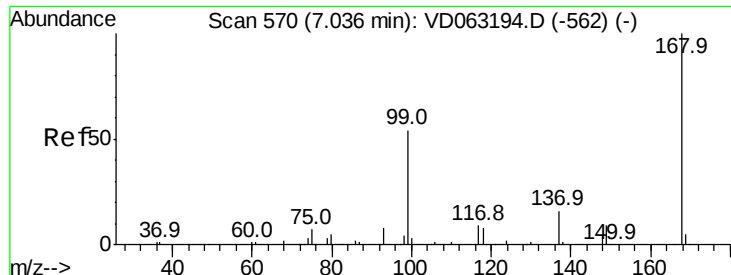
MMdadoda  
 8/3/2019 12:11:38 AM

Quant Time: Aug 02 08:17:31 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D072919S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 30 03:04:50 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|--------|------|----------|--------|--------|----------|
| 1) Pentafluorobenzene       | 7.04   | 168  | 803566   | 50.00  | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene     | 8.21   | 114  | 1259929  | 50.00  | ug/l   | 0.00     |
| 63) Chlorobenzene-d5        | 12.36  | 117  | 833179   | 50.00  | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 14.52  | 152  | 249189   | 50.00  | ug/l   | 0.00     |
| System Monitoring Compounds |        |      |          |        |        |          |
| 33) 1,2-Dichloroethane-d4   | 7.44   | 65   | 376727   | 42.25  | ug/l   | 0.00     |
| Spiked Amount               | 50.000 |      | Recovery | =      | 84.50% |          |
| 35) Dibromofluoromethane    | 6.91   | 113  | 424285   | 39.44  | ug/l   | 0.00     |
| Spiked Amount               | 50.000 |      | Recovery | =      | 78.88% |          |
| 50) Toluene-d8              | 10.40  | 98   | 782794   | 32.52  | ug/l   | 0.00     |
| Spiked Amount               | 50.000 |      | Recovery | =      | 65.04% |          |
| 62) 4-Bromofluorobenzene    | 13.55  | 95   | 258568   | 23.57  | ug/l   | 0.00     |
| Spiked Amount               | 50.000 |      | Recovery | =      | 47.14% |          |
| Target Compounds            |        |      |          |        |        |          |
|                             |        |      |          |        | Qvalue |          |
| 16) Acetone                 | 3.22   | 43   | 78946    | 45.443 | ug/l   | 98       |
| 31) Cyclohexane             | 6.95   | 56   | 704871   | 88.749 | ug/l   | 96       |
| 39) Methylcyclohexane       | 8.85   | 83   | 251049   | 26.205 | ug/l # | 94       |
| 40) Benzene                 | 7.44   | 78   | 1555918  | 64.565 | ug/l   | 99       |
| 52) Toluene                 | 10.50  | 92   | 298222   | 18.606 | ug/l   | 99       |
| 67) Ethyl Benzene           | 12.52  | 91   | 988334   | 36.304 | ug/l   | 99       |
| 68) m/p-Xylenes             | 12.66  | 106  | 264701   | 26.513 | ug/l   | 94       |
| 69) o-Xylene                | 13.04  | 106  | 76956    | 8.394  | ug/l   | 87       |
| 73) Isopropylbenzene        | 13.40  | 105  | 51767    | 3.310  | ug/l   | 89       |
| 78) n-propylbenzene         | 13.77  | 91   | 95032    | 5.106  | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene  | 13.93  | 105  | 79569    | 5.899  | ug/l   | 92       |
| 84) 1,2,4-Trimethylbenzene  | 14.23  | 105  | 220574   | 15.809 | ug/l   | 99       |
| 85) sec-Butylbenzene        | 14.36  | 105  | 17955    | 1.106  | ug/l   | 94       |
| 89) n-Butylbenzene          | 14.79  | 91   | 17098m   | 1.278  | ug/l   |          |
| 95) Naphthalene             | 16.12  | 128  | 32116    | 4.167  | ug/l # | 88       |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.04 min Scan# 570

Delta R.T. -0.00 min

Lab File: VD063297.D

Acq: 1 Aug 2019 17:23

Instrument :

MSVOA\_D

ClientSampled :

T3-1

Tot Ion:168 Resp: 803566

Ion Ratio Lower Upper

168 100

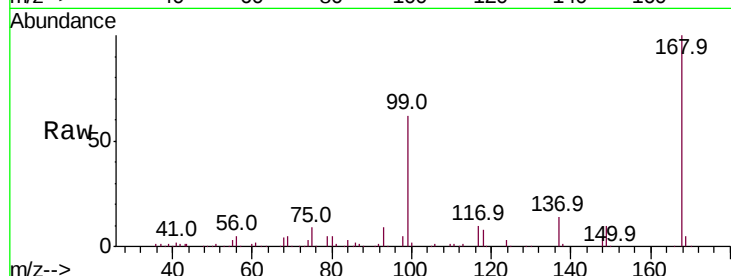
99 61.9 43.7 65.5

Manual Integrations

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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.04

300000

250000

200000

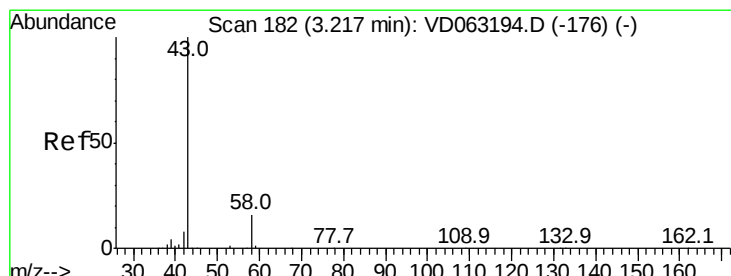
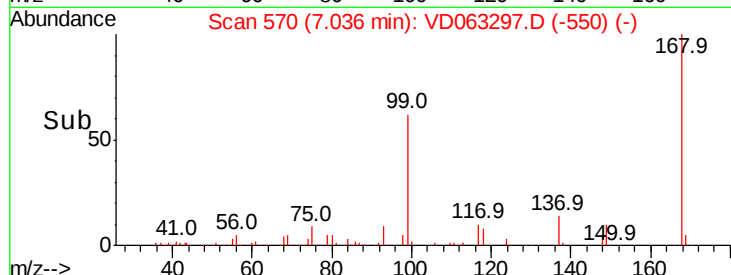
150000

100000

50000

0

Time-->



#16

Acetone

Concen: 45.443 ug/l

RT: 3.22 min Scan# 182

Delta R.T. -0.00 min

Lab File: VD063297.D

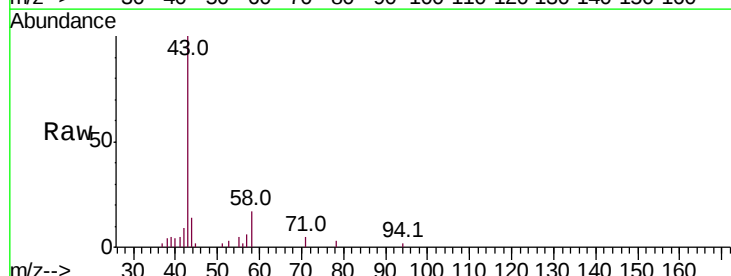
Acq: 1 Aug 2019 17:23

Tgt Ion: 43 Resp: 78946

Ion Ratio Lower Upper

43 100

58 16.9 13.0 19.4



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC

3.22

20000

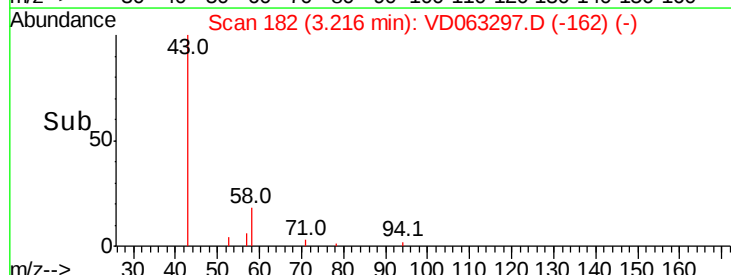
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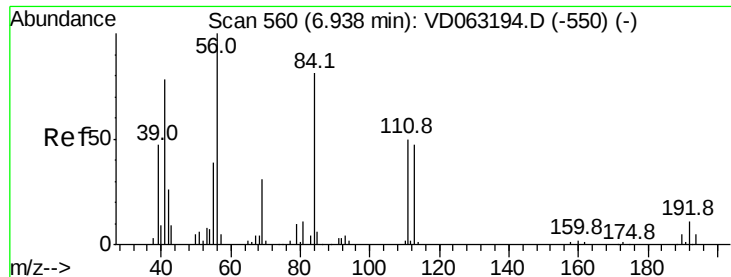
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5000

0

Time-->





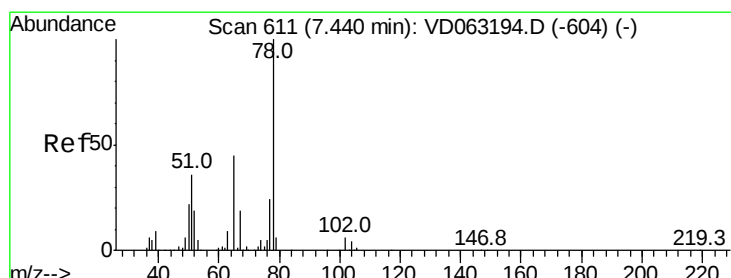
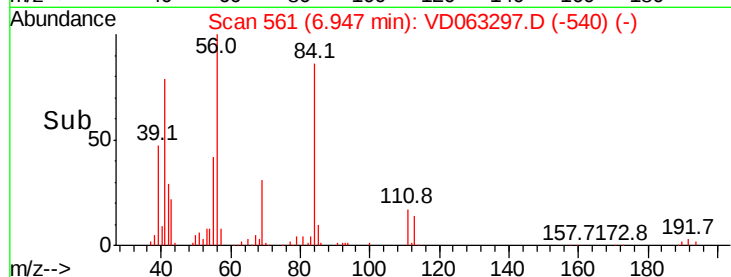
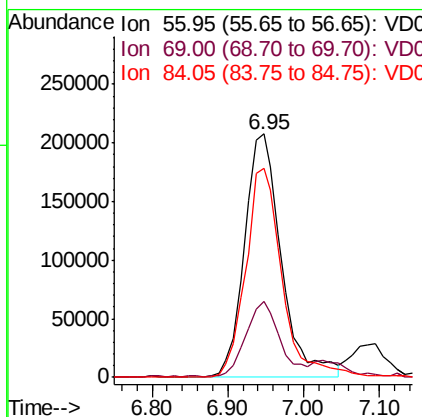
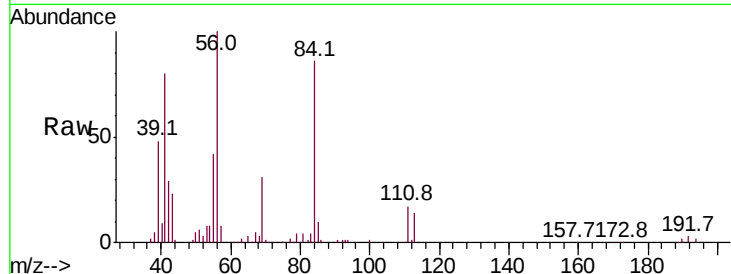
#31  
Cyclohexane  
Concen: 88.749 ug/l  
RT: 6.95 min Scan# 561  
Delta R.T. 0.01 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

Instrument :  
MSVOA\_D  
ClientSampled :  
T3-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 31.4  | 24.5  | 36.7  |
| 84      | 85.9  | 64.9  | 97.3  |

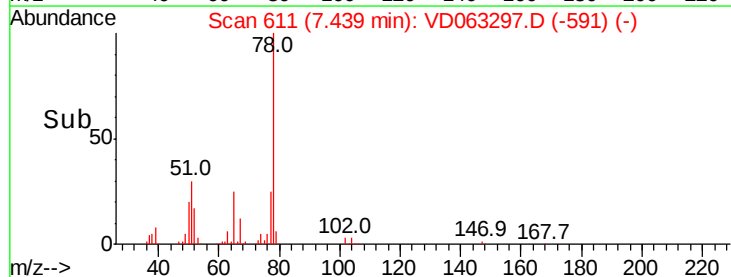
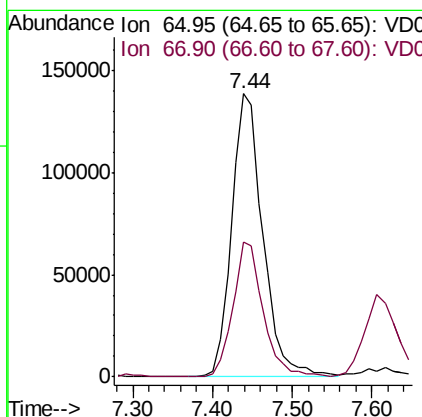
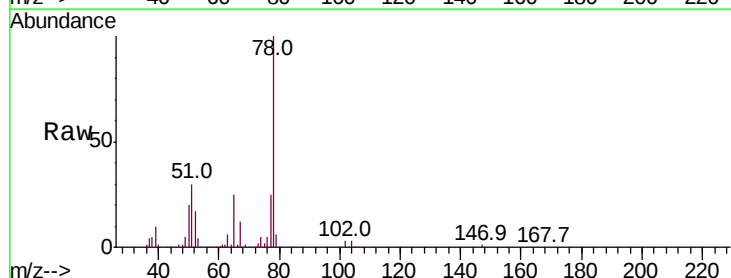
Manual Integrations  
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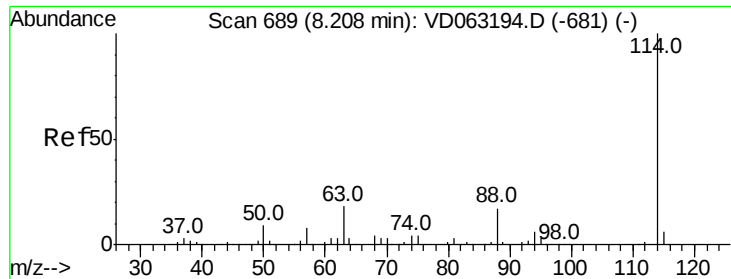
MMDadoda  
8/3/2019 12:11:38 AM



#33  
1,2-Dichloroethane-d4  
Concen: 42.251 ug/l  
RT: 7.44 min Scan# 611  
Delta R.T. -0.00 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 65      | 100   |       |       |
| 67      | 47.9  | 0.0   | 85.8  |





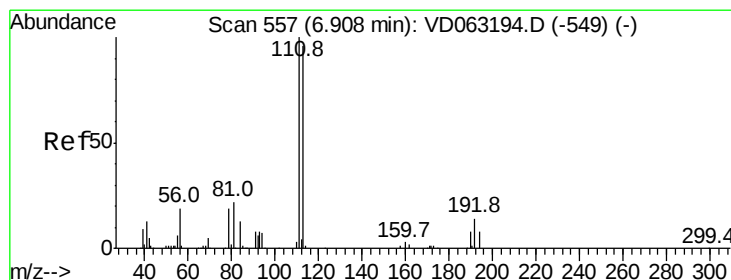
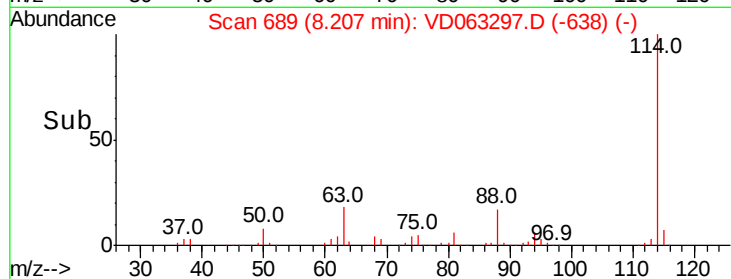
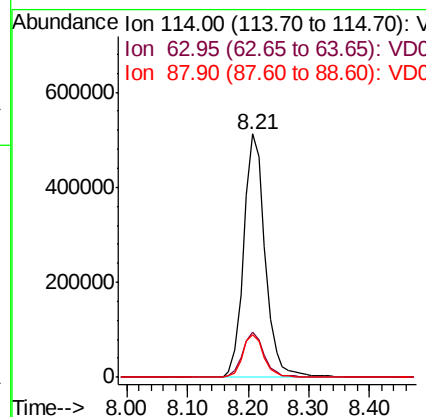
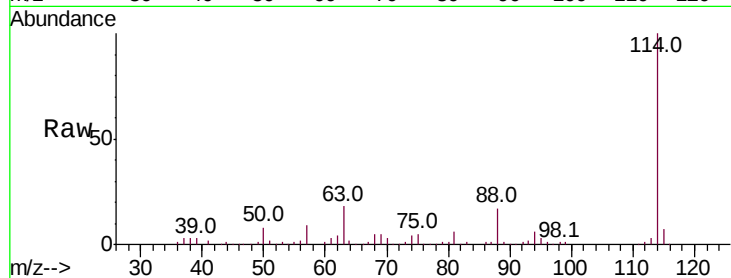
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.21 min Scan# 689  
 Delta R.T. -0.00 min  
 Lab File: VD063297.D  
 Acq: 1 Aug 2019 17:23

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
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| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 18.3  | 0.0   | 35.2  |
| 88      | 17.3  | 0.0   | 34.6  |

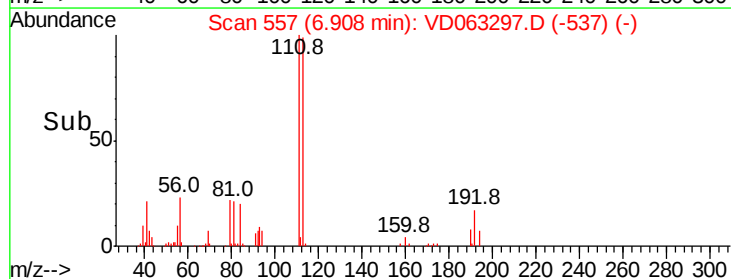
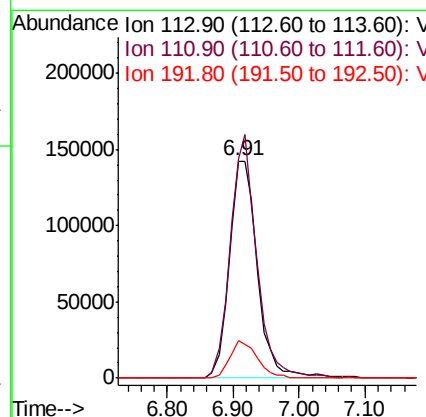
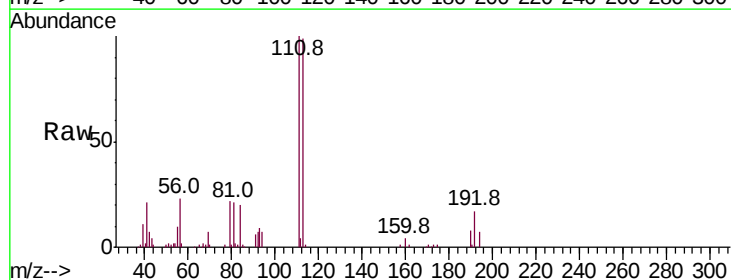
Manual Integrations  
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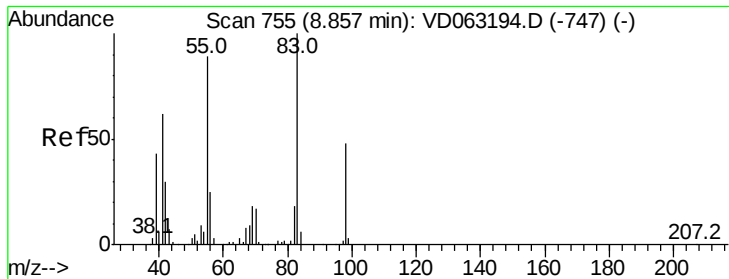
MMDadoda  
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#35  
 Dibromofluoromethane  
 Concen: 39.442 ug/l  
 RT: 6.91 min Scan# 557  
 Delta R.T. -0.00 min  
 Lab File: VD063297.D  
 Acq: 1 Aug 2019 17:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 101.3 | 83.2  | 124.8 |
| 192     | 17.3  | 11.8  | 17.8  |





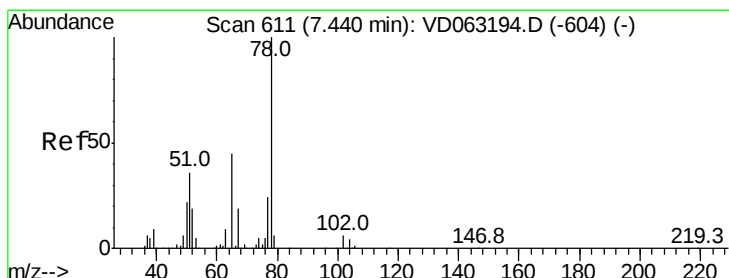
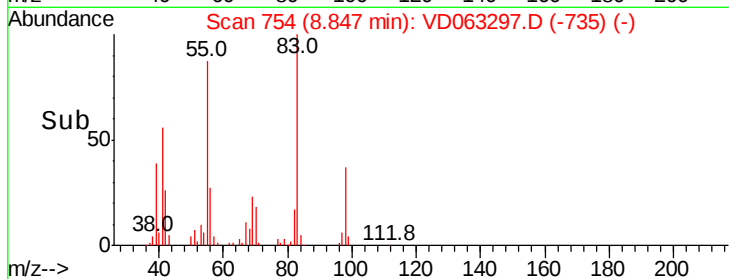
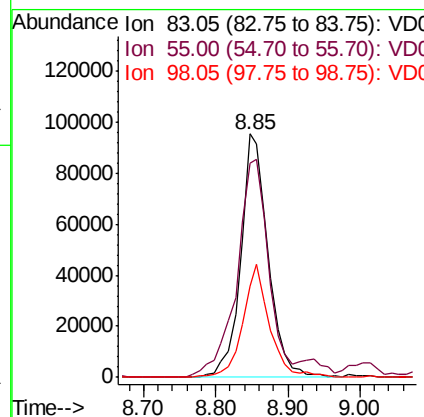
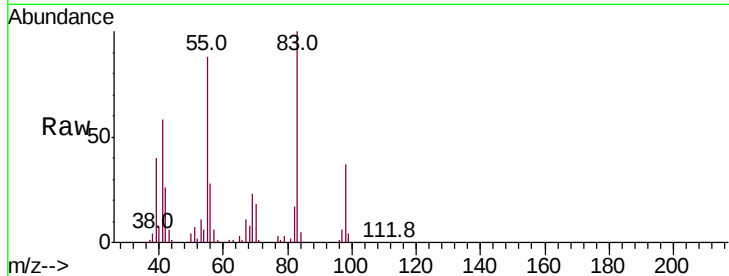
#39  
Methvlcvclohexane  
Concen: 26.205 ug/l  
RT: 8.85 min Scan# 754  
Delta R.T. -0.01 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

Instrument :  
MSVOA\_D  
ClientSampleId :  
T3-1

| Tot Ion | 83 | Ratio | 100 | Resp  | 251049 |
|---------|----|-------|-----|-------|--------|
| Ion     | 83 | 100   |     | Lower | Upper  |
|         | 55 | 87.8  |     | 71.1  | 106.7  |
|         | 98 | 37.3  |     | 38.5  | 57.7#  |

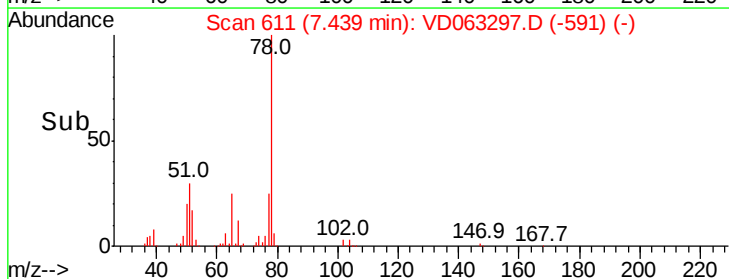
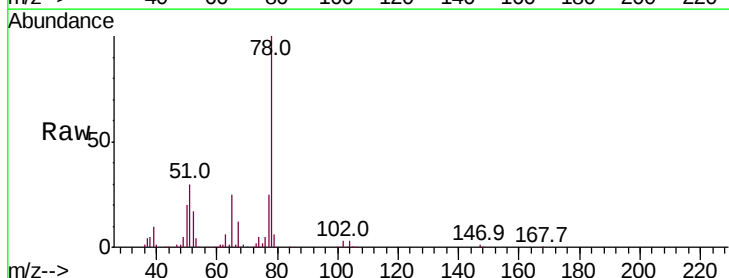
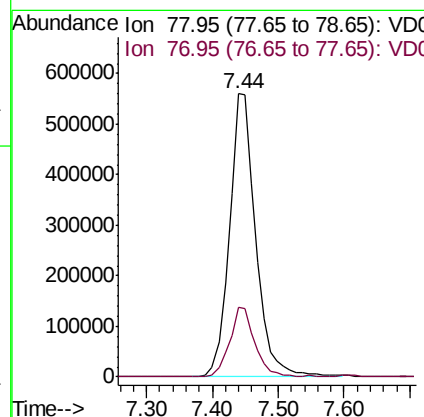
Manual Integrations  
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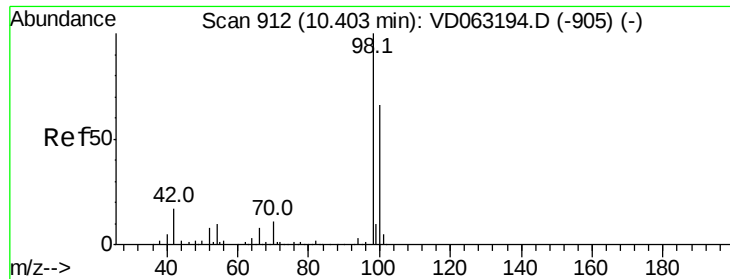
MMDadoda  
8/3/2019 12:11:38 AM



#40  
Benzene  
Concen: 64.565 ug/l  
RT: 7.44 min Scan# 611  
Delta R.T. -0.00 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

| Tgt Ion | 78 | Ratio | 100 | Resp  | 1555918 |
|---------|----|-------|-----|-------|---------|
| Ion     | 78 | 100   |     | Lower | Upper   |
|         | 77 | 24.6  |     | 19.4  | 29.2    |





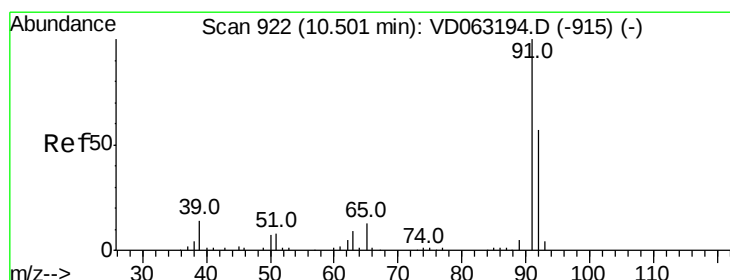
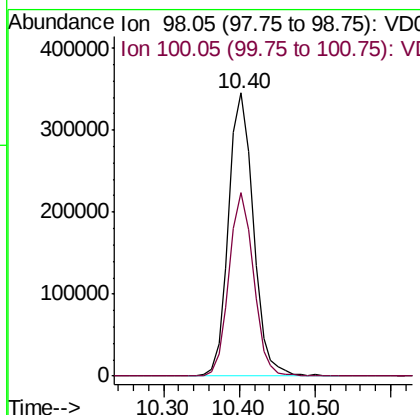
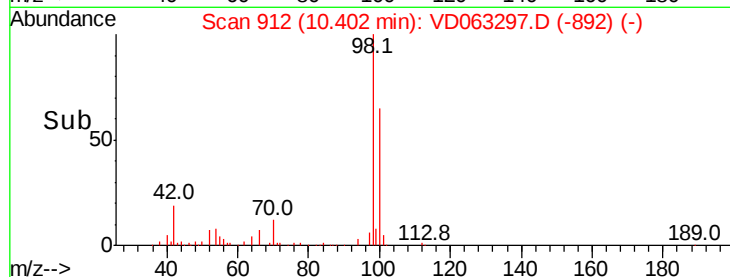
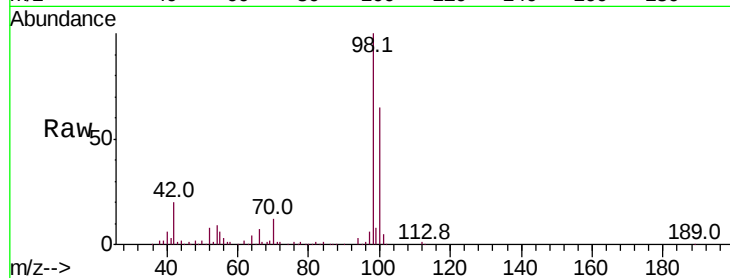
#50  
Toluene-d8  
Concen: 32.516 ug/l  
RT: 10.40 min Scan# 912  
Delta R.T. -0.00 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

Instrument :  
MSVOA\_D  
ClientSampleId :  
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Tot Ion: 98 Resp: 782794  
Ion Ratio Lower Upper  
98 100  
100 64.7 53.2 79.8

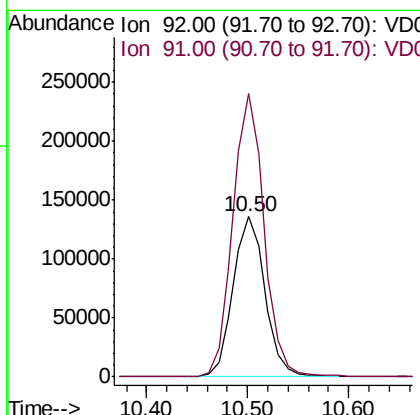
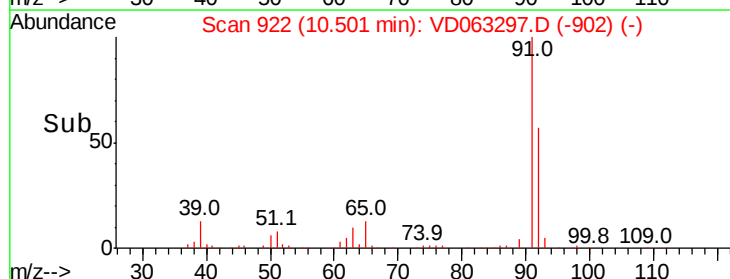
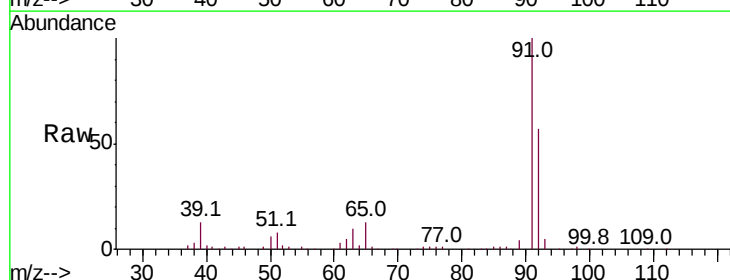
Manual Integrations  
APPROVED

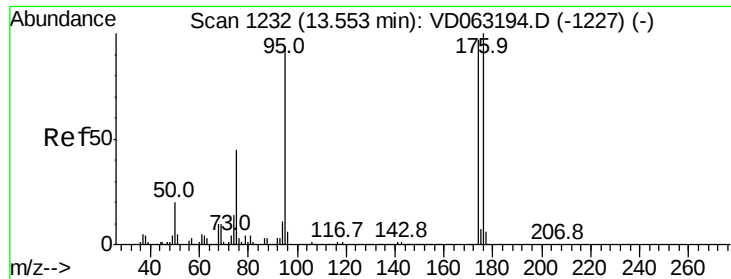
MMdadoda  
8/3/2019 12:11:38 AM



#52  
Toluene  
Concen: 18.606 ug/l  
RT: 10.50 min Scan# 922  
Delta R.T. -0.00 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

Tgt Ion: 92 Resp: 298222  
Ion Ratio Lower Upper  
92 100  
91 176.8 140.8 211.2





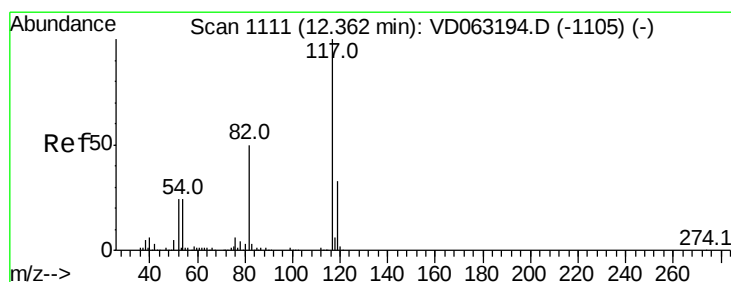
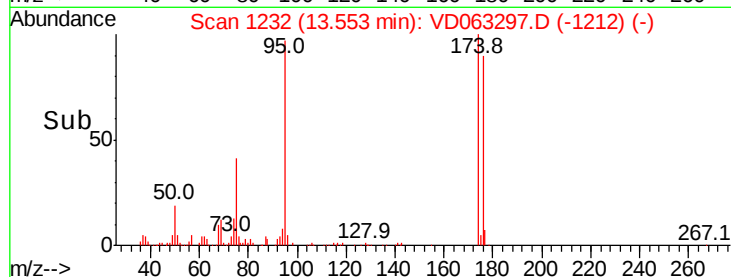
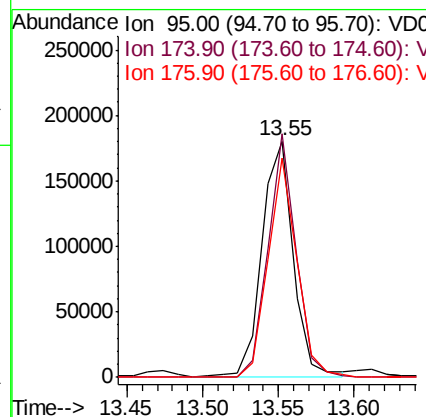
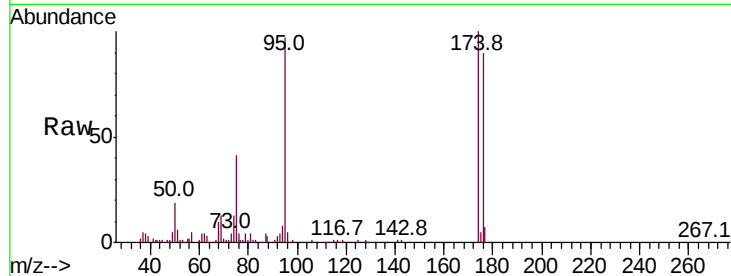
#62  
4-Bromofluorobenzene  
Concen: 23.569 ug/l  
RT: 13.55 min Scan# 1232  
Delta R.T. -0.00 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

Instrument :  
MSVOA\_D  
ClientSampleId :  
T3-1

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 95      | 100   | 258568 |       |       |
| 174     | 103.0 | 0.0    | 205.4 |       |
| 176     | 92.7  | 0.0    | 211.8 |       |

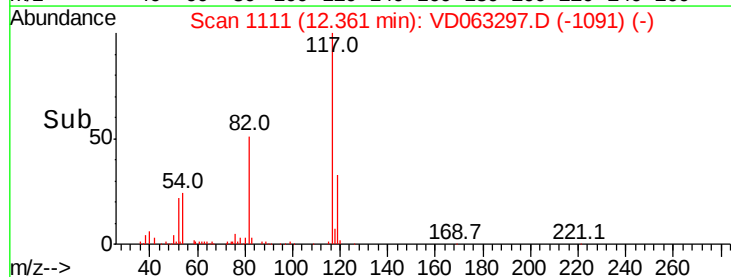
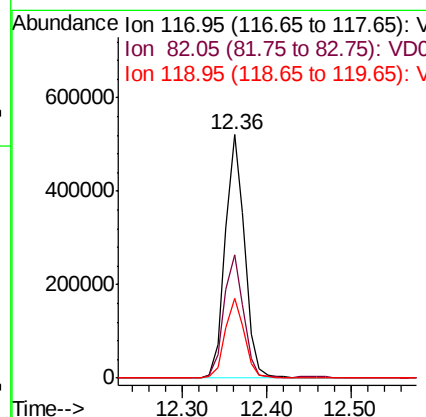
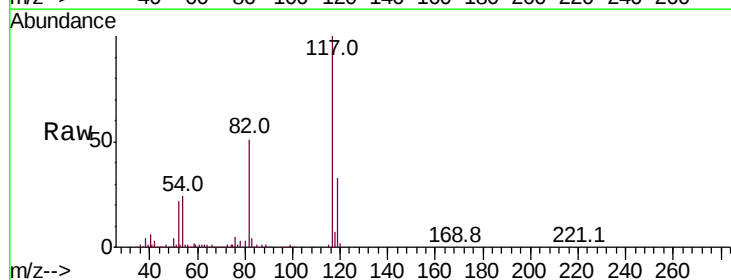
Manual Integrations  
APPROVED

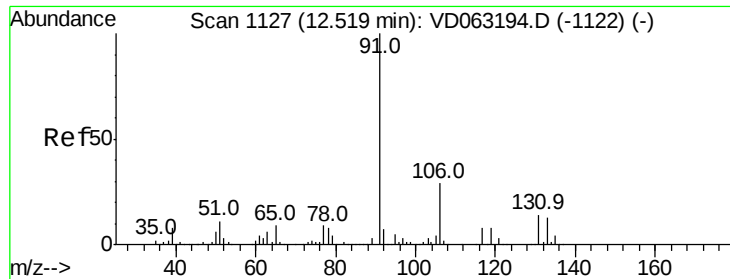
MMdadoda  
8/3/2019 12:11:38 AM



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.36 min Scan# 1111  
Delta R.T. -0.00 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 117     | 100   | 833179 |       |       |
| 82      | 50.9  | 40.1   | 60.1  |       |
| 119     | 32.7  | 26.5   | 39.7  |       |





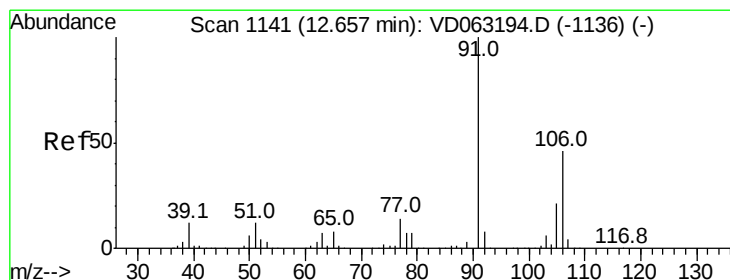
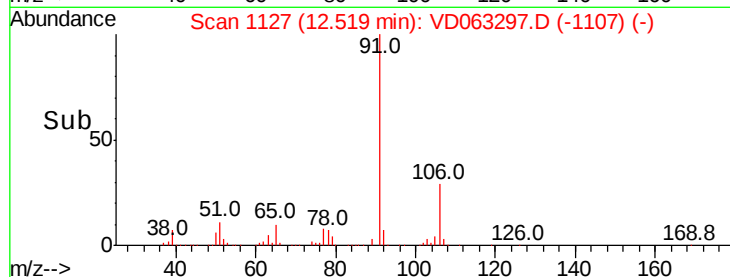
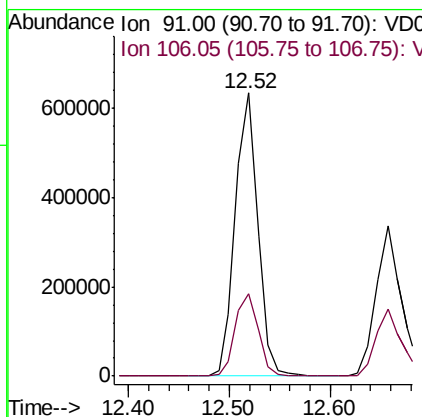
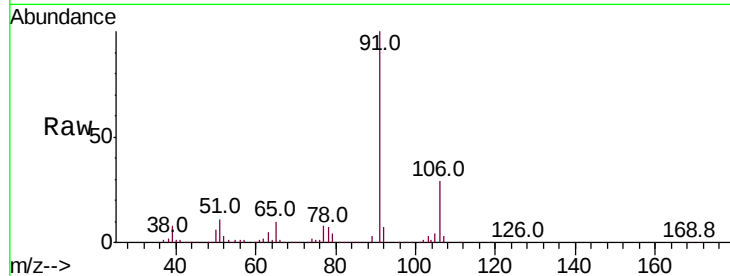
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Ethyl Benzene  
Concen: 36.304 ug/l  
RT: 12.52 min Scan# 1127  
Delta R.T. -0.00 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

Instrument :  
MSVOA\_D  
ClientSampleId :  
T3-1

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 91      | 100   | 988334 |       |       |
| 106     | 29.1  | 22.9   | 34.3  |       |

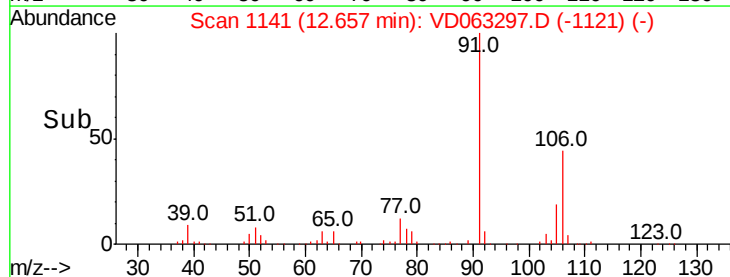
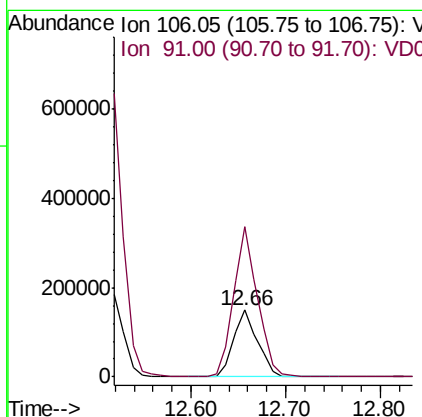
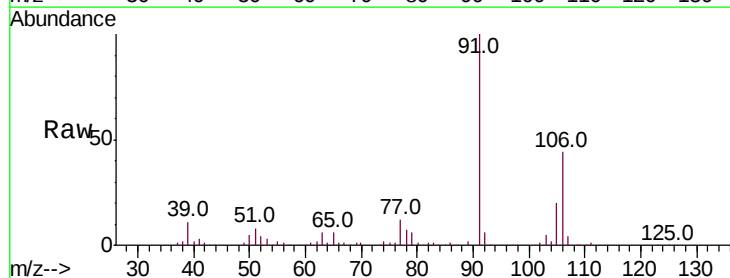
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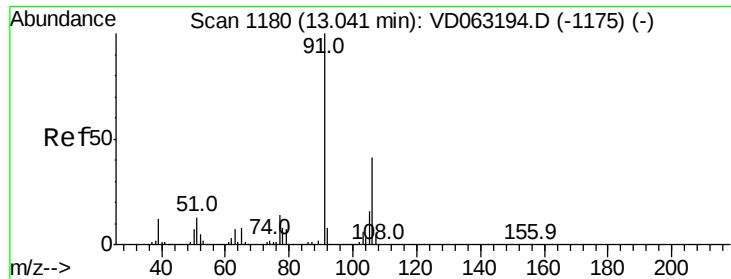
MMDadoda  
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#68  
m/p-Xylenes  
Concen: 26.513 ug/l  
RT: 12.66 min Scan# 1141  
Delta R.T. -0.00 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 106     | 100   | 264701 |       |       |
| 91      | 225.7 | 172.6  | 259.0 |       |





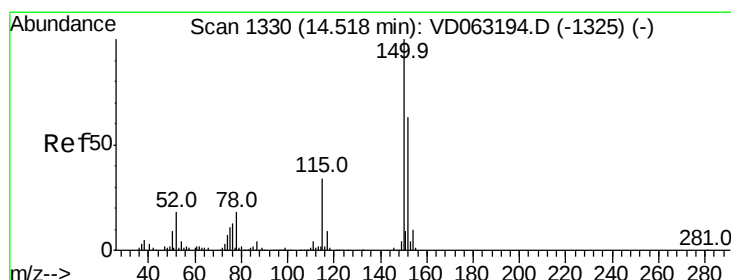
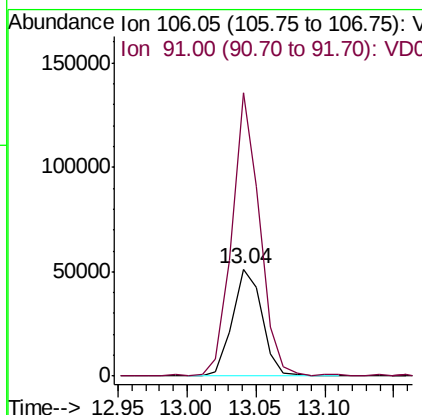
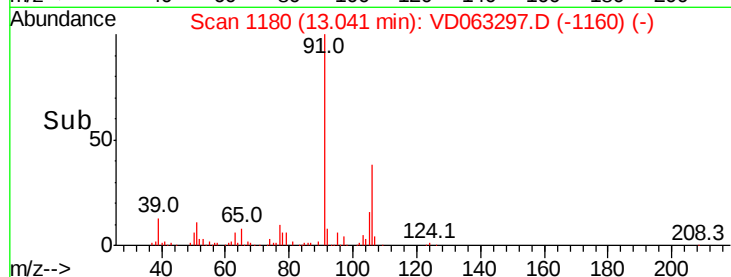
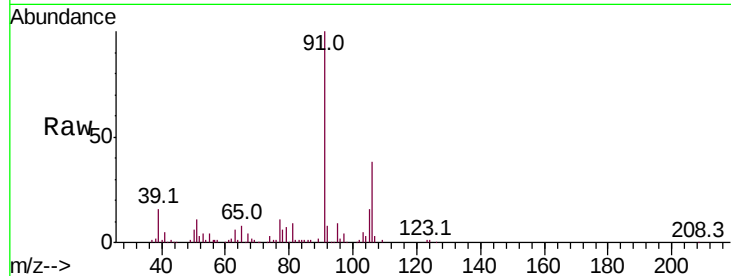
#69  
o-Xylene  
Concen: 8.394 ug/l  
RT: 13.04 min Scan# 1180  
Delta R.T. -0.00 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

Instrument :  
MSVOA\_D  
ClientSampled :  
T3-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 106     | 100   |       |       |
| 91      | 265.2 | 121.3 | 363.9 |

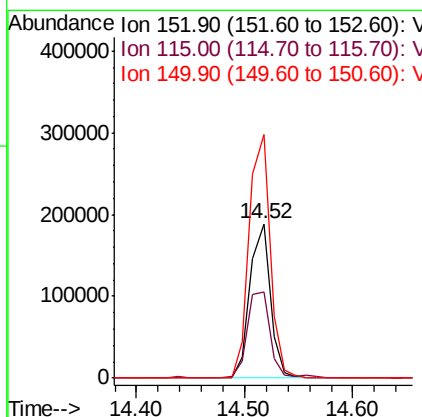
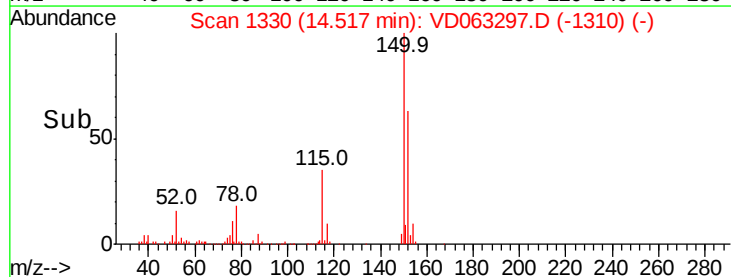
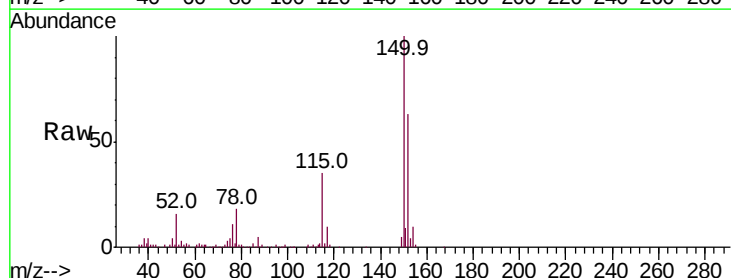
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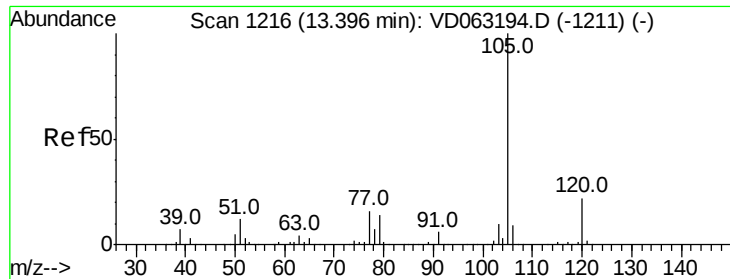
MMDadoda  
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#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 14.52 min Scan# 1330  
Delta R.T. -0.00 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 55.6  | 27.5  | 82.4  |
| 150     | 158.0 | 0.0   | 320.6 |





#73

Isopropylbenzene

Concen: 3.310 ug/l

RT: 13.40 min Scan# 1216

Delta R.T. -0.00 min

Lab File: VD063297.D

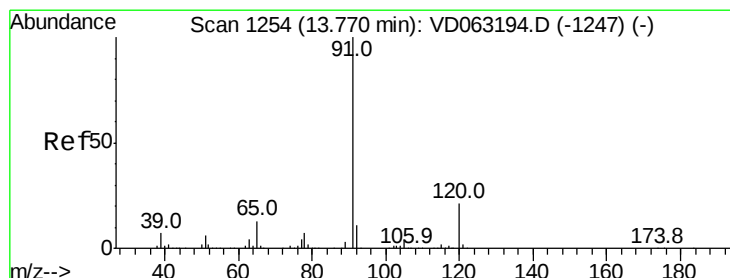
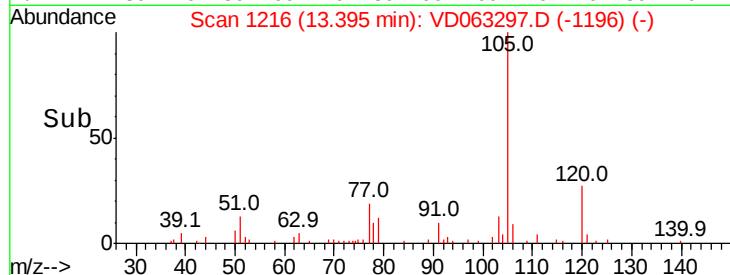
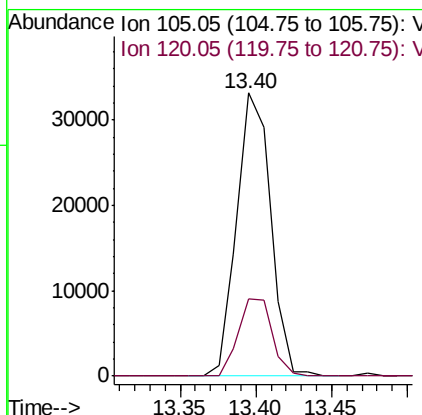
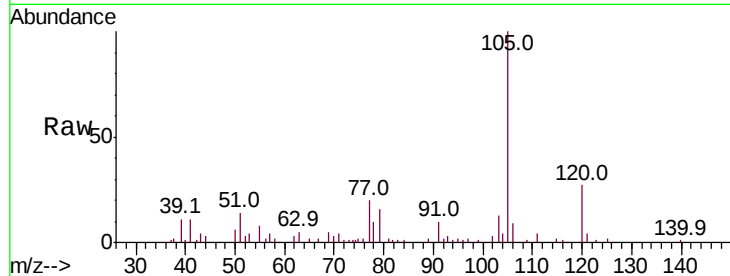
Acq: 1 Aug 2019 17:23

Instrument :  
MSVOA\_D  
ClientSampled :  
T3-1

Tot Ion:105 Resp: 51767  
Ion Ratio Lower Upper  
105 100  
120 27.5 11.1 33.3

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#78

n-propylbenzene

Concen: 5.106 ug/l

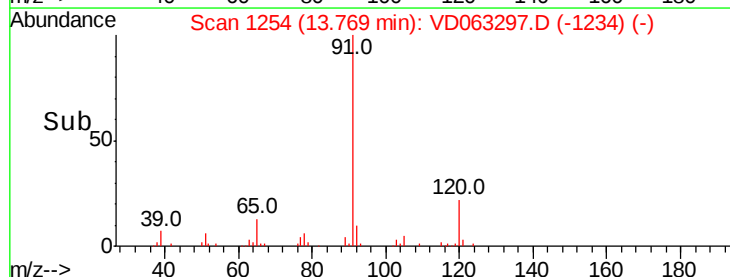
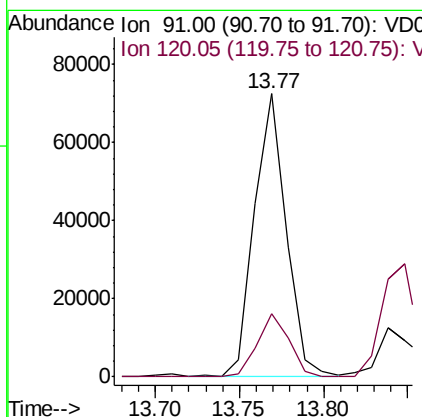
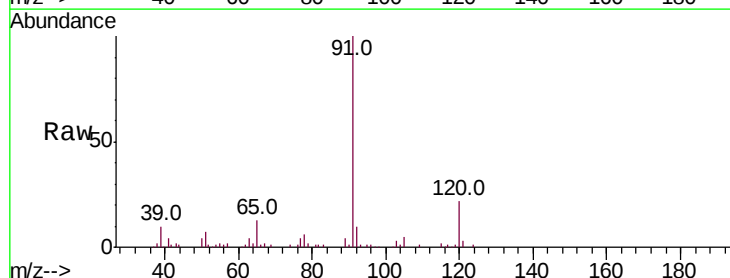
RT: 13.77 min Scan# 1254

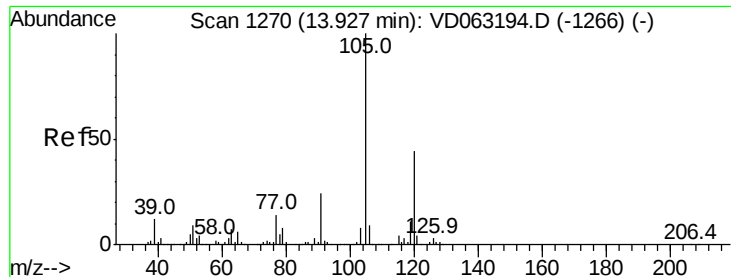
Delta R.T. -0.00 min

Lab File: VD063297.D

Acq: 1 Aug 2019 17:23

Tgt Ion: 91 Resp: 95032  
Ion Ratio Lower Upper  
91 100  
120 22.1 10.7 32.1





#80

1,3,5-Trimethylbenzene

Concen: 5.899 ug/l

RT: 13.93 min Scan# 1270

Delta R.T. -0.00 min

Lab File: VD063297.D

Acq: 1 Aug 2019 17:23

Instrument :

MSVOA\_D

ClientSampleId :

T3-1

Tot Ion:105 Resp: 79569

Ion Ratio Lower Upper

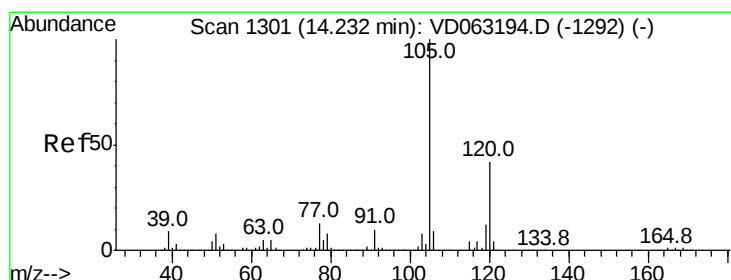
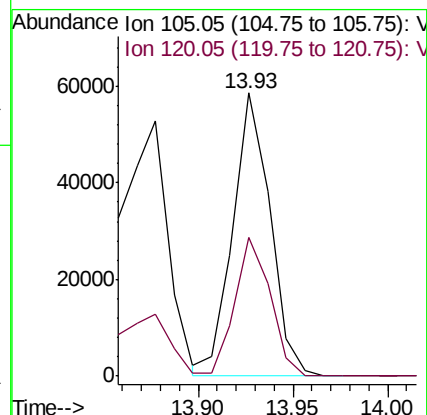
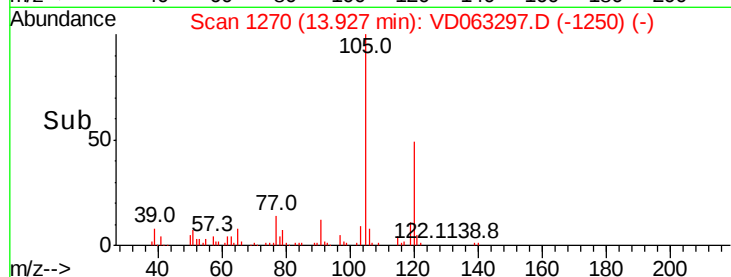
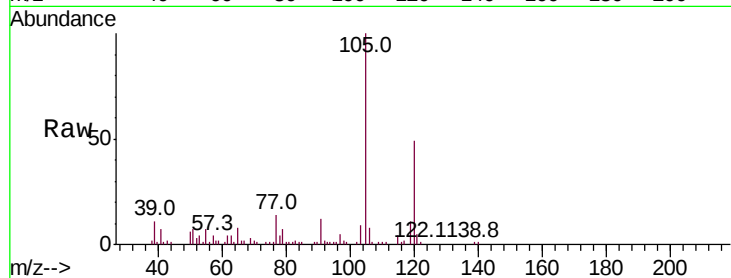
105 100

120 49.2 22.1 66.1

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#84

1,2,4-Trimethylbenzene

Concen: 15.809 ug/l

RT: 14.23 min Scan# 1301

Delta R.T. -0.00 min

Lab File: VD063297.D

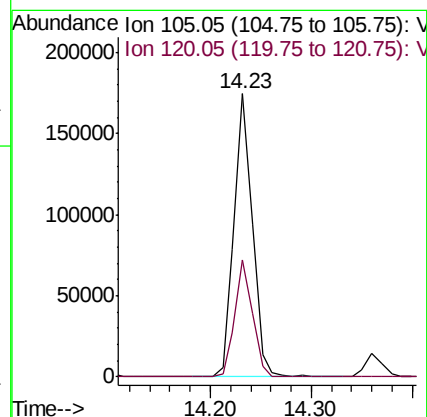
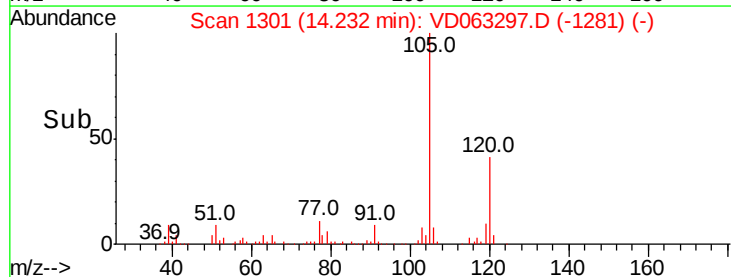
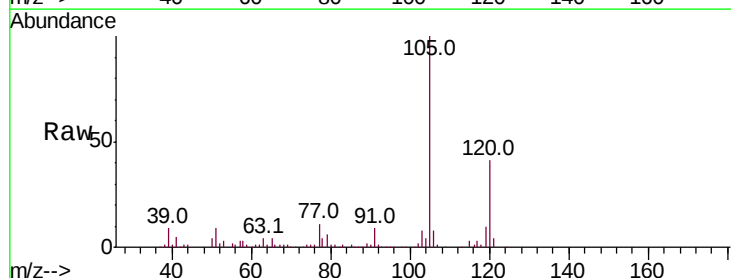
Acq: 1 Aug 2019 17:23

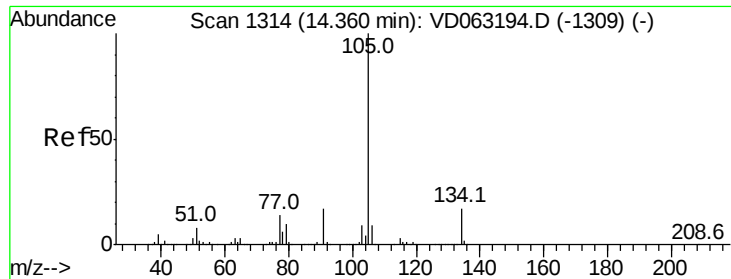
Tgt Ion:105 Resp: 220574

Ion Ratio Lower Upper

105 100

120 41.2 20.9 62.7





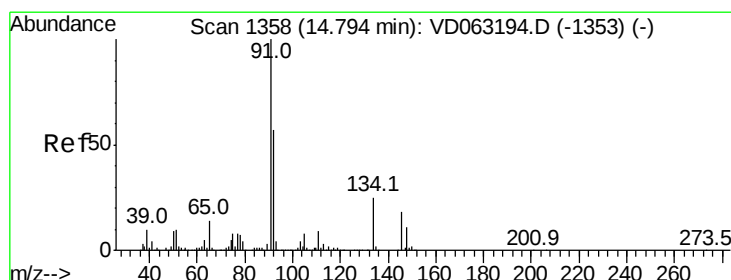
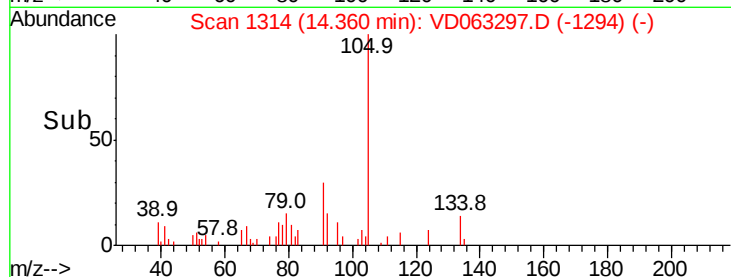
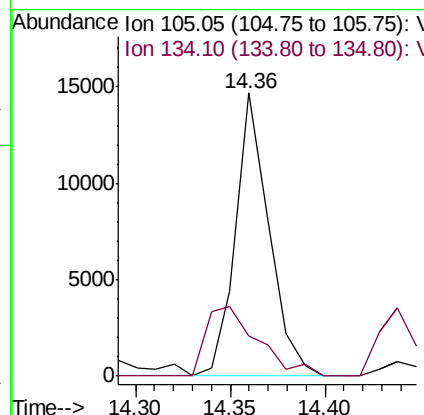
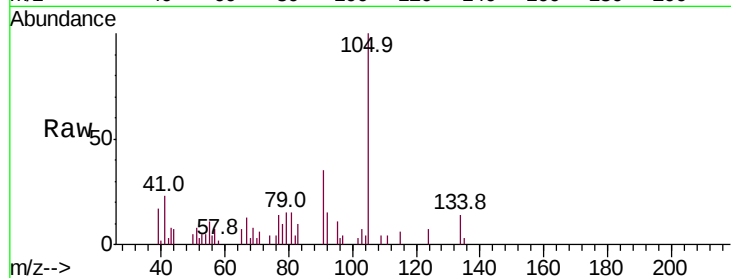
#85  
 sec-Butylbenzene  
 Concen: 1.106 ug/l  
 RT: 14.36 min Scan# 1314  
 Delta R.T. -0.00 min  
 Lab File: VD063297.D  
 Acq: 1 Aug 2019 17:23

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 T3-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 134     | 14.2  | 8.3   | 24.9  |

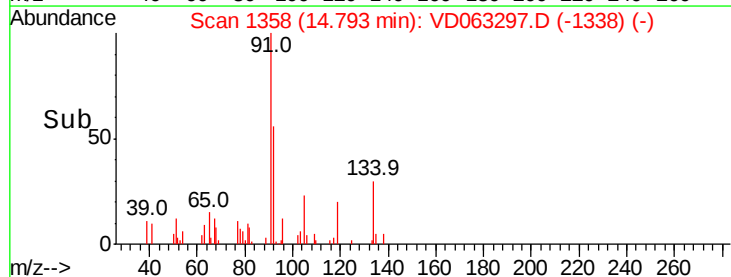
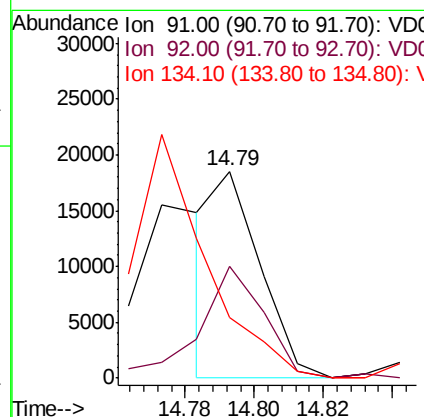
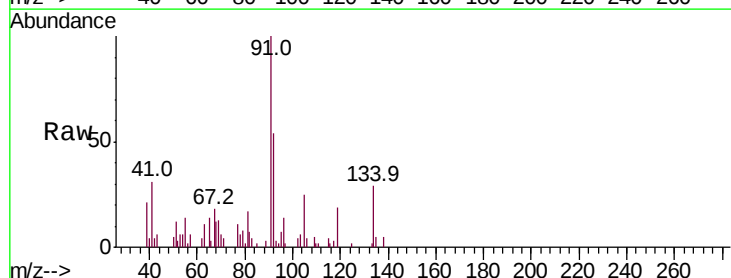
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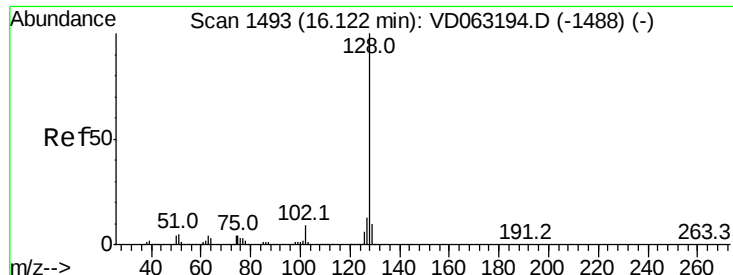
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#89  
 n-Butylbenzene  
 Concen: 1.278 ug/l m  
 RT: 14.79 min Scan# 1358  
 Delta R.T. -0.00 min  
 Lab File: VD063297.D  
 Acq: 1 Aug 2019 17:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 53.8  | 28.3  | 85.0  |
| 134     | 29.4  | 12.3  | 36.8  |





#95  
Naphthalene  
Concen: 4.167 ug/l  
RT: 16.12 min Scan# 1493  
Delta R.T. -0.00 min  
Lab File: VD063297.D  
Acq: 1 Aug 2019 17:23

Instrument :  
MSVOA\_D  
ClientSampleId :  
T3-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 17.4  | 10.2  | 15.4# |
| 129     | 14.3  | 7.8   | 11.8# |

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