

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD101119\  
 Data File : VD063931.D  
 Acq On : 11 Oct 2019 12:25  
 Operator : VA/SY  
 Sample : K5297-04RE  
 Misc : 5.89G/5ml/MSVOA D/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 TP-1RE

Manual Integrations  
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 10/15/2019 4:13:55 PM

Quant Time: Oct 12 02:01:34 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D100219S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Oct 05 03:51:17 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc    | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene       | 7.99  | 168  | 18910    | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene     | 8.87  | 114  | 33464    | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5        | 11.64 | 117  | 35761    | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.58 | 152  | 19374    | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds |       |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4   | 8.34  | 65   | 14913    | 81.00   | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 162.00% |          |
| 35) Dibromofluoromethane    | 7.92  | 113  | 10468    | 51.19   | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 102.38% |          |
| 50) Toluene-d8              | 10.34 | 98   | 43420    | 52.31   | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 104.62% |          |
| 62) 4-Bromofluorobenzene    | 12.63 | 95   | 18686    | 64.78   | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 129.56% |          |
| Target Compounds            |       |      |          |         |         |          |
|                             |       |      |          |         | Qvalue  |          |
| 39) Methylcyclohexane       | 9.35  | 83   | 2132     | 5.667   | ug/l #  | 49       |
| 67) Ethyl Benzene           | 11.75 | 91   | 13807    | 10.662  | ug/l    | 90       |
| 68) m/p-Xylenes             | 11.86 | 106  | 6718     | 13.440  | ug/l    | 81       |
| 69) o-Xylene                | 12.17 | 106  | 2273     | 4.749   | ug/l    | 97       |
| 73) Isopropylbenzene        | 12.48 | 105  | 7436     | 5.709   | ug/l    | 96       |
| 78) n-propylbenzene         | 12.82 | 91   | 31158    | 20.381  | ug/l    | 99       |
| 80) 1,3,5-Trimethylbenzene  | 12.96 | 105  | 42867    | 39.451  | ug/l    | 97       |
| 84) 1,2,4-Trimethylbenzene  | 13.27 | 105  | 151742   | 135.462 | ug/l    | 97       |
| 85) sec-Butylbenzene        | 13.40 | 105  | 10093    | 7.729   | ug/l #  | 63       |
| 86) p-Isopropyltoluene      | 13.51 | 119  | 8960m    | 7.251   | ug/l    |          |
| 89) n-Butylbenzene          | 13.84 | 91   | 28434    | 24.719  | ug/l #  | 71       |
| 95) Naphthalene             | 15.40 | 128  | 378102   | 527.651 | ug/l    | 97       |

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

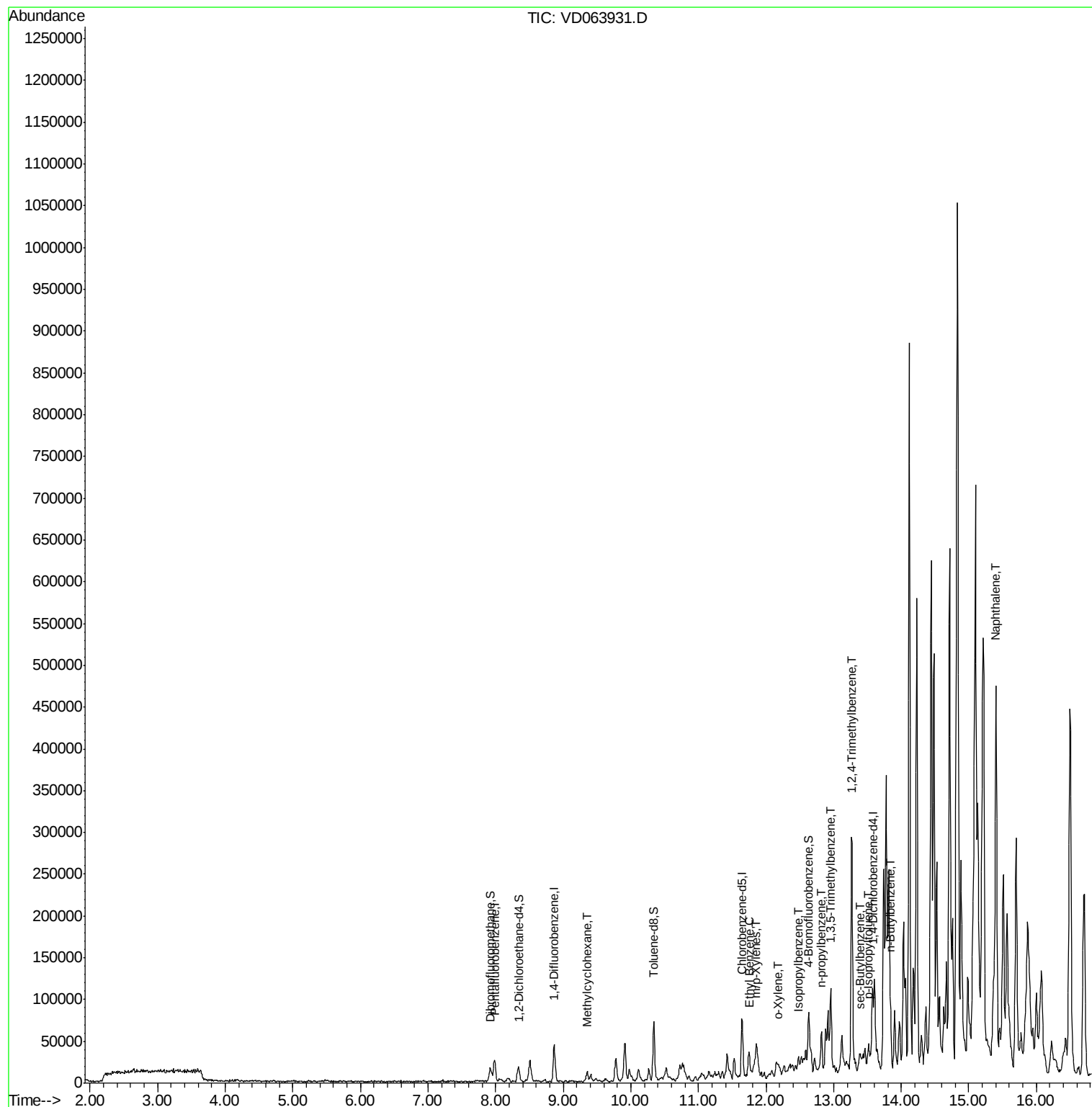
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD101119\  
Data File : VD063931.D  
Acq On : 11 Oct 2019 12:25  
Operator : VA/SY  
Sample : K5297-04RE  
Misc : 5.89G/5ml/MSVOA D/SOIL  
ALS Vial : 6 Sample Multiplier: 1

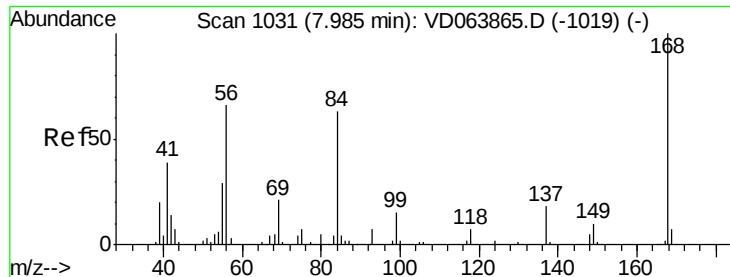
Instrument :  
MSVOA\_D  
ClientSampleId :  
TP-1RE

Quant Time: Oct 12 02:01:34 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D100219S.M  
Quant Title : SW846 8260  
QLast Update : Sat Oct 05 03:51:17 2019  
Response via : Initial Calibration

Manual Integrations  
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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.99 min Scan# 1031

Delta R.T. 0.00 min

Lab File: VD063931.D

Acq: 11 Oct 2019 12:25

Instrument :

MSVOA\_D

ClientSampleId :

TP-1RE

Tot Ion:168 Resp: 18910

Ion Ratio Lower Upper

168 100

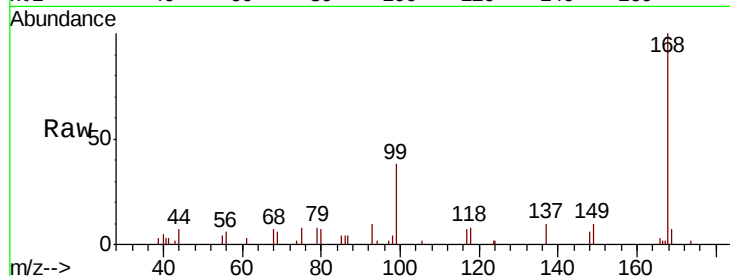
99 37.6 43.0 64.4#

Manual Integrations

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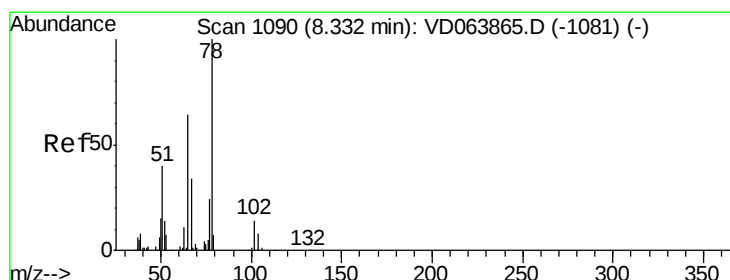
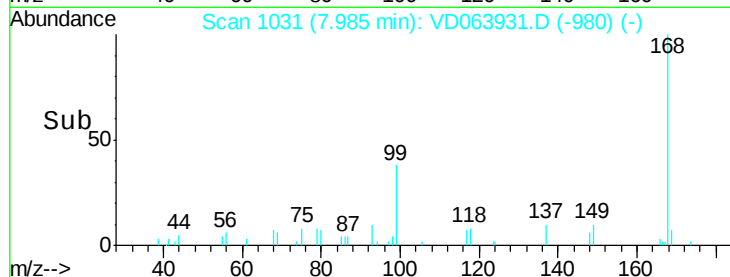
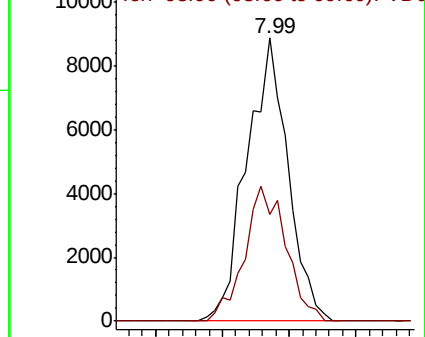
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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC



#33

1,2-Dichloroethane-d4

Concen: 81.003 ug/l

RT: 8.34 min Scan# 1091

Delta R.T. 0.01 min

Lab File: VD063931.D

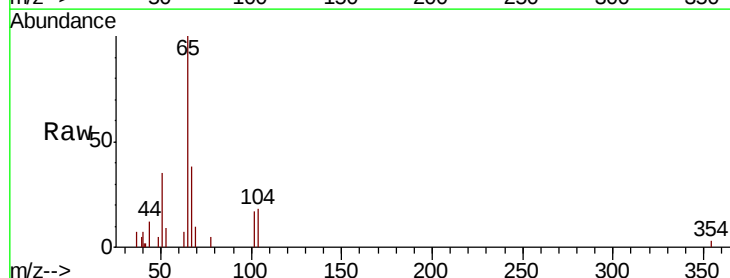
Acq: 11 Oct 2019 12:25

Tgt Ion: 65 Resp: 14913

Ion Ratio Lower Upper

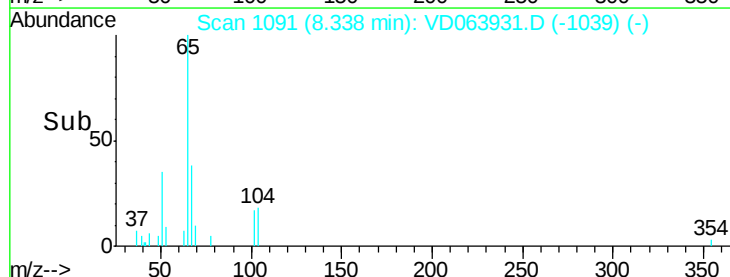
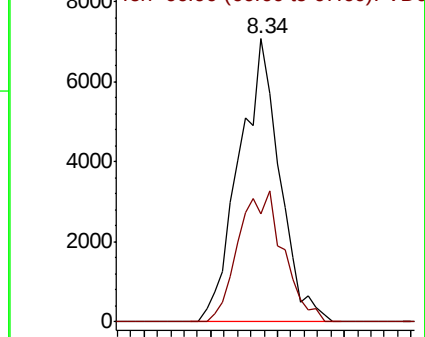
65 100

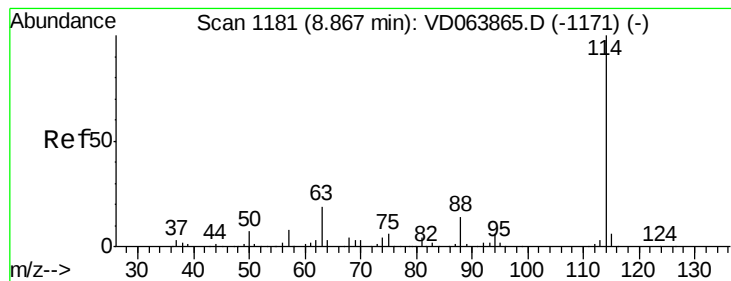
67 50.9 0.0 106.4



Abundance Ion 64.90 (64.60 to 65.60): VDC

Ion 66.90 (66.60 to 67.60): VDC





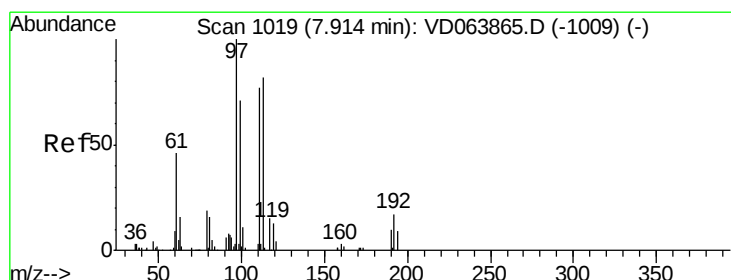
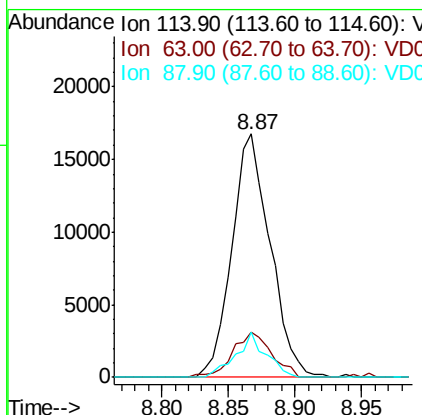
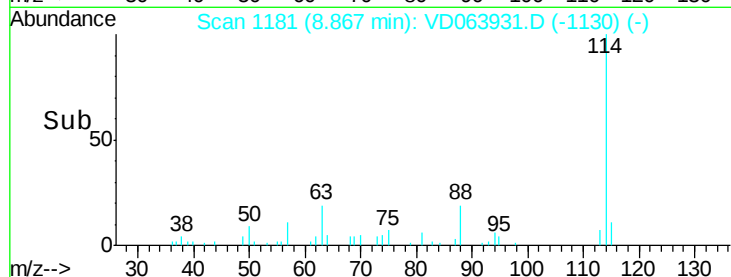
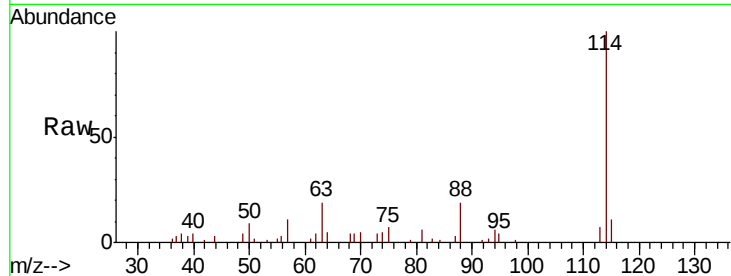
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.87 min Scan# 1181  
 Delta R.T. 0.00 min  
 Lab File: VD063931.D  
 Acq: 11 Oct 2019 12:25

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 TP-1RE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 18.5  | 0.0   | 38.4  |
| 88      | 18.8  | 0.0   | 27.4  |

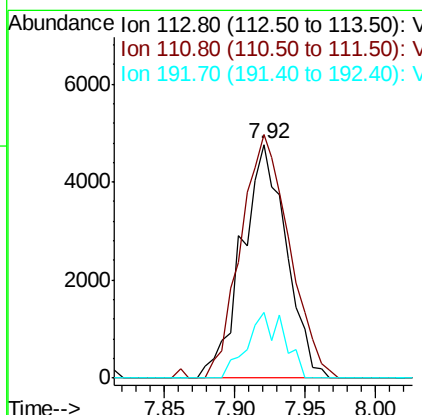
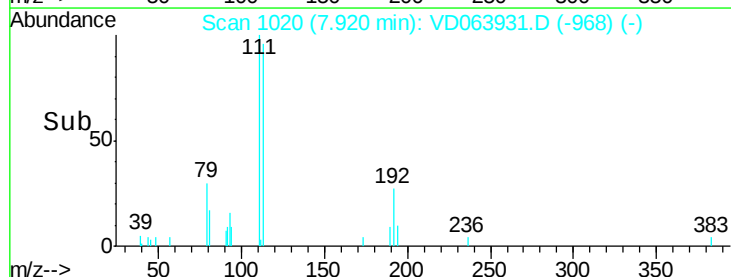
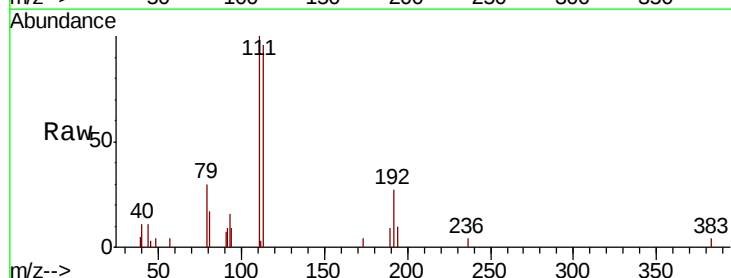
Manual Integrations  
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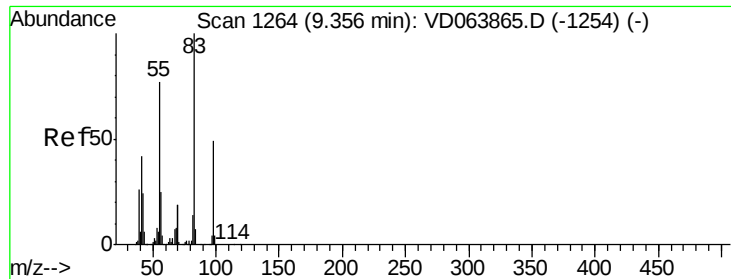
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#35  
 Dibromofluoromethane  
 Concen: 51.186 ug/l  
 RT: 7.92 min Scan# 1020  
 Delta R.T. 0.01 min  
 Lab File: VD063931.D  
 Acq: 11 Oct 2019 12:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 114.2 | 82.6  | 123.8 |
| 192     | 23.4  | 17.1  | 25.7  |





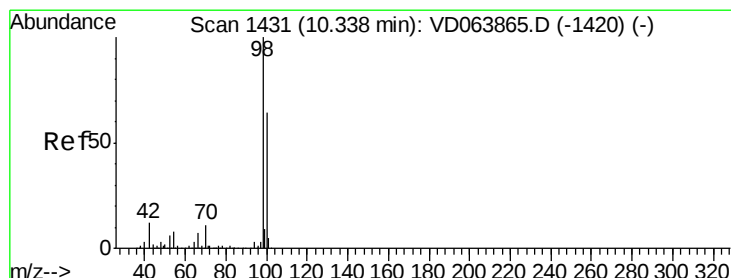
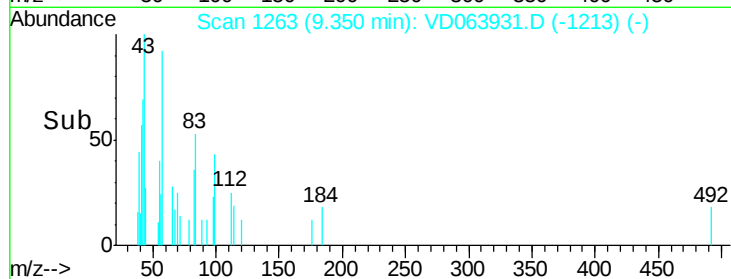
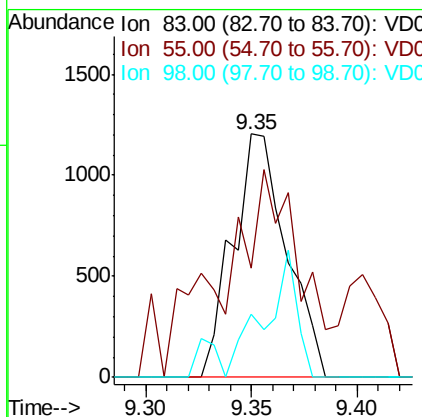
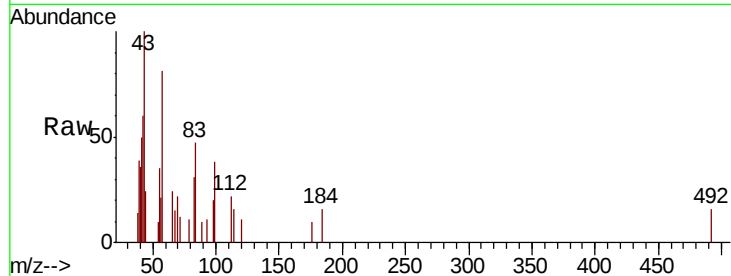
#39  
Methylcyclohexane  
Concen: 5.667 ug/l  
RT: 9.35 min Scan# 1263  
Delta R.T. -0.01 min  
Lab File: VD063931.D  
Acq: 11 Oct 2019 12:25

Instrument :  
MSVOA\_D  
ClientSampleId :  
TP-1RE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 55      | 23.2  | 61.3  | 91.9# |
| 98      | 26.1  | 39.3  | 58.9# |

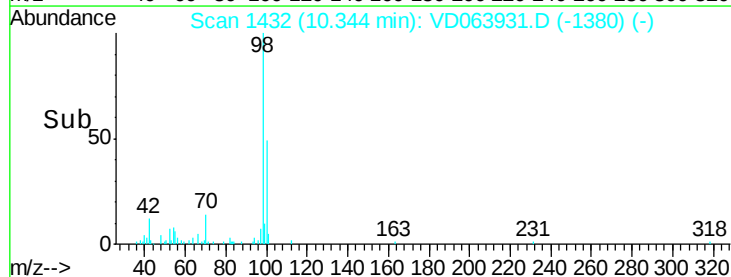
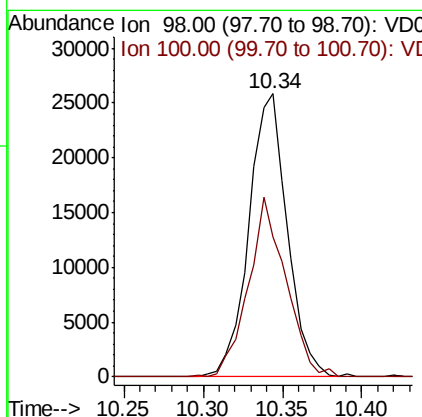
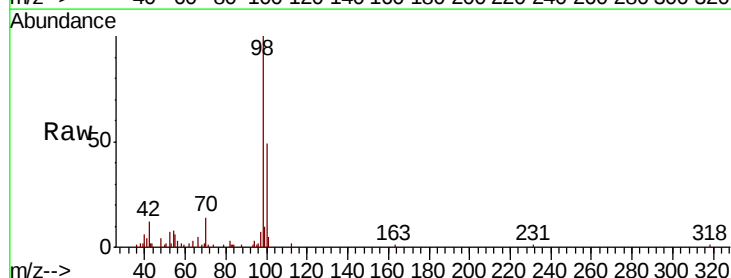
Manual Integrations  
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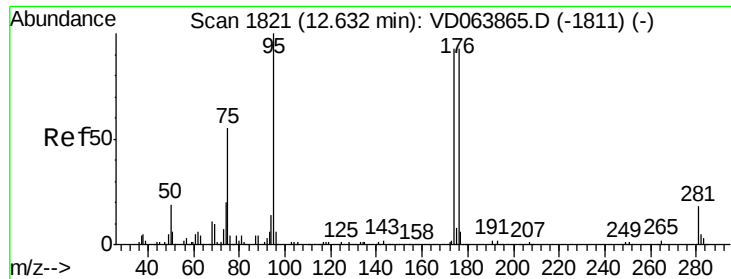
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#50  
Toluene-d8  
Concen: 52.309 ug/l  
RT: 10.34 min Scan# 1432  
Delta R.T. 0.01 min  
Lab File: VD063931.D  
Acq: 11 Oct 2019 12:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 98      | 100   |       |       |
| 100     | 62.0  | 52.1  | 78.1  |





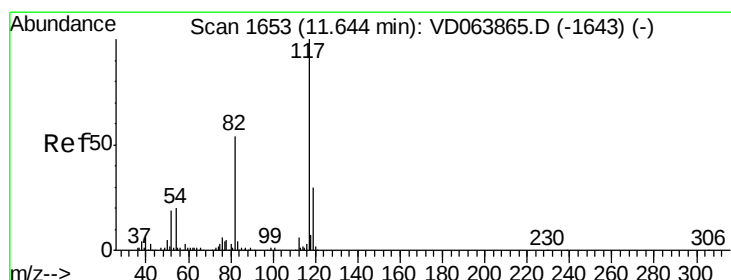
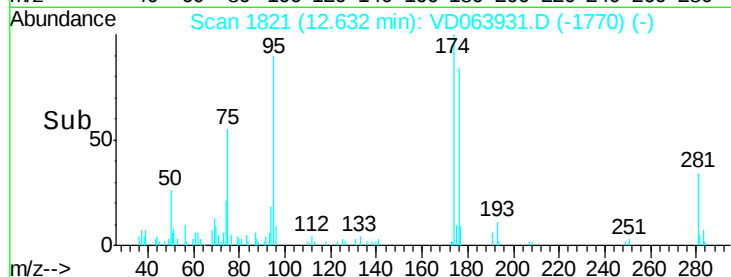
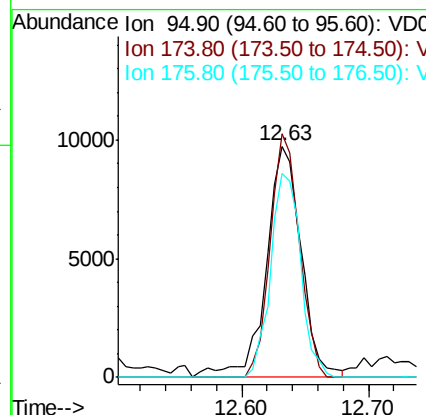
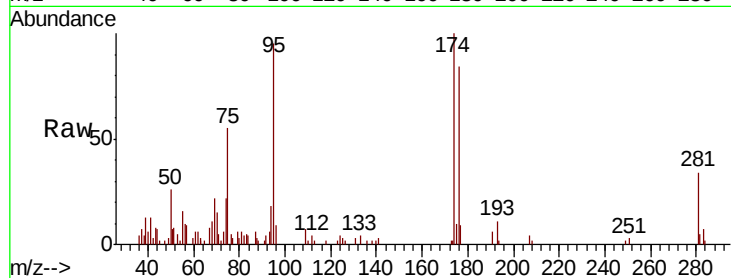
#62  
4-Bromofluorobenzene  
Concen: 64.781 ug/l  
RT: 12.63 min Scan# 1821  
Delta R.T. 0.00 min  
Lab File: VD063931.D  
Acq: 11 Oct 2019 12:25

Instrument :  
MSVOA\_D  
ClientSampleId :  
TP-1RE

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 95      | 100   | 18686 |       |       |
| 174     | 87.8  | 0.0   | 186.4 |       |
| 176     | 75.6  | 0.0   | 184.2 |       |

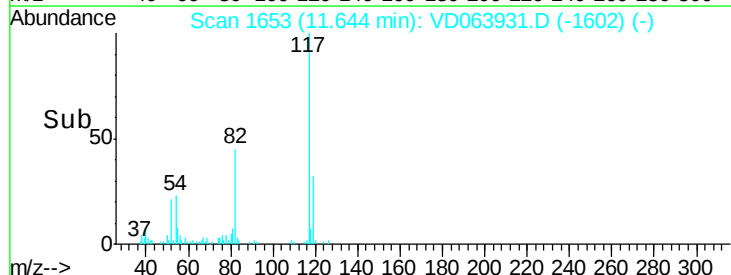
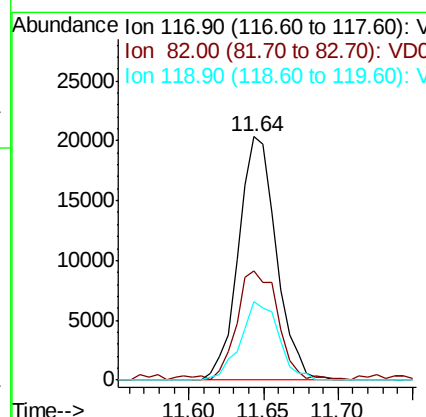
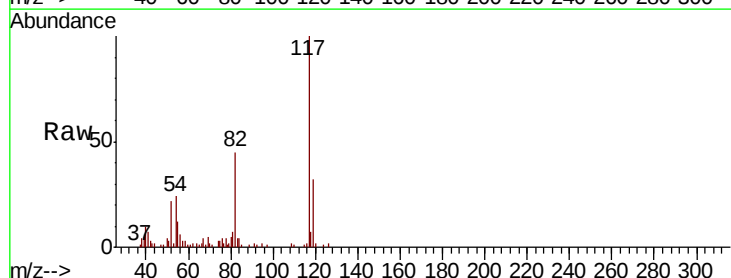
Manual Integrations  
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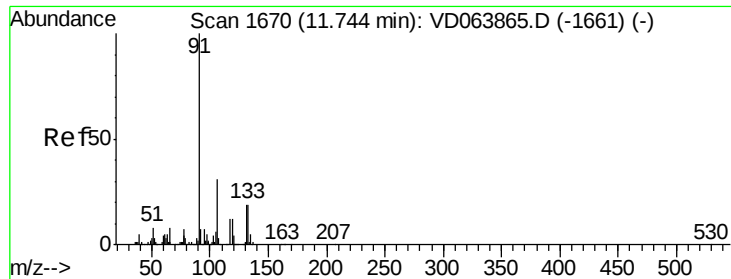
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#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.64 min Scan# 1653  
Delta R.T. 0.00 min  
Lab File: VD063931.D  
Acq: 11 Oct 2019 12:25

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 117     | 100   | 35761 |       |       |
| 82      | 44.1  | 42.8  | 64.2  |       |
| 119     | 32.4  | 24.4  | 36.6  |       |





#67

Ethyl Benzene

Concen: 10.662 ug/l

RT: 11.75 min Scan# 1671

Delta R.T. 0.01 min

Lab File: VD063931.D

Acq: 11 Oct 2019 12:25

Instrument :

MSVOA\_D

ClientSampleId :

TP-1RE

Tot Ion: 91 Resp: 13807

Ion Ratio Lower Upper

91 100

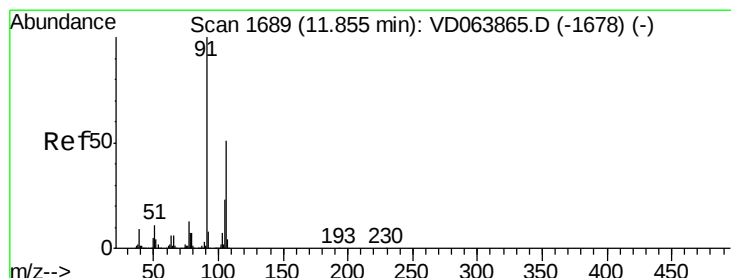
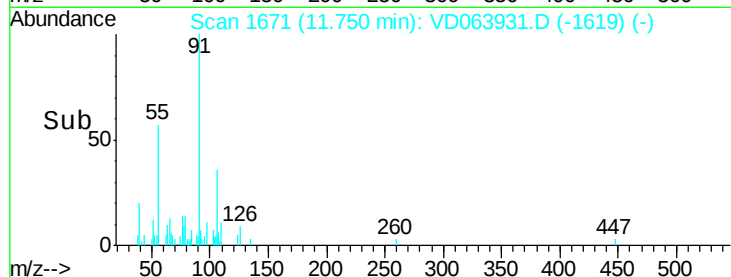
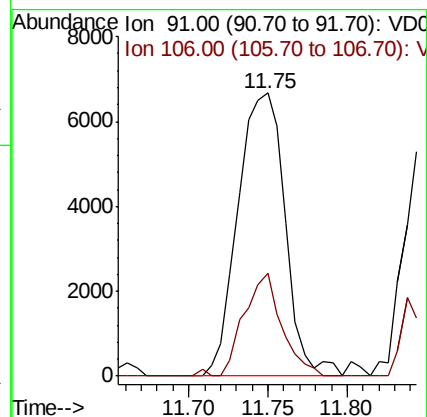
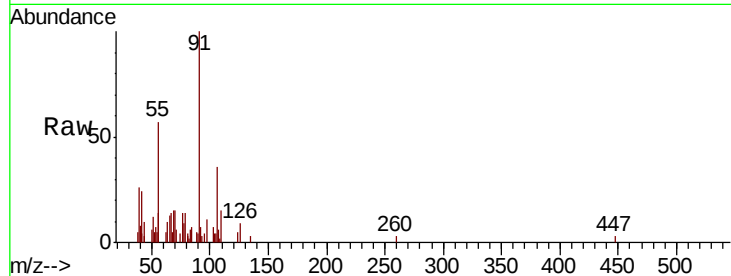
106 36.4 24.6 37.0

Manual Integrations

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#68

m/p-Xylenes

Concen: 13.440 ug/l

RT: 11.86 min Scan# 1689

Delta R.T. 0.00 min

Lab File: VD063931.D

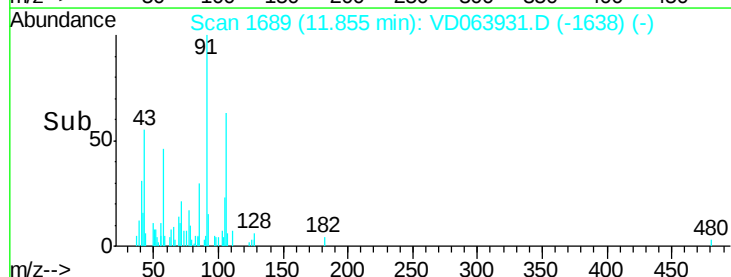
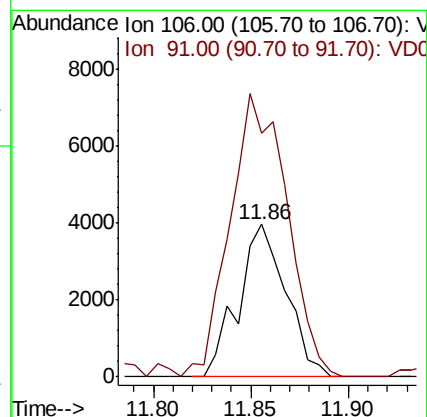
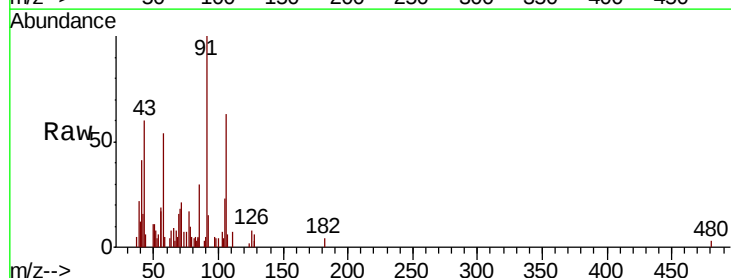
Acq: 11 Oct 2019 12:25

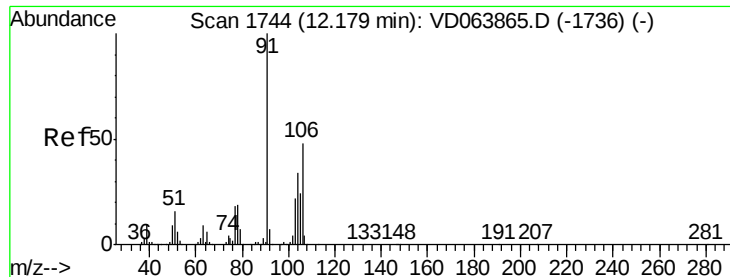
Tgt Ion: 106 Resp: 6718

Ion Ratio Lower Upper

106 100

91 221.6 154.8 232.2





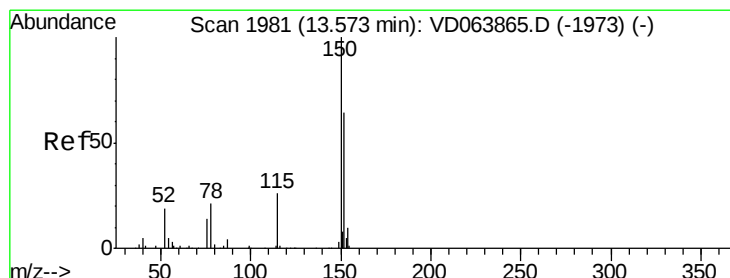
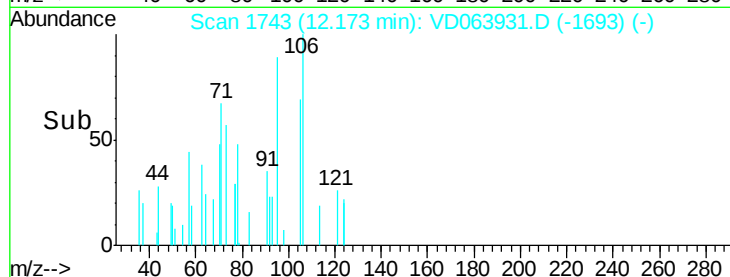
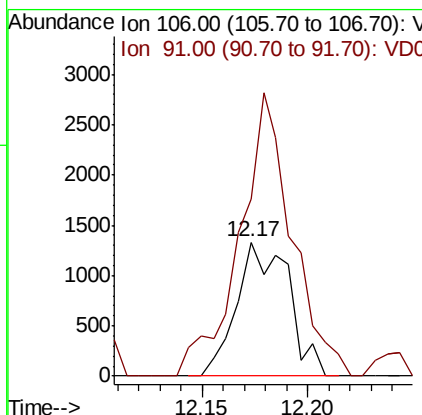
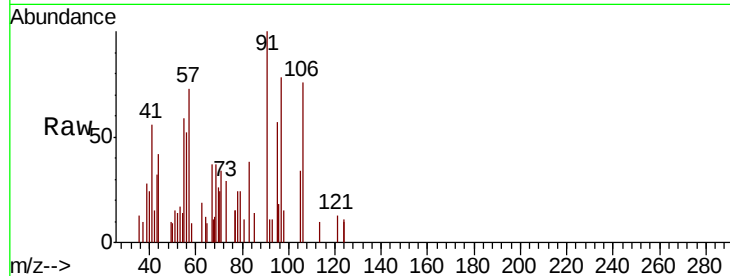
#69  
o-Xylene  
Concen: 4.749 ug/l  
RT: 12.17 min Scan# 1743  
Delta R.T. -0.01 min  
Lab File: VD063931.D  
Acq: 11 Oct 2019 12:25

Instrument :  
MSVOA\_D  
ClientSampled :  
TP-1RE

Tot Ion:106 Resp: 2273  
Ion Ratio Lower Upper  
106 100  
91 213.2 103.9 311.7

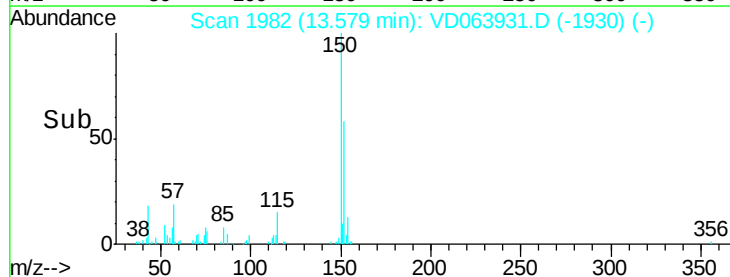
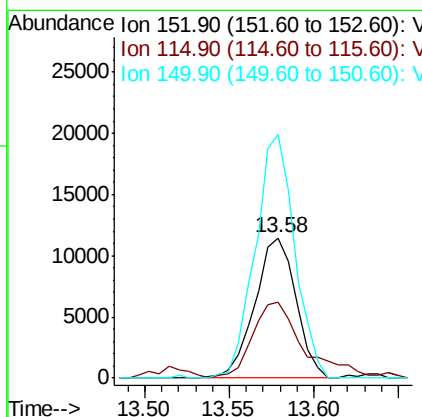
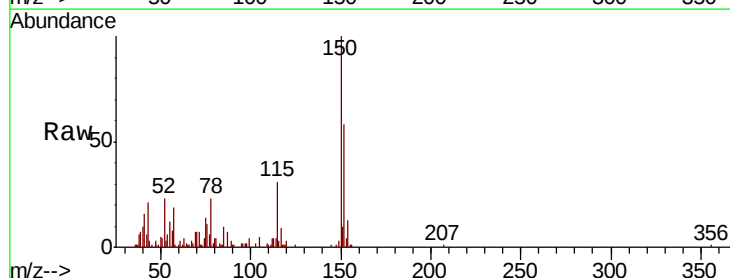
Manual Integrations  
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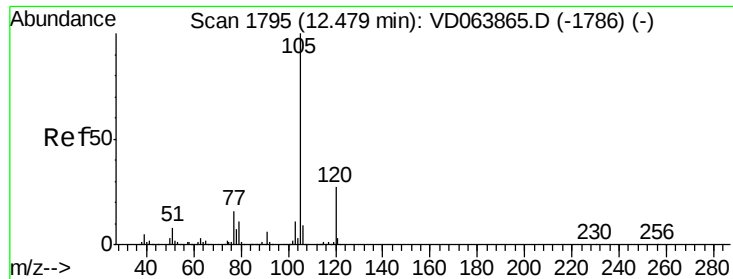
MMDadoda  
10/15/2019 4:13:55 PM



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.58 min Scan# 1982  
Delta R.T. 0.01 min  
Lab File: VD063931.D  
Acq: 11 Oct 2019 12:25

Tgt Ion:152 Resp: 19374  
Ion Ratio Lower Upper  
152 100  
115 67.4 25.9 77.7  
150 166.2 0.0 344.2





#73

Isopropylbenzene

Concen: 5.709 ug/l

RT: 12.48 min Scan# 1796

Delta R.T. 0.01 min

Lab File: VD063931.D

Acq: 11 Oct 2019 12:25

Instrument :

MSVOA\_D

ClientSampleId :

TP-1RE

Tot Ion:105 Resp: 7436

Ion Ratio Lower Upper

105 100

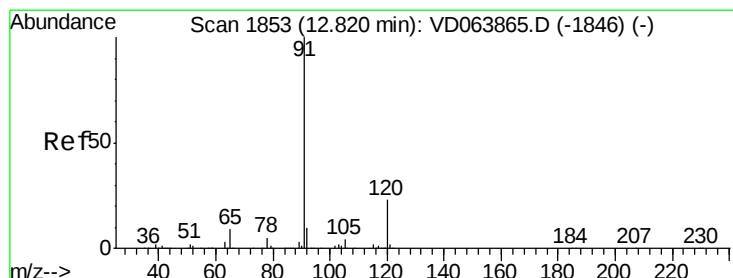
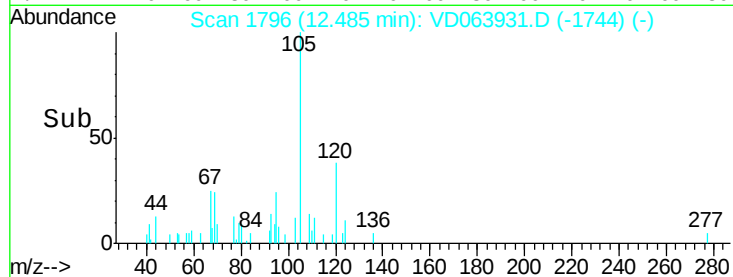
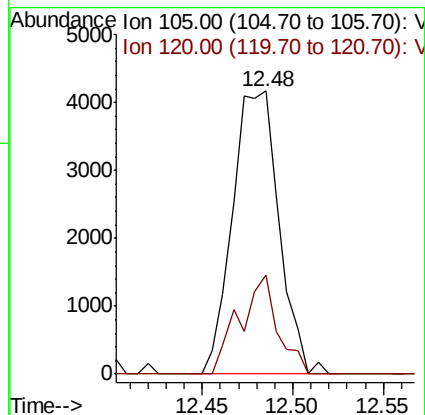
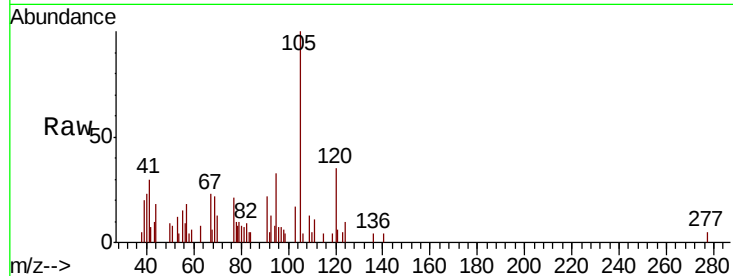
120 28.5 13.3 39.8

Manual Integrations

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#78

n-propylbenzene

Concen: 20.381 ug/l

RT: 12.82 min Scan# 1853

Delta R.T. 0.00 min

Lab File: VD063931.D

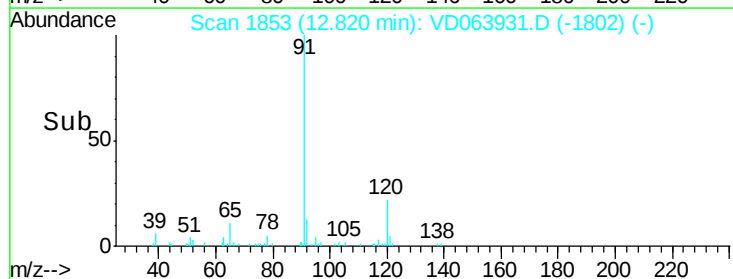
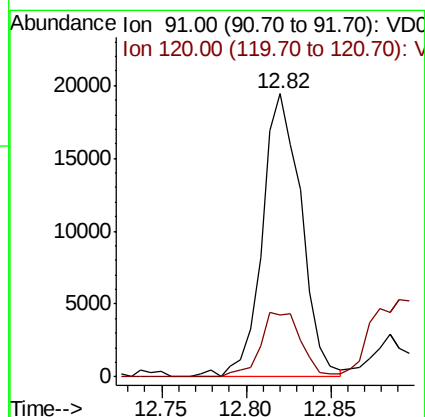
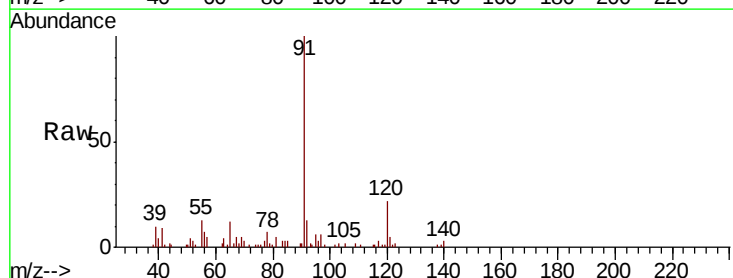
Acq: 11 Oct 2019 12:25

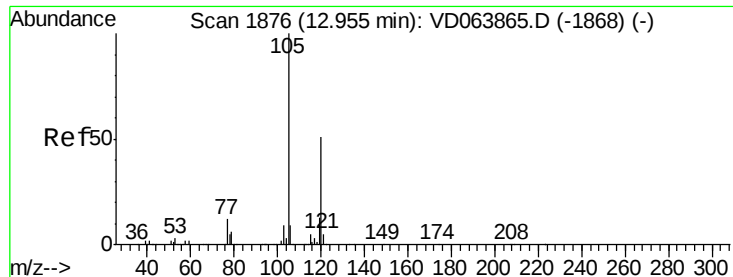
Tgt Ion: 91 Resp: 31158

Ion Ratio Lower Upper

91 100

120 23.5 12.0 36.0





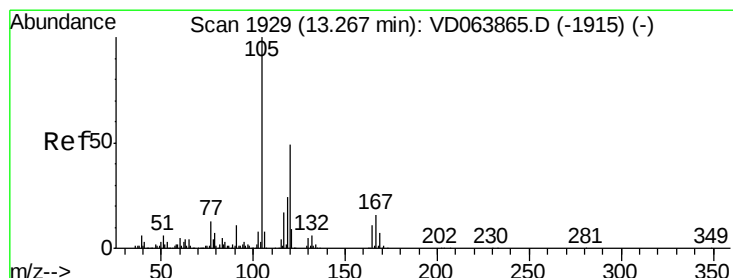
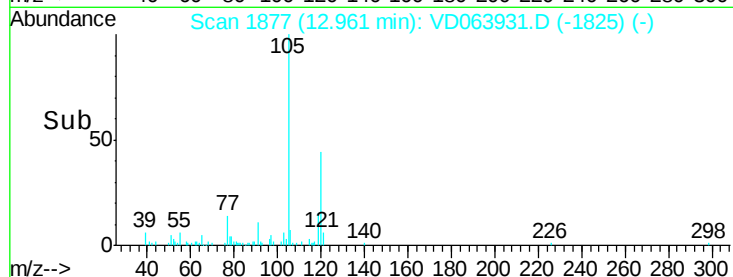
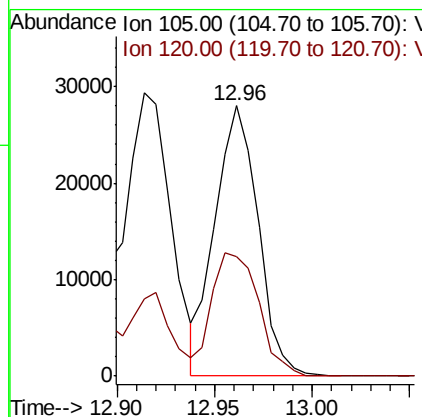
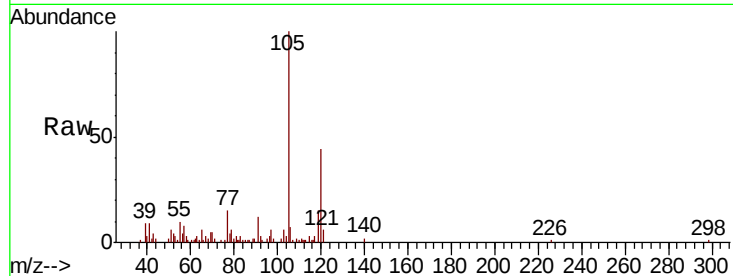
#80  
 1,3,5-Trimethylbenzene  
 Concen: 39.451 ug/l  
 RT: 12.96 min Scan# 1877  
 Delta R.T. 0.01 min  
 Lab File: VD063931.D  
 Acq: 11 Oct 2019 12:25

Instrument :  
 MSVOA\_D  
 ClientSampled :  
 TP-1RE

Tot Ion:105 Resp: 42867  
 Ion Ratio Lower Upper  
 105 100  
 120 50.0 25.9 77.8

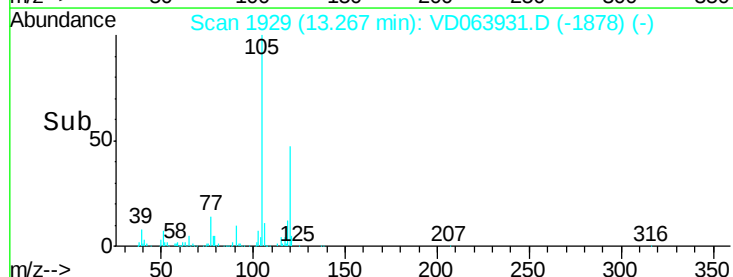
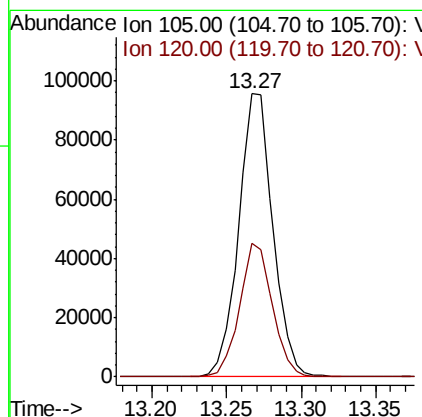
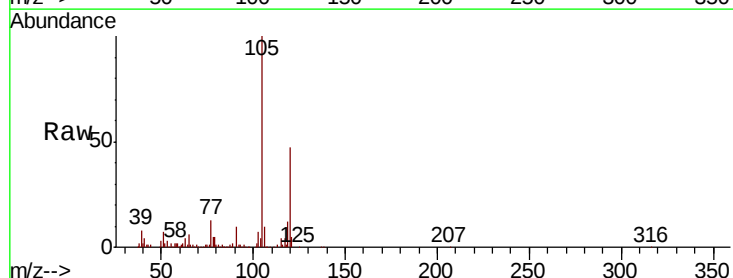
Manual Integrations  
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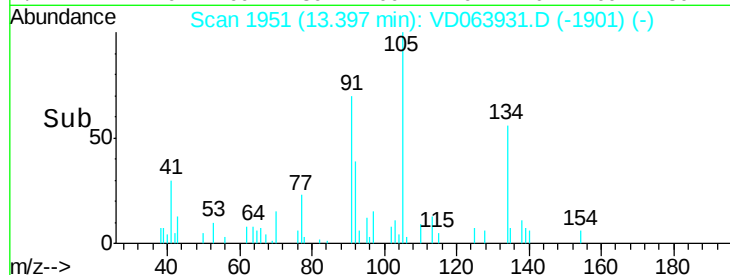
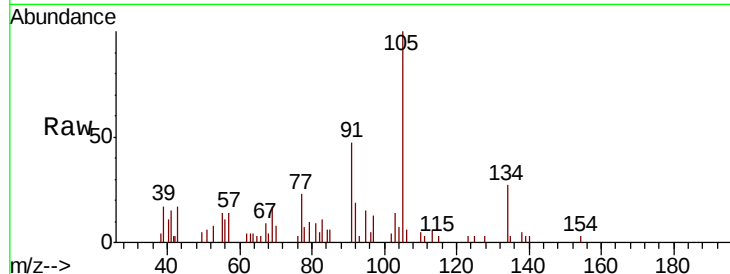
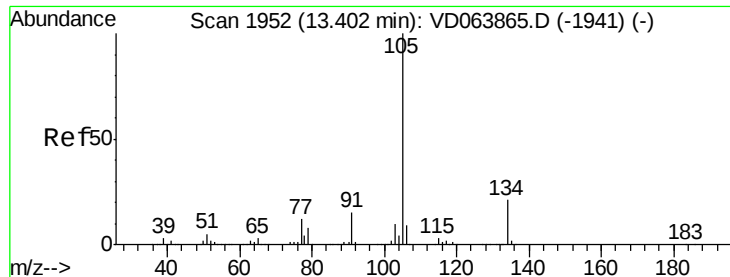
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#84  
 1,2,4-Trimethylbenzene  
 Concen: 135.462 ug/l  
 RT: 13.27 min Scan# 1929  
 Delta R.T. 0.00 min  
 Lab File: VD063931.D  
 Acq: 11 Oct 2019 12:25

Tgt Ion:105 Resp: 151742  
 Ion Ratio Lower Upper  
 105 100  
 120 45.5 23.8 71.5





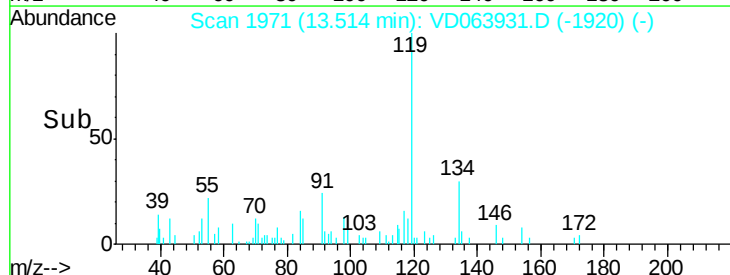
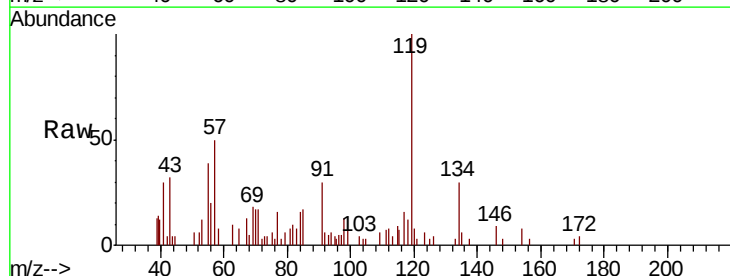
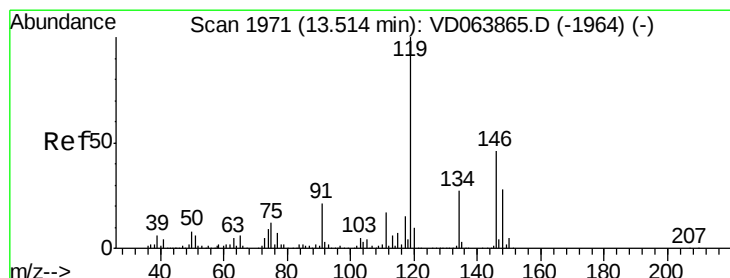
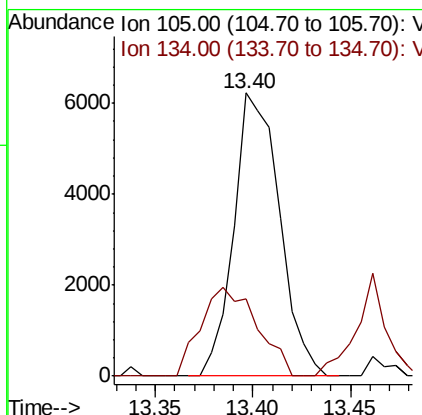
#85  
 sec-Butylbenzene  
 Concen: 7.729 ug/l  
 RT: 13.40 min Scan# 1951  
 Delta R.T. -0.01 min  
 Lab File: VD063931.D  
 Acq: 11 Oct 2019 12:25

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 TP-1RE

Tot Ion:105 Resp: 10093  
 Ion Ratio Lower Upper  
 105 100  
 134 38.6 10.6 31.8#

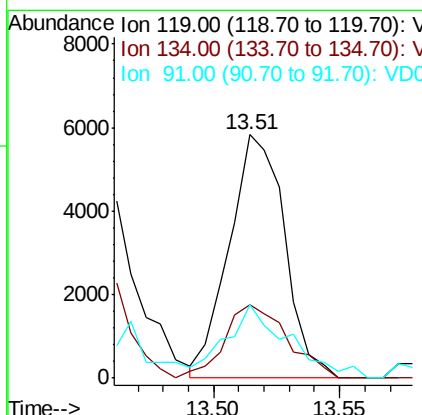
Manual Integrations  
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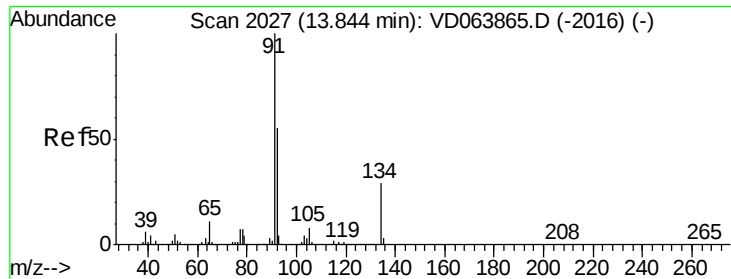
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#86  
 p-Isopropyltoluene  
 Concen: 7.251 ug/l m  
 RT: 13.51 min Scan# 1971  
 Delta R.T. 0.00 min  
 Lab File: VD063931.D  
 Acq: 11 Oct 2019 12:25

Tgt Ion:119 Resp: 8960  
 Ion Ratio Lower Upper  
 119 100  
 134 26.6 13.9 41.6  
 91 15.3 11.2 33.5





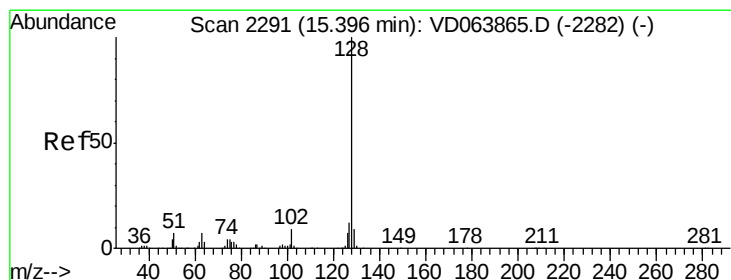
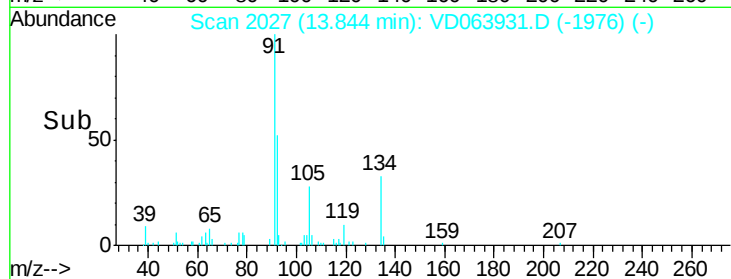
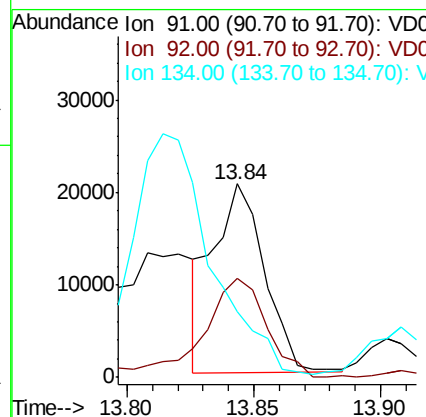
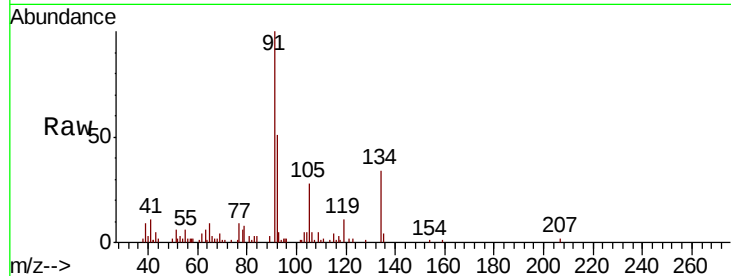
#89  
n-Butylbenzene  
Concen: 24.719 ug/l  
RT: 13.84 min Scan# 2027  
Delta R.T. 0.00 min  
Lab File: VD063931.D  
Acq: 11 Oct 2019 12:25

Instrument :  
MSVOA\_D  
ClientSampleId :  
TP-1RE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 64.1  | 26.8  | 80.3  |
| 134     | 0.0   | 14.4  | 43.0  |

Manual Integrations  
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#95  
Naphthalene  
Concen: 527.651 ug/l  
RT: 15.40 min Scan# 2292  
Delta R.T. 0.01 min  
Lab File: VD063931.D  
Acq: 11 Oct 2019 12:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 14.2  | 10.6  | 16.0  |
| 129     | 12.4  | 8.6   | 13.0  |

