

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD052219\  
 Data File : VD062503.D  
 Acq On : 22 May 2019 15:27  
 Operator : VA/AP  
 Sample : K2996-02  
 Misc : 5.95g/5ml/MSVOA D/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 P-2(0.5-1.0)

Manual Integrations  
 APPROVED

MMDadoda  
 5/23/2019 11:21:13 AM

Quant Time: May 23 03:45:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D052019S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 21 03:32:39 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 1) Pentafluorobenzene       | 7.02  | 168  | 505881   | 50.00  | ug/l   | -0.04    |
| 34) 1,4-Difluorobenzene     | 8.20  | 114  | 701888   | 50.00  | ug/l   | -0.03    |
| 63) Chlorobenzene-d5        | 12.36 | 117  | 473564   | 50.00  | ug/l   | -0.02    |
| 72) 1,4-Dichlorobenzene-d4  | 14.51 | 152  | 214095   | 50.00  | ug/l   | -0.02    |
| System Monitoring Compounds |       |      |          |        |        |          |
| 33) 1,2-Dichloroethane-d4   | 7.44  | 65   | 160181   | 29.58  | ug/l   | -0.03    |
| Spiked Amount 50.000        |       |      | Recovery | =      | 59.16% |          |
| 35) Dibromofluoromethane    | 6.90  | 113  | 195256   | 30.84  | ug/l   | -0.04    |
| Spiked Amount 50.000        |       |      | Recovery | =      | 61.68% |          |
| 50) Toluene-d8              | 10.40 | 98   | 319501   | 23.06  | ug/l   | -0.03    |
| Spiked Amount 50.000        |       |      | Recovery | =      | 46.12% |          |
| 62) 4-Bromofluorobenzene    | 13.55 | 95   | 140145   | 23.12  | ug/l   | -0.02    |
| Spiked Amount 50.000        |       |      | Recovery | =      | 46.24% |          |
| Target Compounds            |       |      |          |        |        |          |
|                             |       |      |          |        | Qvalue |          |
| 31) Cyclohexane             | 6.95  | 56   | 20254    | 3.961  | ug/l # | 61       |
| 39) Methylcyclohexane       | 8.84  | 83   | 30379    | 5.489  | ug/l   | 88       |
| 40) Benzene                 | 7.44  | 78   | 29979    | 2.278  | ug/l   | 94       |
| 67) Ethyl Benzene           | 12.51 | 91   | 82267    | 5.245  | ug/l   | 97       |
| 68) m/p-Xylenes             | 12.66 | 106  | 61218    | 10.872 | ug/l   | 85       |
| 73) Isopropylbenzene        | 13.39 | 105  | 47744    | 3.538  | ug/l   | 94       |
| 78) n-propylbenzene         | 13.76 | 91   | 46924    | 3.002  | ug/l   | 91       |
| 80) 1,3,5-Trimethylbenzene  | 13.92 | 105  | 25639    | 2.194  | ug/l   | 92       |
| 84) 1,2,4-Trimethylbenzene  | 14.23 | 105  | 169353   | 14.144 | ug/l   | 92       |
| 95) Naphthalene             | 16.12 | 128  | 44246    | 7.154  | ug/l # | 96       |

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

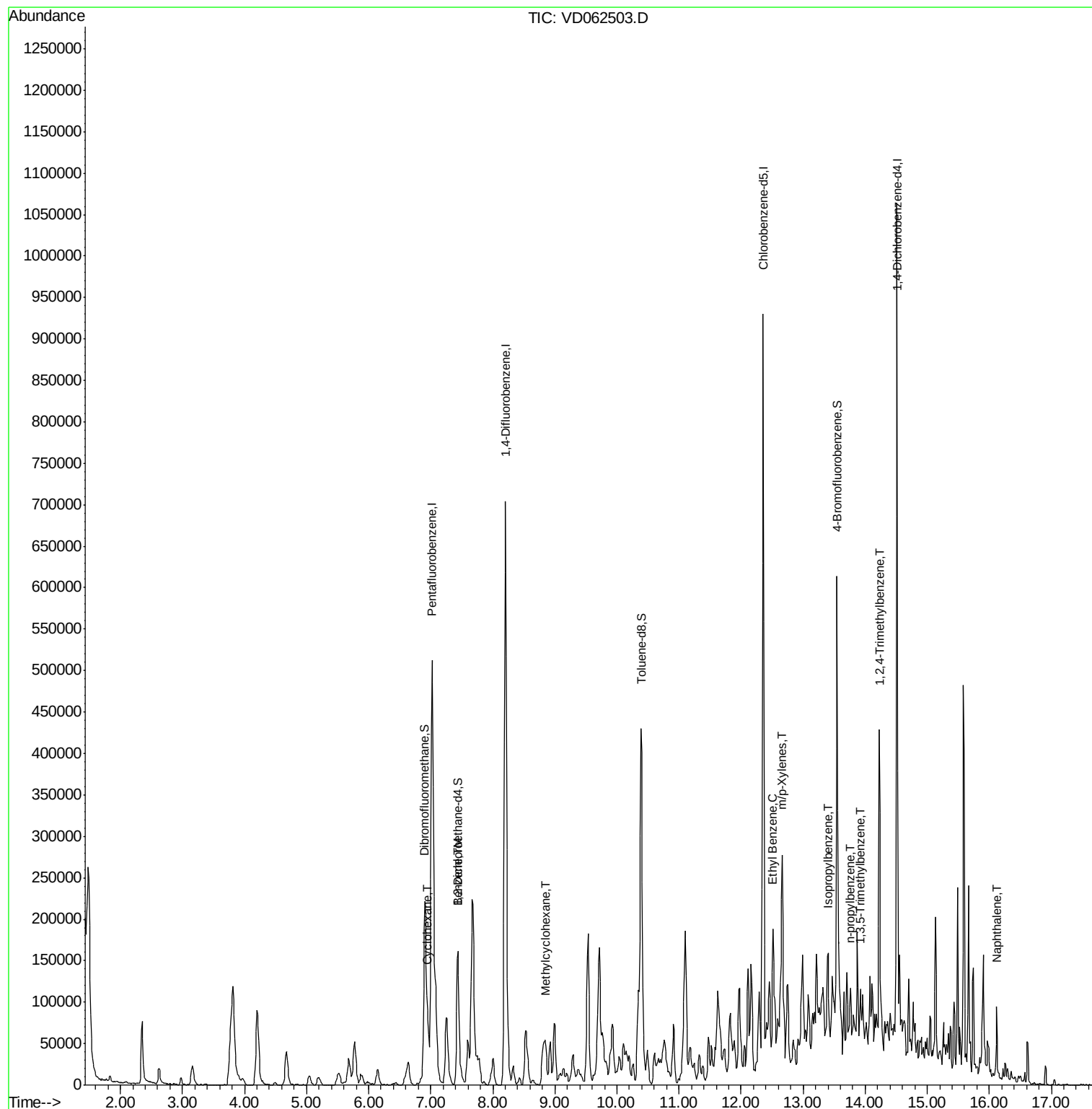
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD052219\  
Data File : VD062503.D  
Acq On : 22 May 2019 15:27  
Operator : VA/AP  
Sample : K2996-02  
Misc : 5.95g/5ml/MSVOA D/SOIL  
ALS Vial : 9 Sample Multiplier: 1

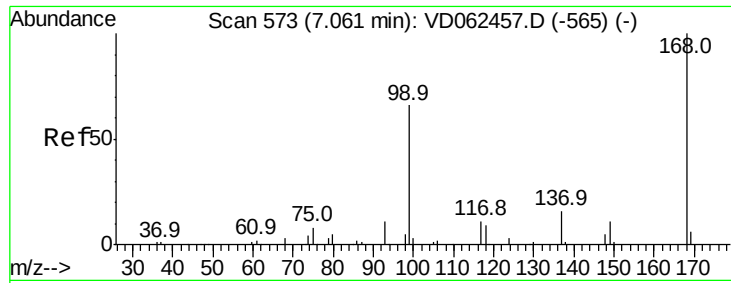
Instrument :  
MSVOA\_D  
ClientSampleId :  
P-2(0.5-1.0)

Manual Integrations  
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Quant Time: May 23 03:45:45 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D052019S.M  
Quant Title : SW846 8260  
QLast Update : Tue May 21 03:32:39 2019  
Response via : Initial Calibration





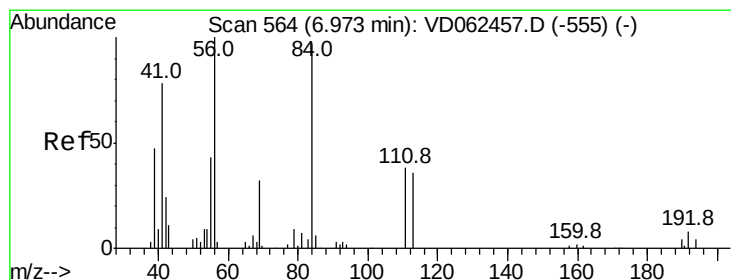
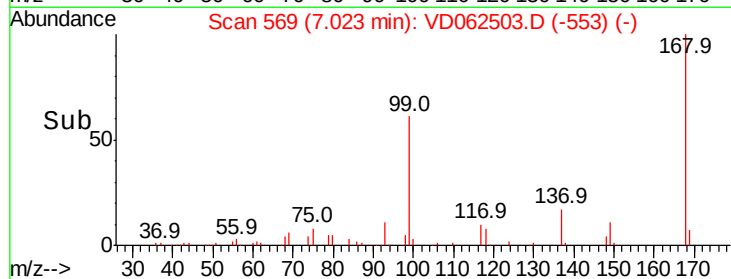
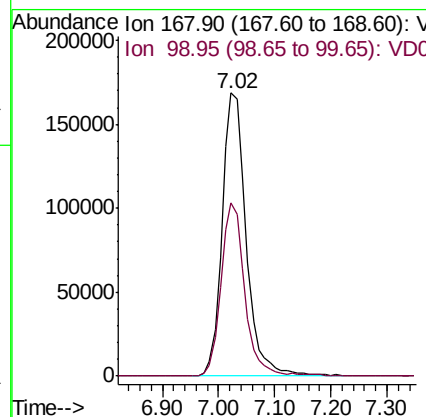
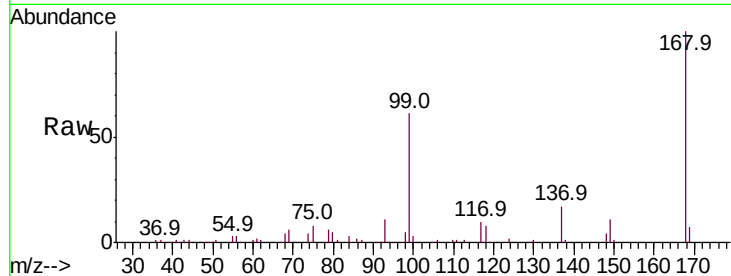
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.02 min Scan# 569  
Delta R.T. -0.04 min  
Lab File: VD062503.D  
Acq: 22 May 2019 15:27

Instrument :  
MSVOA\_D  
ClientSampleId :  
P-2(0.5-1.0)

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 168     | 100   |      |       |       |
| 99      | 61.3  | 46.5 | 69.7  |       |

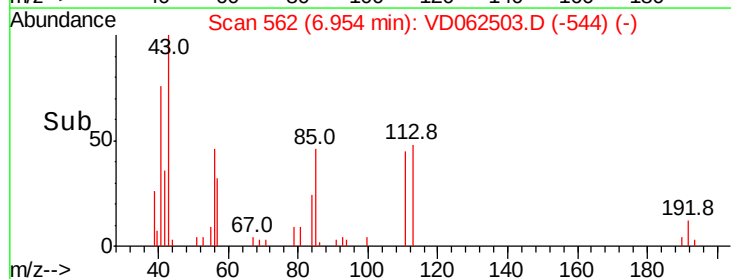
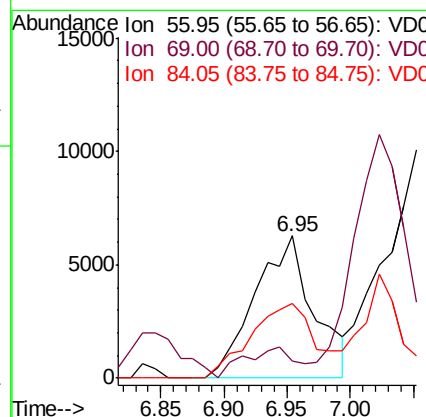
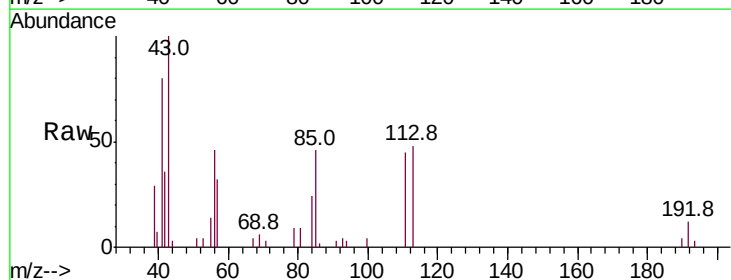
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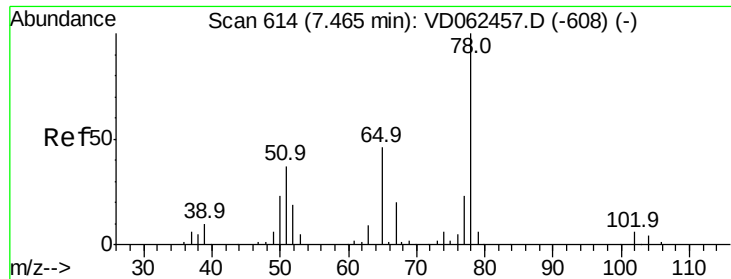
MMDadoda  
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#31  
Cyclohexane  
Concen: 3.961 ug/l  
RT: 6.95 min Scan# 562  
Delta R.T. -0.02 min  
Lab File: VD062503.D  
Acq: 22 May 2019 15:27

| Tgt Ion | Ratio | Resp | Lower  | Upper |
|---------|-------|------|--------|-------|
| 56      | 100   |      |        |       |
| 69      | 12.1  | 25.8 | 38.6#  |       |
| 84      | 52.4  | 72.2 | 108.4# |       |





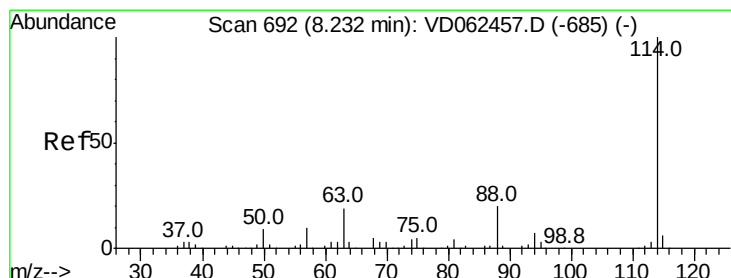
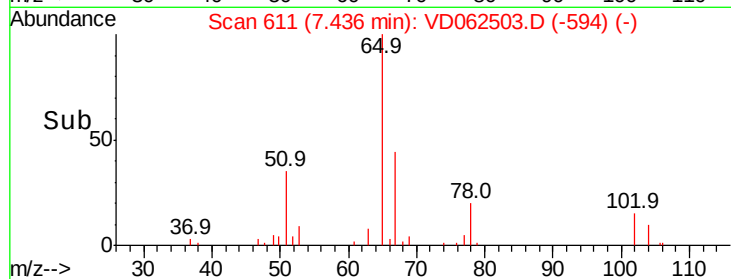
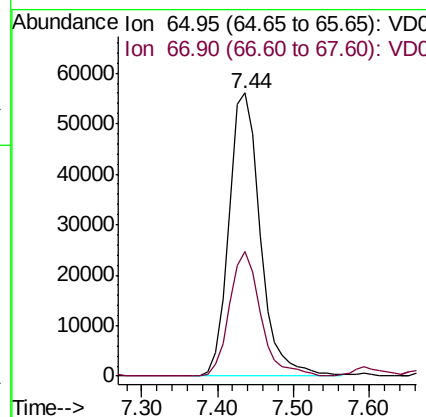
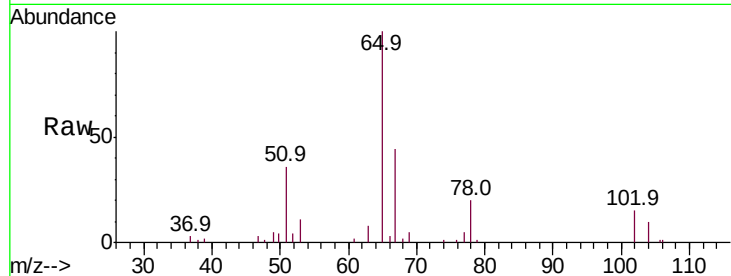
#33  
 1,2-Dichloroethane-d4  
 Concen: 29.580 ug/l  
 RT: 7.44 min Scan# 611  
 Delta R.T. -0.03 min  
 Lab File: VD062503.D  
 Acq: 22 May 2019 15:27

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 P-2(0.5-1.0)

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 65      | 100   | 160181 |       |       |
| 67      | 44.2  | 0.0    | 98.0  |       |

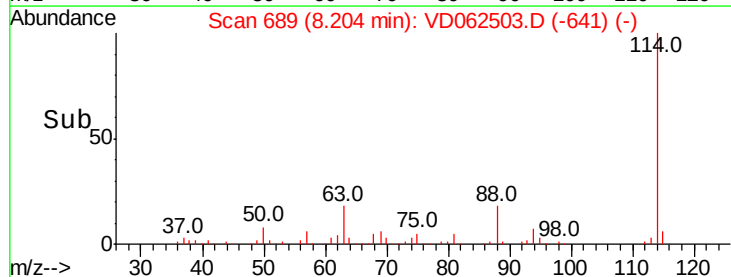
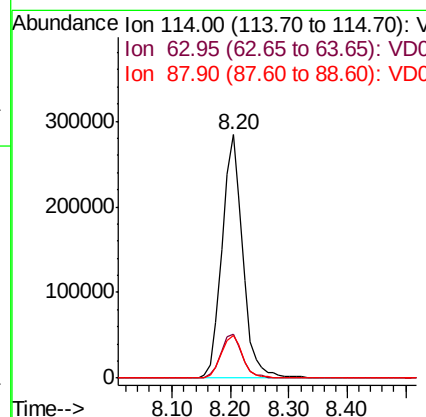
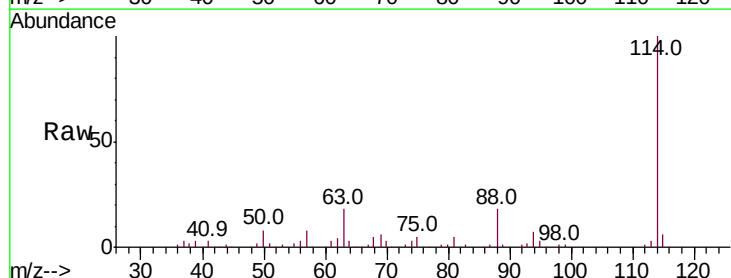
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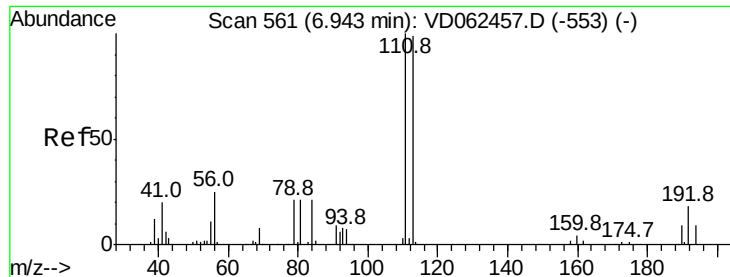
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#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.20 min Scan# 689  
 Delta R.T. -0.03 min  
 Lab File: VD062503.D  
 Acq: 22 May 2019 15:27

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 114     | 100   | 701888 |       |       |
| 63      | 18.0  | 0.0    | 32.4  |       |
| 88      | 17.6  | 0.0    | 33.6  |       |





#35

Dibromofluoromethane

Concen: 30.837 ug/l

RT: 6.90 min Scan# 557

Delta R.T. -0.04 min

Lab File: VD062503.D

Acq: 22 May 2019 15:27

Instrument :

MSVOA\_D

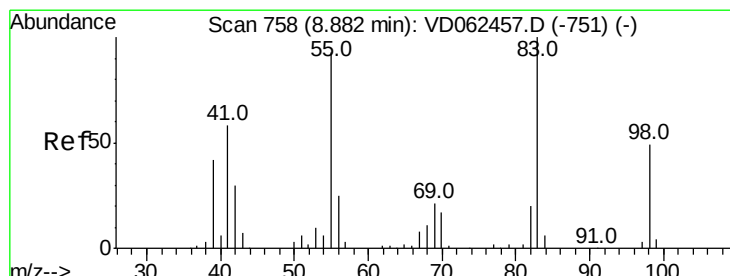
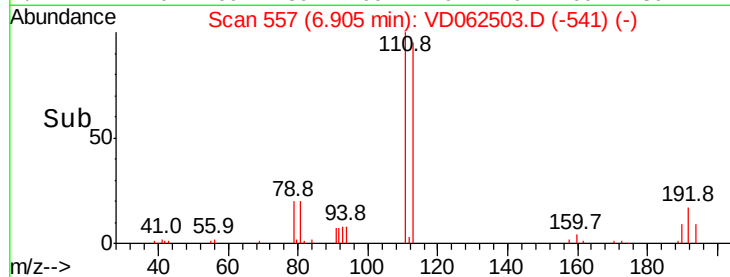
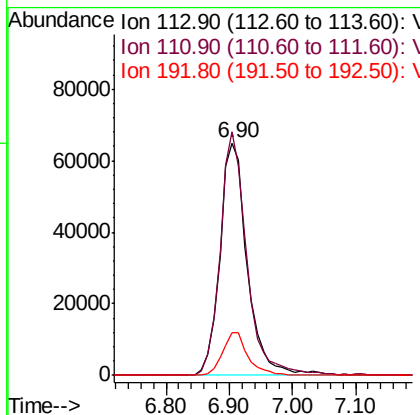
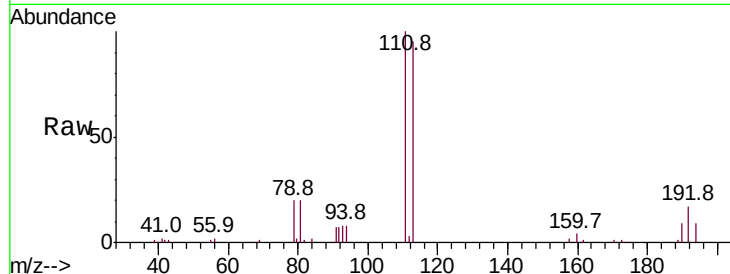
ClientSampleId :

P-2(0.5-1.0)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 113   | Resp: | 195256 |
| Ion Ratio | Lower | Upper |        |
| 113       | 100   |       |        |
| 111       | 104.9 | 78.5  | 117.7  |
| 192       | 18.3  | 13.0  | 19.4   |

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#39

Methylcyclohexane

Concen: 5.489 ug/l

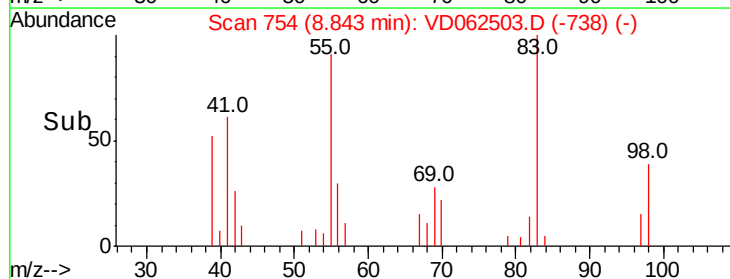
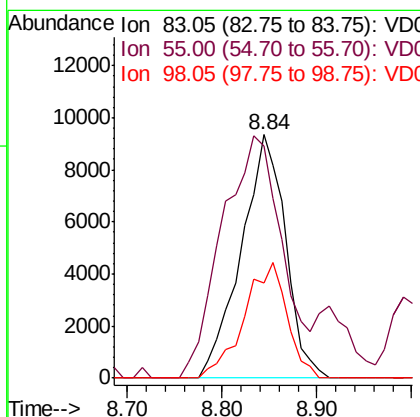
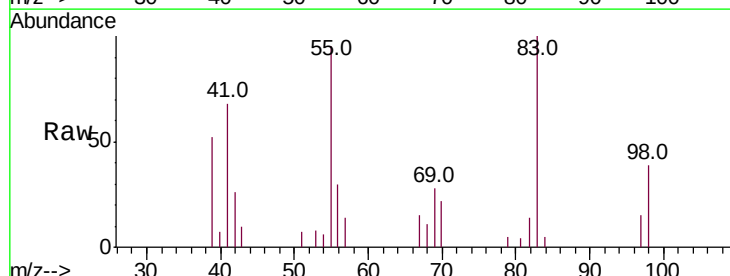
RT: 8.84 min Scan# 754

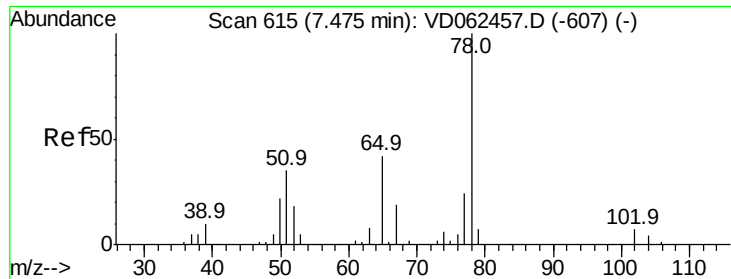
Delta R.T. -0.04 min

Lab File: VD062503.D

Acq: 22 May 2019 15:27

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 83    | Resp: | 30379 |
| Ion Ratio | Lower | Upper |       |
| 83        | 100   |       |       |
| 55        | 95.3  | 68.2  | 102.4 |
| 98        | 39.1  | 38.2  | 57.4  |





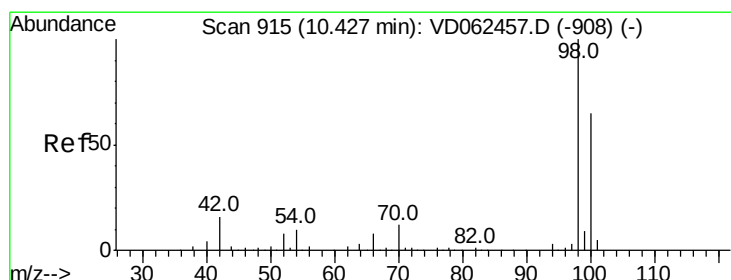
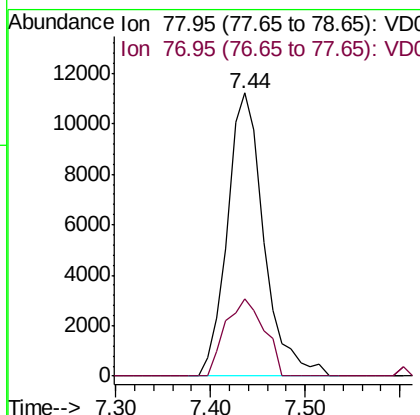
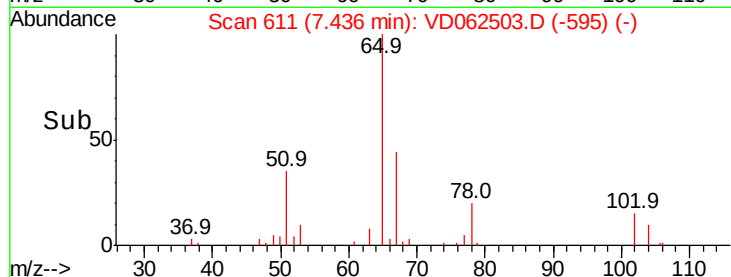
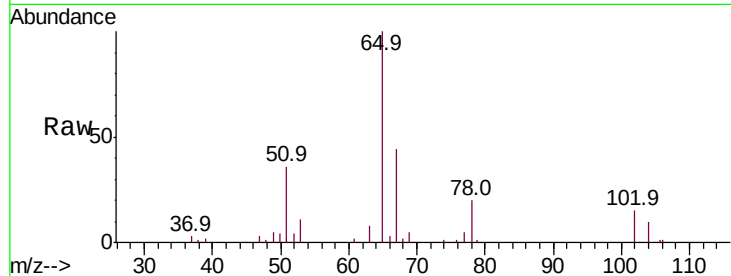
#40  
Benzene  
Concen: 2.278 ug/l  
RT: 7.44 min Scan# 611  
Delta R.T. -0.04 min  
Lab File: VD062503.D  
Acq: 22 May 2019 15:27

Instrument :  
MSVOA\_D  
ClientSampleId :  
P-2(0.5-1.0)

Tot Ion: 78 Resp: 29979  
Ion Ratio Lower Upper  
78 100  
77 27.5 19.7 29.5

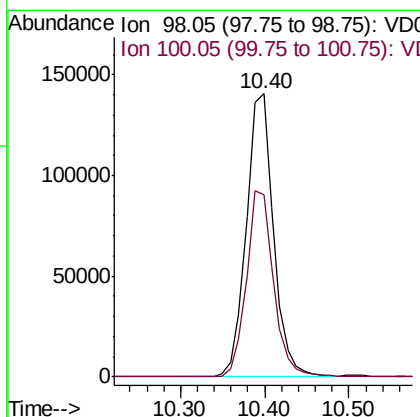
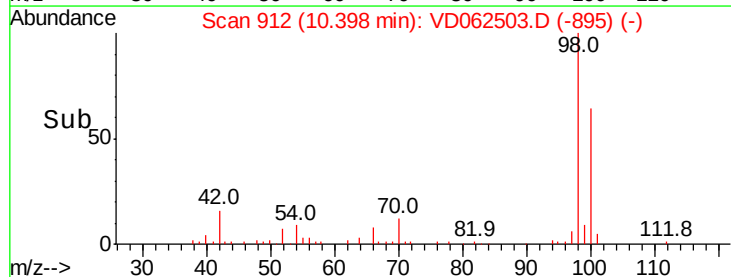
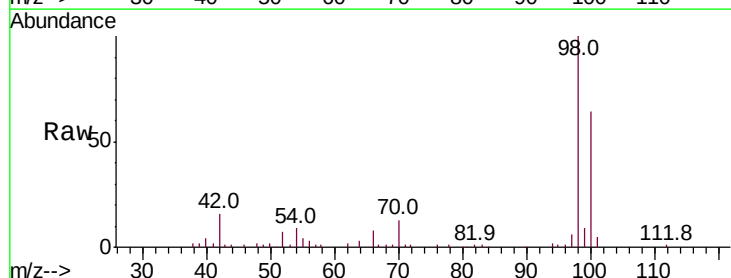
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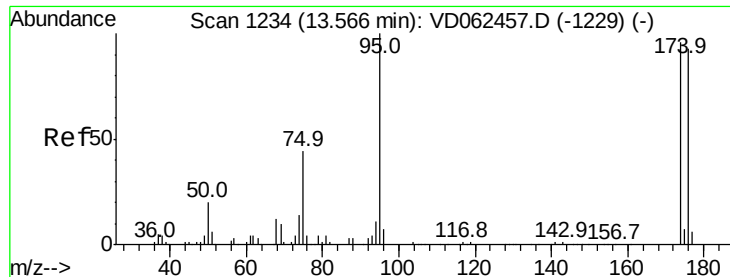
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#50  
Toluene-d8  
Concen: 23.058 ug/l  
RT: 10.40 min Scan# 912  
Delta R.T. -0.03 min  
Lab File: VD062503.D  
Acq: 22 May 2019 15:27

Tgt Ion: 98 Resp: 319501  
Ion Ratio Lower Upper  
98 100  
100 64.4 53.8 80.8





#62

4-Bromofluorobenzene

Concen: 23.121 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. -0.02 min

Lab File: VD062503.D

Acq: 22 May 2019 15:27

Instrument :

MSVOA\_D

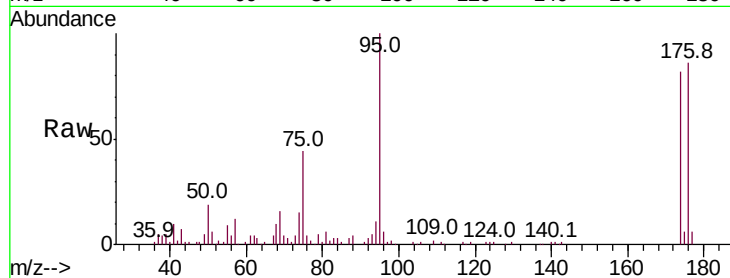
ClientSampleId :

P-2(0.5-1.0)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 95    | Resp: | 140145 |
| Ion Ratio | Lower | Upper |        |
| 95        | 100   |       |        |
| 174       | 81.7  | 0.0   | 181.8  |
| 176       | 85.7  | 0.0   | 174.4  |

Manual Integrations  
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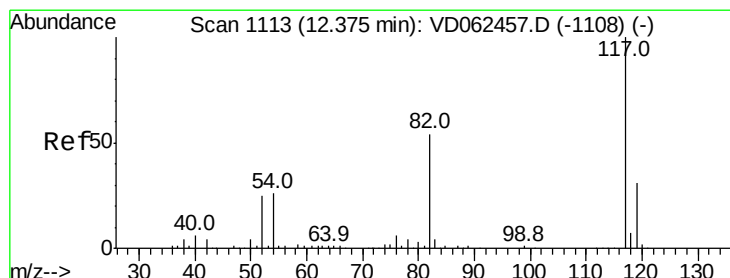
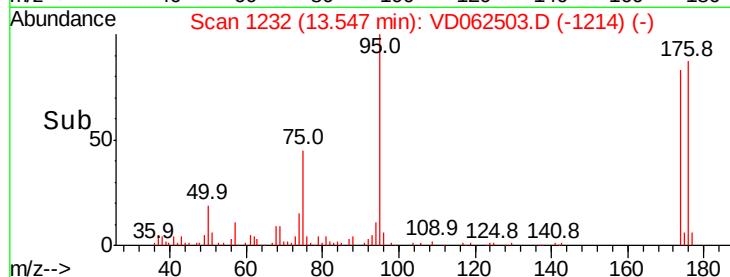
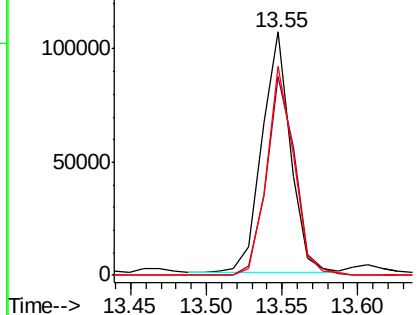
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Abundance Ion 95.00 (94.70 to 95.70): V

Ion 173.90 (173.60 to 174.60): V

Ion 175.90 (175.60 to 176.60): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

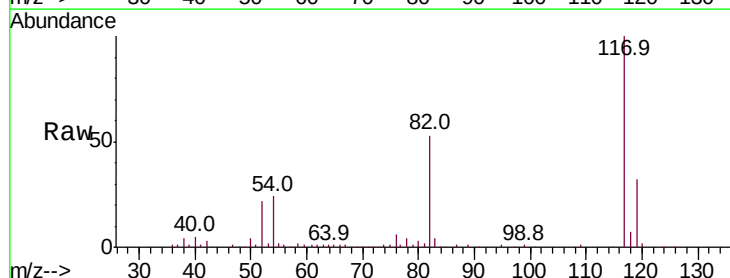
RT: 12.36 min Scan# 1111

Delta R.T. -0.02 min

Lab File: VD062503.D

Acq: 22 May 2019 15:27

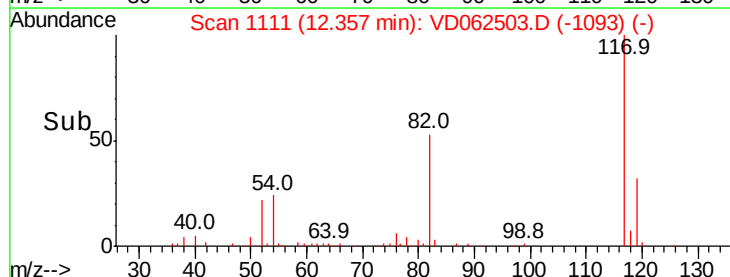
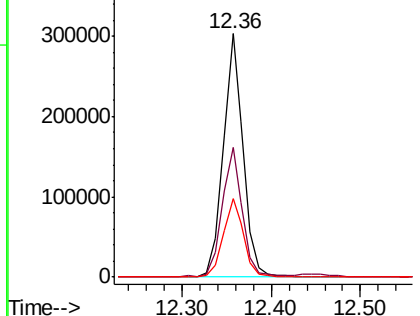
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 117   | Resp: | 473564 |
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 82        | 53.2  | 36.2  | 54.2   |
| 119       | 32.2  | 26.2  | 39.4   |

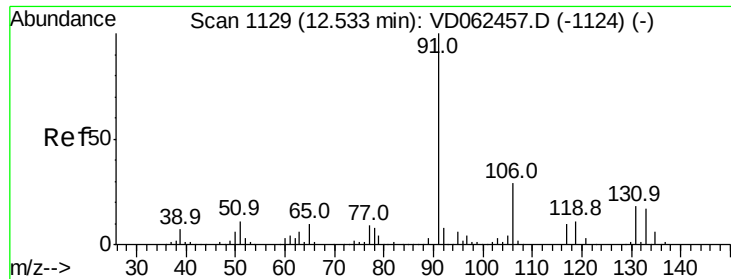


Abundance Ion 116.95 (116.65 to 117.65): V

Ion 82.05 (81.75 to 82.75): V

Ion 118.95 (118.65 to 119.65): V





#67

Ethyl Benzene

Concen: 5.245 ug/l

RT: 12.51 min Scan# 1127

Delta R.T. -0.02 min

Lab File: VD062503.D

Acq: 22 May 2019 15:27

Instrument :

MSVOA\_D

ClientSampleId :

P-2(0.5-1.0)

Tot Ion: 91 Resp: 82267

Ion Ratio Lower Upper

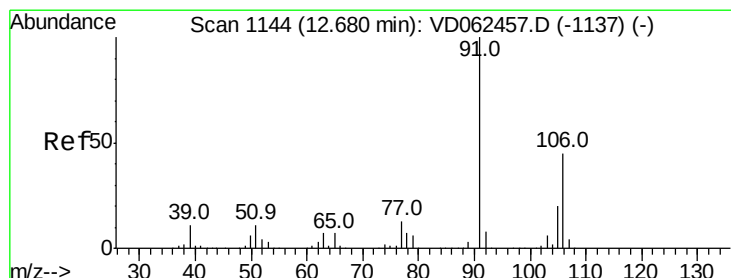
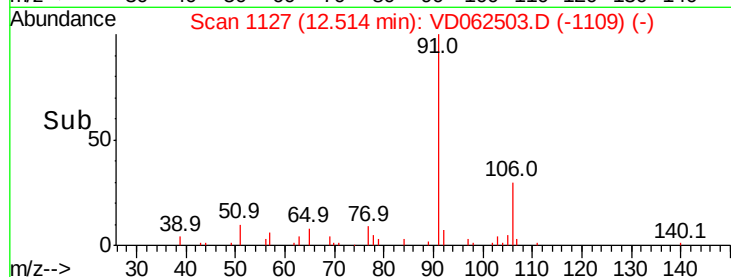
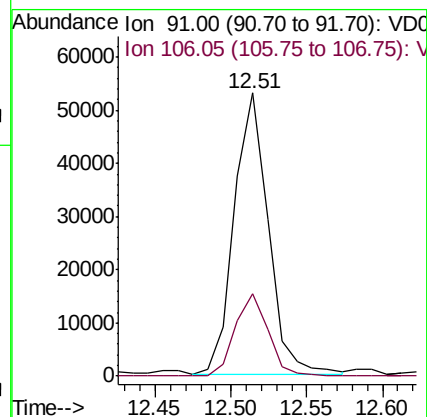
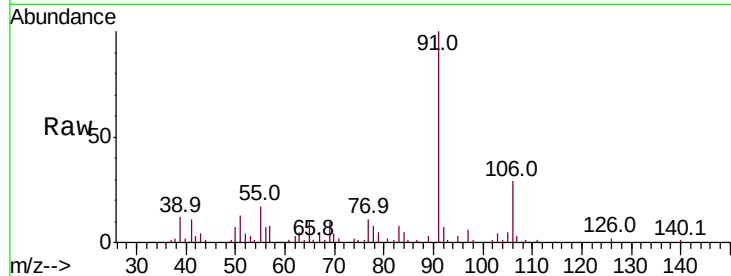
91 100

106 29.0 24.7 37.1

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#68

m/p-Xylenes

Concen: 10.872 ug/l

RT: 12.66 min Scan# 1142

Delta R.T. -0.02 min

Lab File: VD062503.D

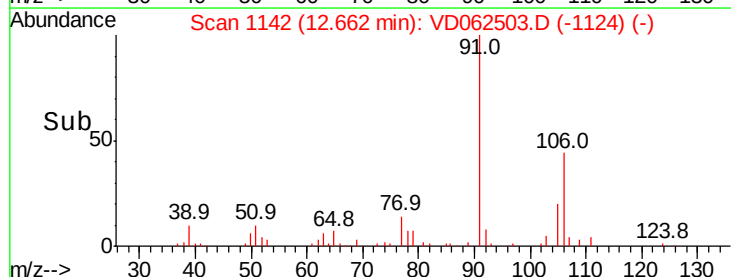
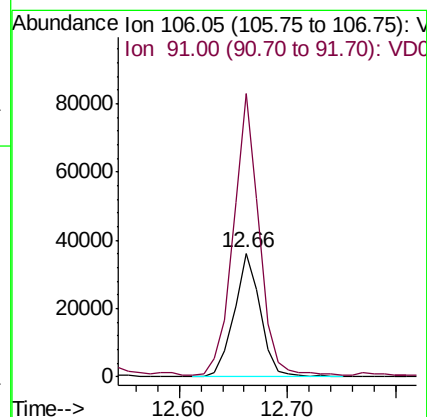
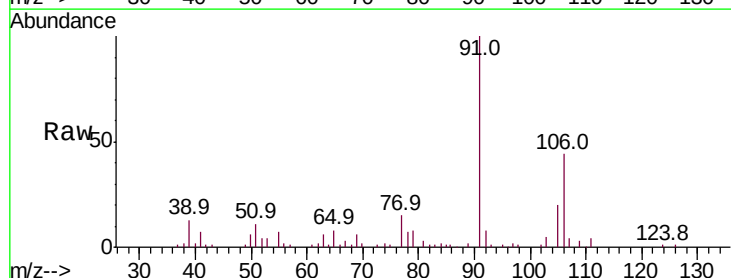
Acq: 22 May 2019 15:27

Tgt Ion: 106 Resp: 61218

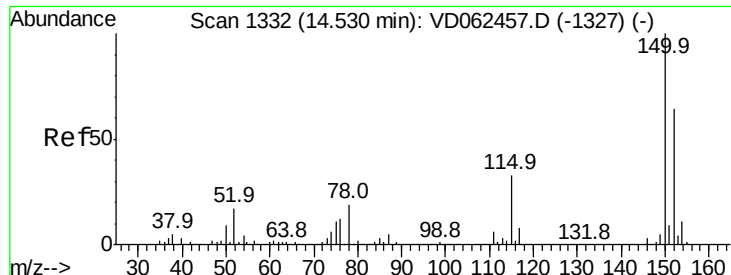
Ion Ratio Lower Upper

106 100

91 228.5 164.0 246.0







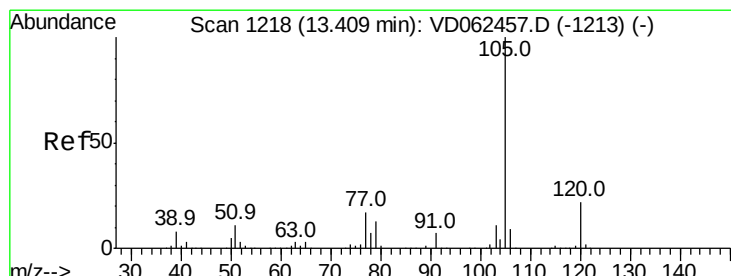
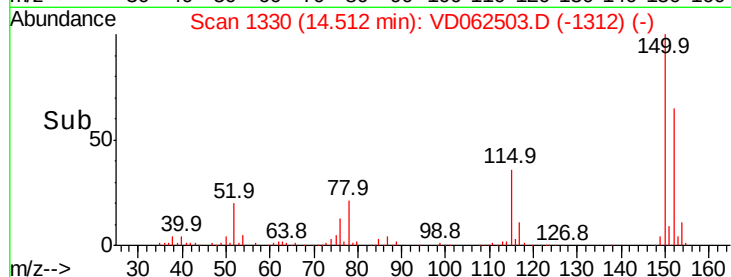
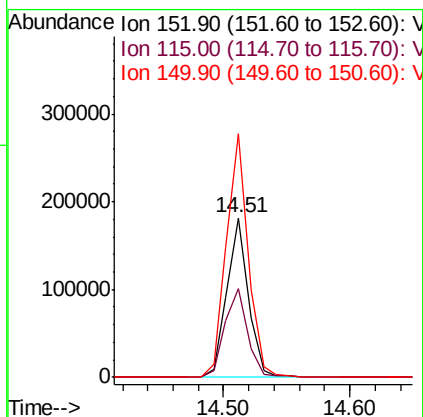
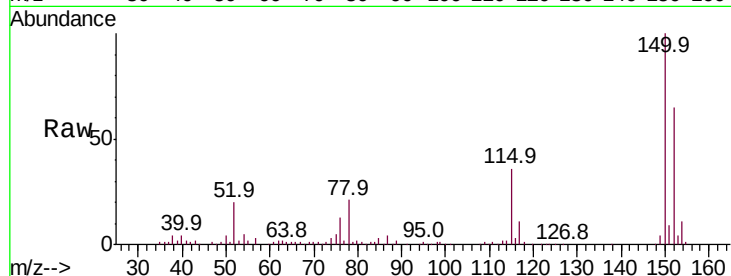
#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 14.51 min Scan# 1330  
 Delta R.T. -0.02 min  
 Lab File: VD062503.D  
 Acq: 22 May 2019 15:27

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 P-2(0.5-1.0)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 55.7  | 30.9  | 92.7  |
| 150     | 152.9 | 0.0   | 314.8 |

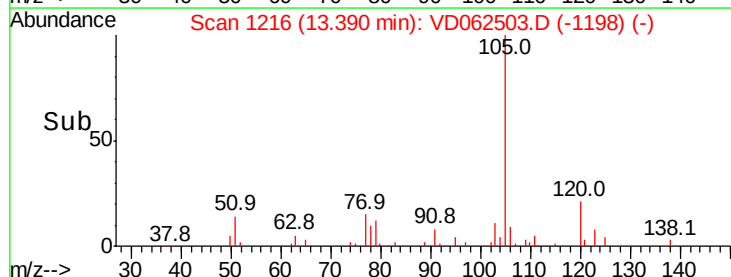
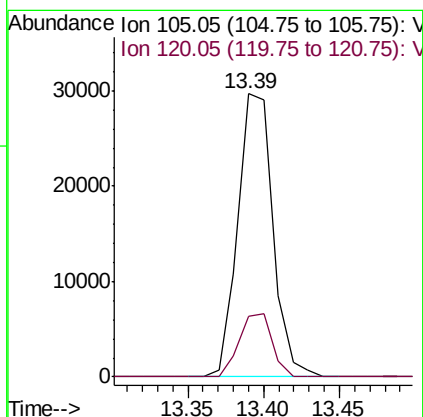
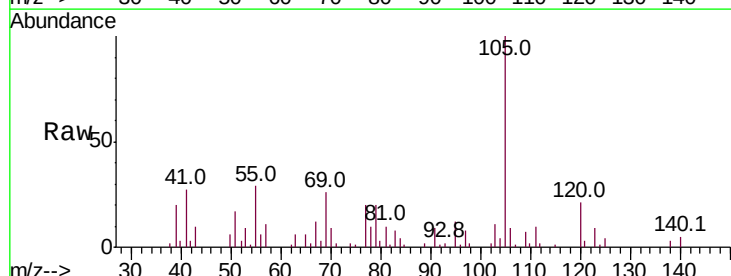
Manual Integrations  
 APPROVED

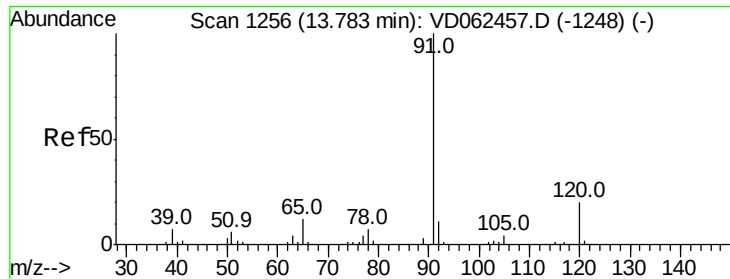
MMDadoda  
 5/23/2019 11:21:13 AM



#73  
 Isopropylbenzene  
 Concen: 3.538 ug/l  
 RT: 13.39 min Scan# 1216  
 Delta R.T. -0.02 min  
 Lab File: VD062503.D  
 Acq: 22 May 2019 15:27

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 21.2  | 12.0  | 36.1  |





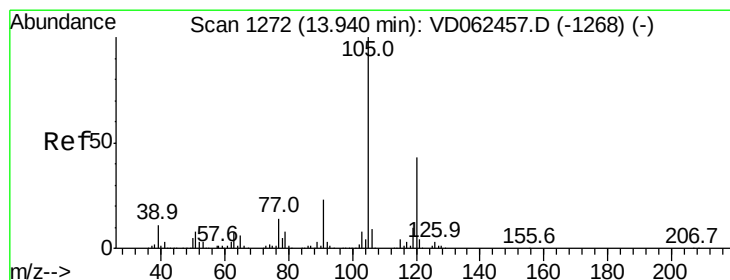
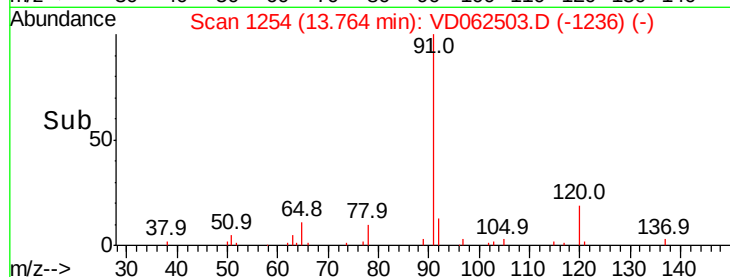
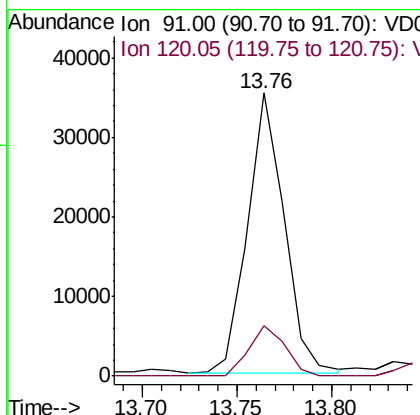
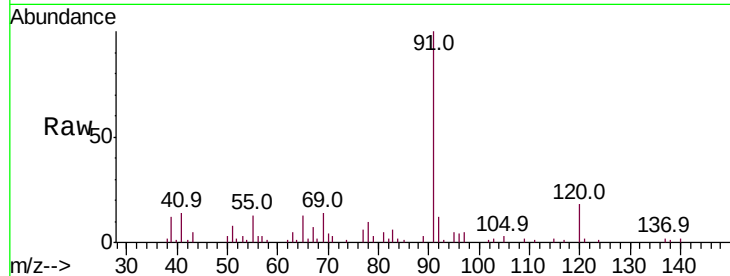
#78  
n-propylbenzene  
Concen: 3.002 ug/l  
RT: 13.76 min Scan# 1254  
Delta R.T. -0.02 min  
Lab File: VD062503.D  
Acq: 22 May 2019 15:27

Instrument :  
MSVOA\_D  
ClientSampleId :  
P-2(0.5-1.0)

Tot Ion: 91 Resp: 46924  
Ion Ratio Lower Upper  
91 100  
120 17.8 11.1 33.1

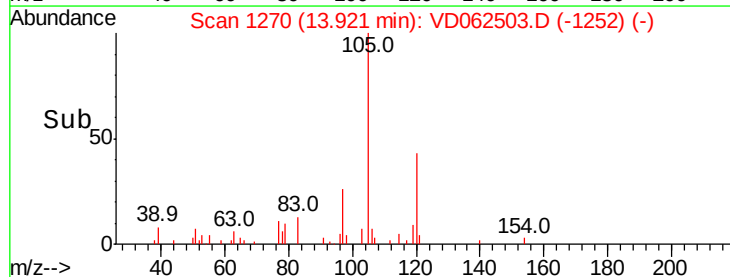
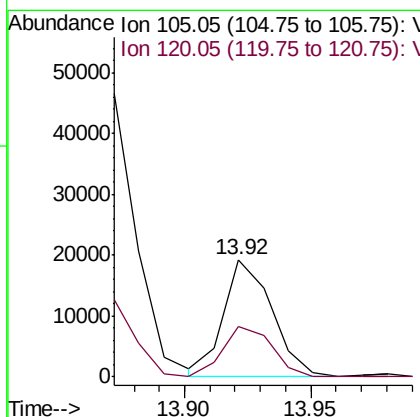
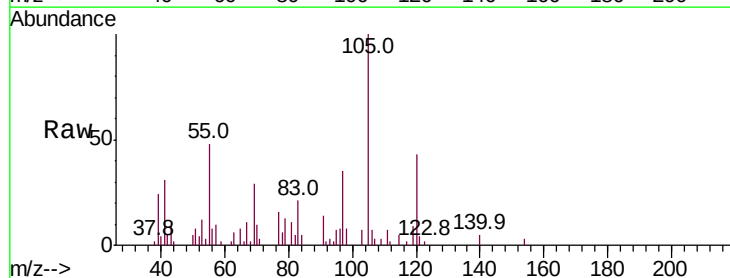
Manual Integrations  
APPROVED

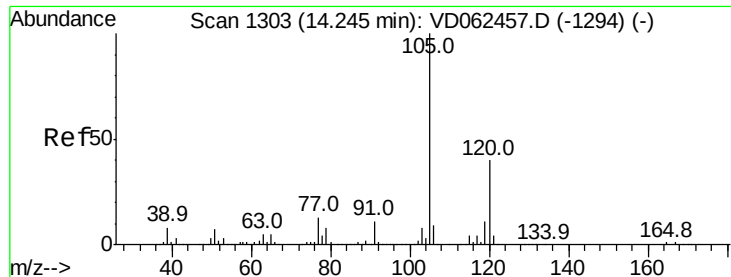
MMDadoda  
5/23/2019 11:21:13 AM



#80  
1,3,5-Trimethylbenzene  
Concen: 2.194 ug/l  
RT: 13.92 min Scan# 1270  
Delta R.T. -0.02 min  
Lab File: VD062503.D  
Acq: 22 May 2019 15:27

Tgt Ion:105 Resp: 25639  
Ion Ratio Lower Upper  
105 100  
120 42.8 24.0 72.0





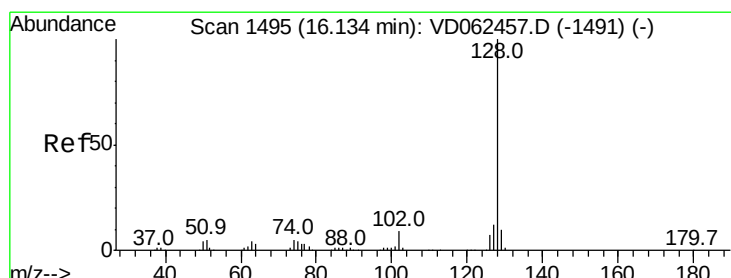
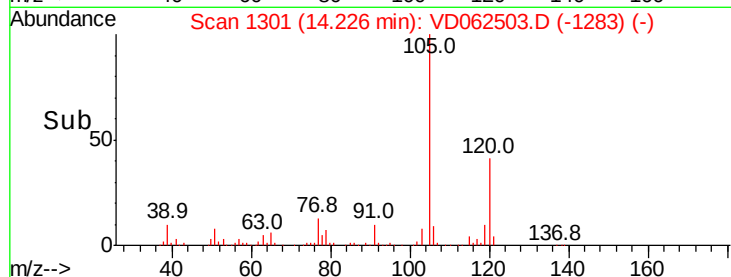
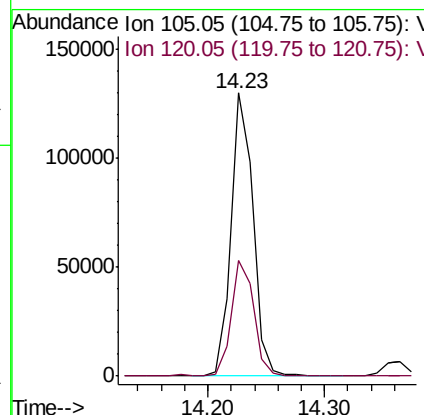
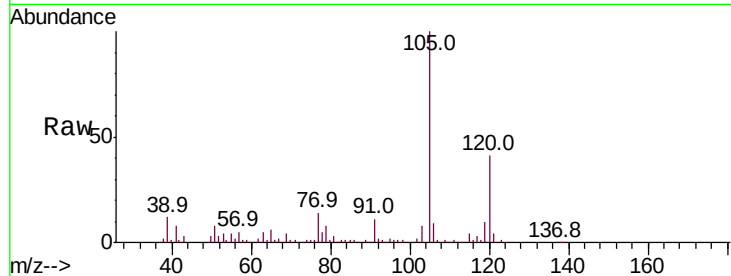
#84  
 1,2,4-Trimethylbenzene  
 Concen: 14.144 ug/l  
 RT: 14.23 min Scan# 1301  
 Delta R.T. -0.02 min  
 Lab File: VD062503.D  
 Acq: 22 May 2019 15:27

Instrument :  
 MSVOA\_D  
 ClientSampled :  
 P-2(0.5-1.0)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 40.7  | 23.1  | 69.2  |

Manual Integrations  
 APPROVED

MMDadoda  
 5/23/2019 11:21:13 AM



#95  
 Naphthalene  
 Concen: 7.154 ug/l  
 RT: 16.12 min Scan# 1493  
 Delta R.T. -0.02 min  
 Lab File: VD062503.D  
 Acq: 22 May 2019 15:27

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 11.7  | 9.8   | 14.8  |
| 129     | 13.6  | 8.8   | 13.2# |

