

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF052319\  
 Data File : VF062726.D  
 Acq On : 23 May 2019 14:56  
 Operator : FY/SY  
 Sample : K2976-06  
 Misc : 5.74g/5mL/MSVOA F/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 EP1-SB-E-6R(17-20)

Manual Integrations  
 APPROVED

MMDadoda  
 5/24/2019 11:16:06 AM

Quant Time: May 24 03:13:46 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F051619S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri May 17 05:49:09 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc    | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene       | 5.06  | 168  | 969353   | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene     | 5.78  | 114  | 1539408  | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5        | 9.91  | 117  | 1097101  | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 12.61 | 152  | 587489   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds |       |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4   | 5.04  | 65   | 240050   | 35.04   | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 70.08%  |          |
| 35) Dibromofluoromethane    | 4.31  | 113  | 445198   | 37.79   | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 75.58%  |          |
| 50) Toluene-d8              | 7.71  | 98   | 1131341  | 40.23   | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 80.46%  |          |
| 62) 4-Bromofluorobenzene    | 11.50 | 95   | 765466   | 71.76   | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 143.52% |          |
| Target Compounds            |       |      |          |         |         |          |
|                             |       |      |          |         | Qvalue  |          |
| 39) Methylcyclohexane       | 5.65  | 83   | 85136    | 4.485   | ug/l    | 95       |
| 64) Tetrachloroethene       | 8.32  | 164  | 18493    | 2.128   | ug/l    | 91       |
| 67) Ethyl Benzene           | 10.04 | 91   | 500919   | 13.381  | ug/l    | 95       |
| 68) m/p-Xylenes             | 10.27 | 106  | 535590   | 38.068  | ug/l    | 82       |
| 69) o-Xylene                | 10.83 | 106  | 46809    | 3.230   | ug/l    | 85       |
| 73) Isopropylbenzene        | 11.22 | 105  | 2282061  | 54.198  | ug/l    | 99       |
| 78) n-propylbenzene         | 11.68 | 91   | 3955285  | 79.373  | ug/l    | 91       |
| 80) 1,3,5-Trimethylbenzene  | 11.90 | 105  | 6331698  | 187.535 | ug/l    | 81       |
| 83) tert-Butylbenzene       | 12.20 | 119  | 676162   | 19.740  | ug/l    | 86       |
| 84) 1,2,4-Trimethylbenzene  | 12.29 | 105  | 10723432 | 328.156 | ug/l    | 66       |
| 85) sec-Butylbenzene        | 12.38 | 105  | 3459299  | 75.252  | ug/l #  | 68       |
| 86) p-Isopropyltoluene      | 12.53 | 119  | 1886377m | 48.692  | ug/l    |          |
| 89) n-Butylbenzene          | 12.90 | 91   | 2961069  | 77.521  | ug/l #  | 54       |
| 95) Naphthalene             | 14.50 | 128  | 496950   | 22.641  | ug/l    | 98       |

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

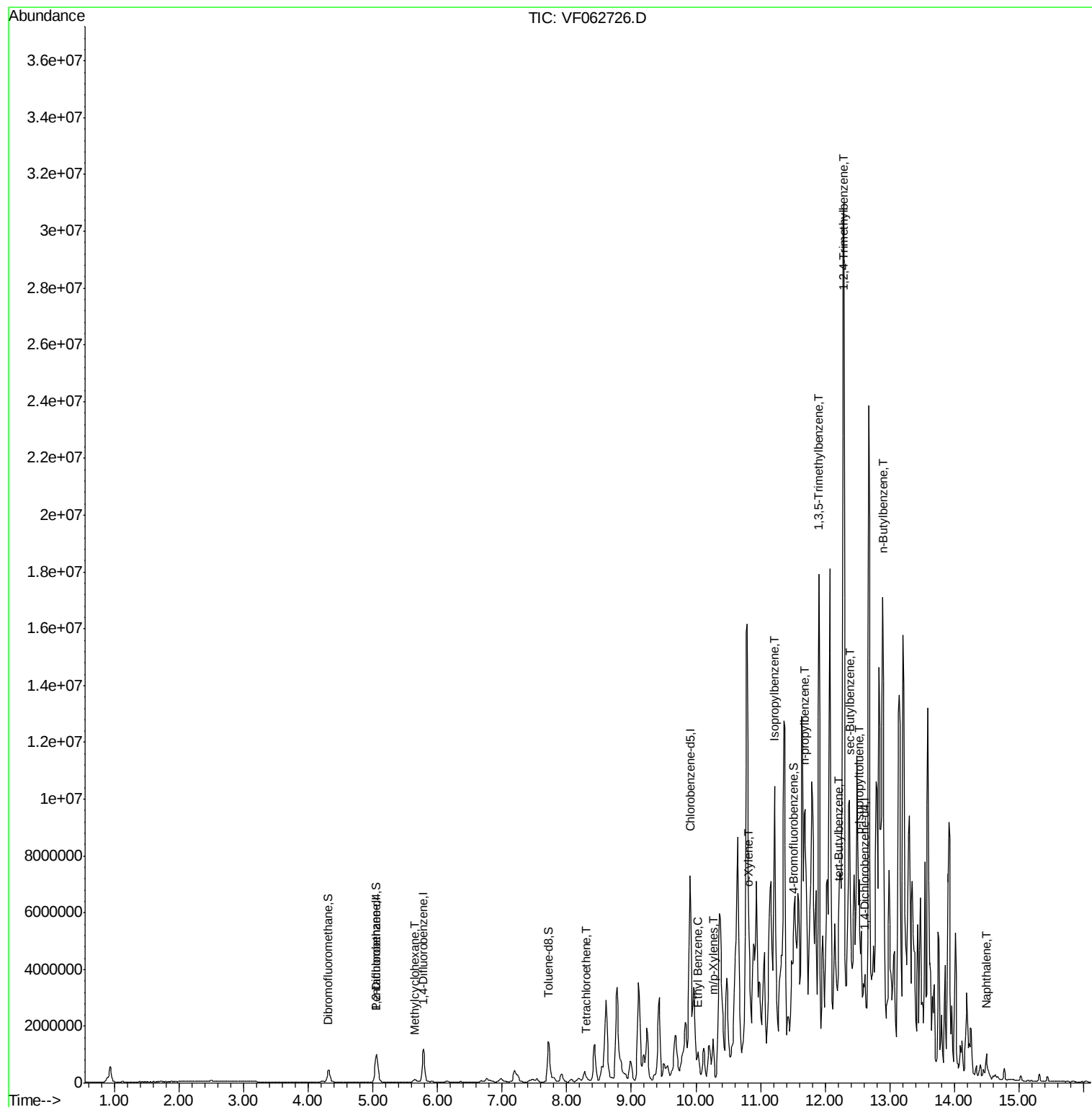
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF052319\  
Data File : VF062726.D  
Acq On : 23 May 2019 14:56  
Operator : FY/SY  
Sample : K2976-06  
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ALS Vial : 10 Sample Multiplier: 1

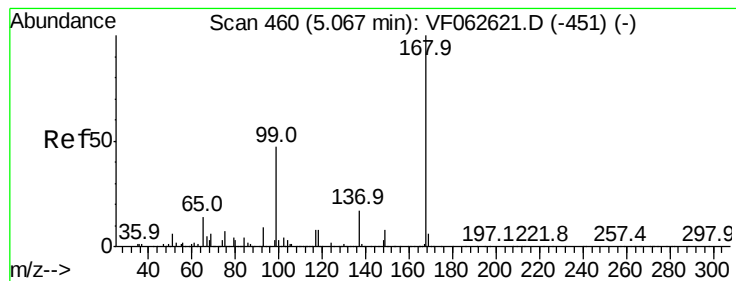
Instrument :  
MSVOA\_F  
ClientSampleId :  
EP1-SB-E-6R(17-20)

Manual Integrations  
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5/24/2019 11:16:06 AM

Quant Time: May 24 03:13:46 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F051619S.M  
Quant Title : SW846 8260  
QLast Update : Fri May 17 05:49:09 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.06 min Scan# 459

Delta R.T. -0.00 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

Instrument :

MSVOA\_F

ClientSampleId :

EP1-SB-E-6R(17-20)

Tot Ion:168 Resp: 969353

Ion Ratio Lower Upper

168 100

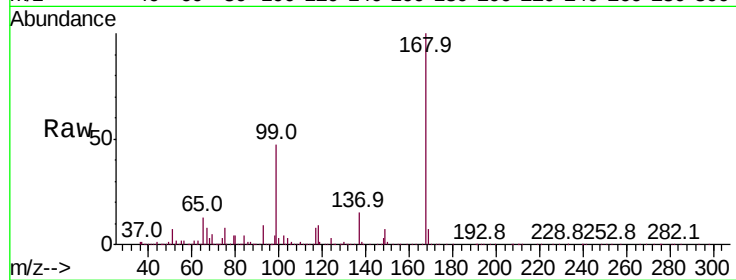
99 47.3 37.8 56.8

Manual Integrations

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Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

5.06

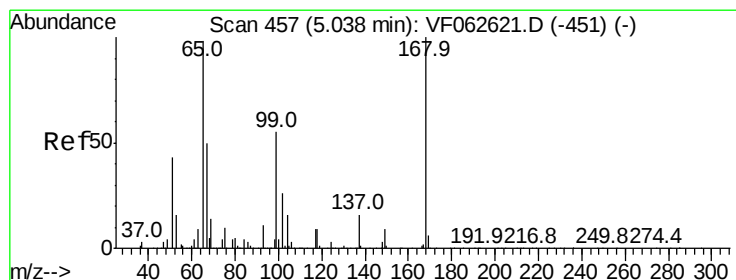
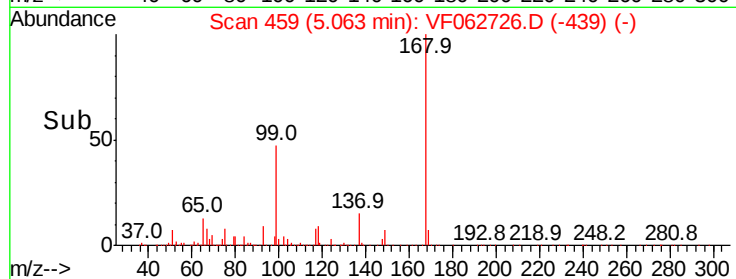
300000

200000

100000

0

Time-->



#33

1,2-Dichloroethane-d4

Concen: 35.044 ug/l

RT: 5.04 min Scan# 457

Delta R.T. 0.01 min

Lab File: VF062726.D

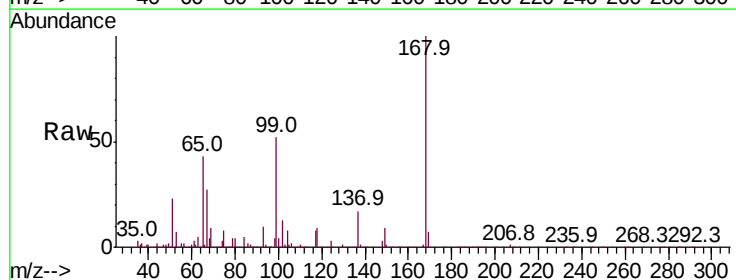
Acq: 23 May 2019 14:56

Tgt Ion: 65 Resp: 240050

Ion Ratio Lower Upper

65 100

67 62.1 0.0 117.6



Abundance Ion 65.00 (64.70 to 65.70): VF0

Ion 67.00 (66.70 to 67.70): VF0

5.04

80000

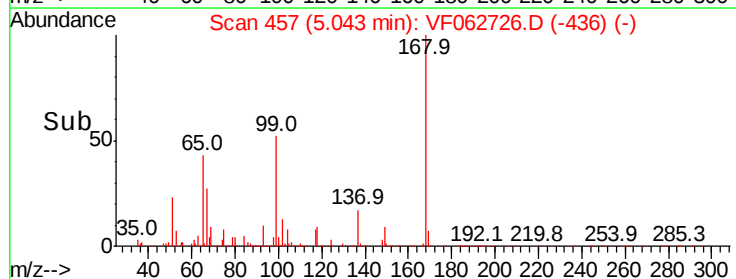
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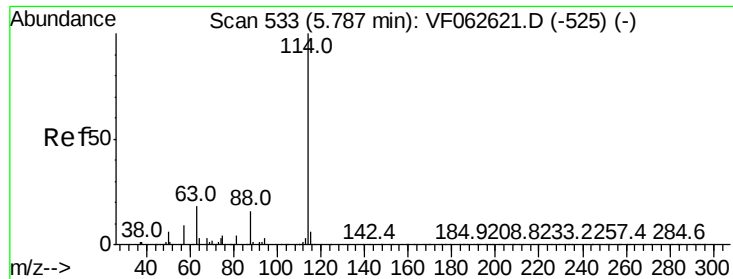
40000

20000

0

Time-->





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.78 min Scan# 532

Delta R.T. -0.00 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

Instrument :

MSVOA\_F

ClientSampleId :

EP1-SB-E-6R(17-20)

Tot Ion:114 Resp: 1539408

Ion Ratio Lower Upper

114 100

63 17.0 0.0 35.4

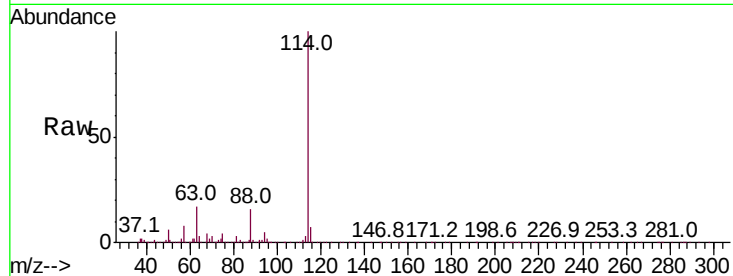
88 16.4 0.0 32.4

Manual Integrations

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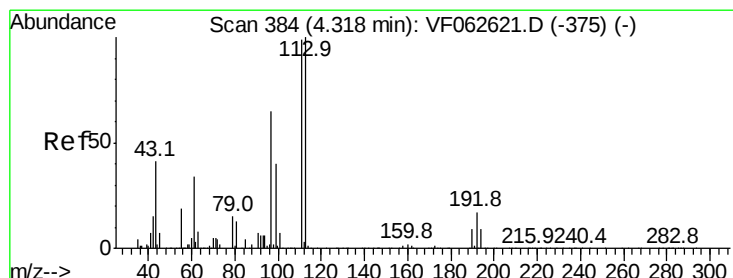
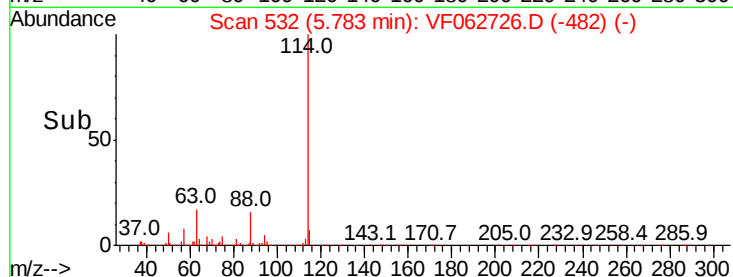
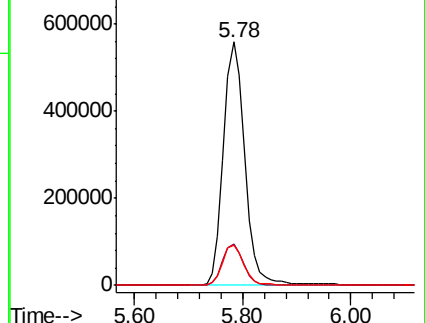
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Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 88.00 (87.70 to 88.70): VF0



#35

Dibromofluoromethane

Concen: 37.794 ug/l

RT: 4.31 min Scan# 383

Delta R.T. -0.00 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

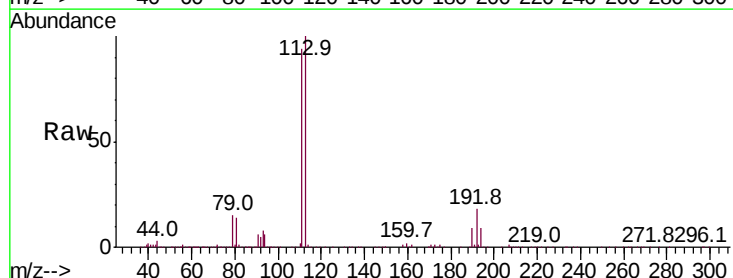
Tgt Ion:113 Resp: 445198

Ion Ratio Lower Upper

113 100

111 94.1 79.4 119.2

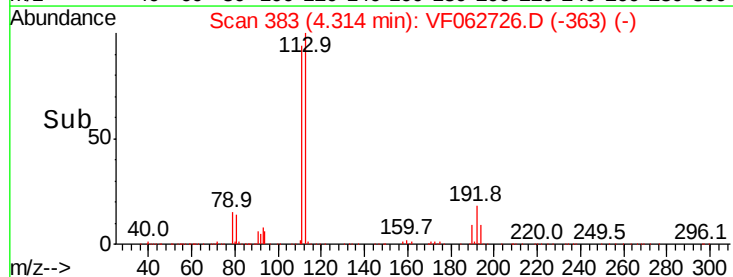
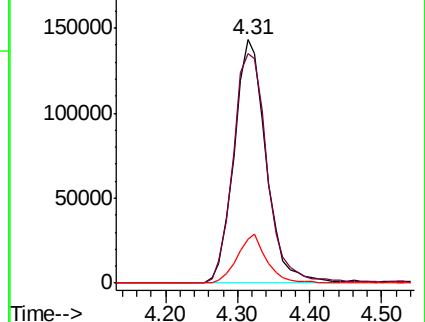
192 17.9 13.4 20.2

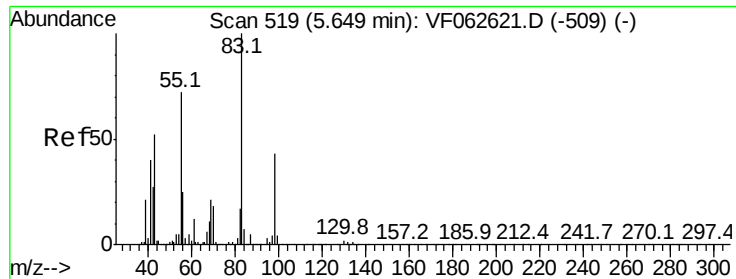


Abundance Ion 113.00 (112.70 to 113.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 192.00 (191.70 to 192.70): V





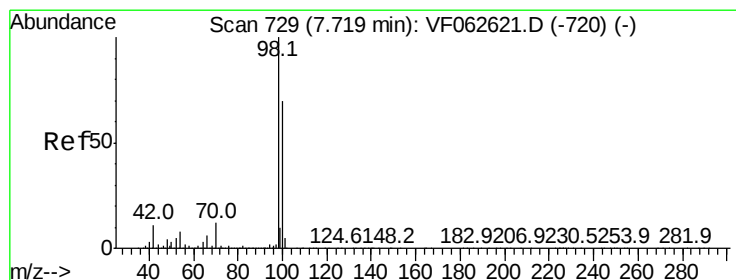
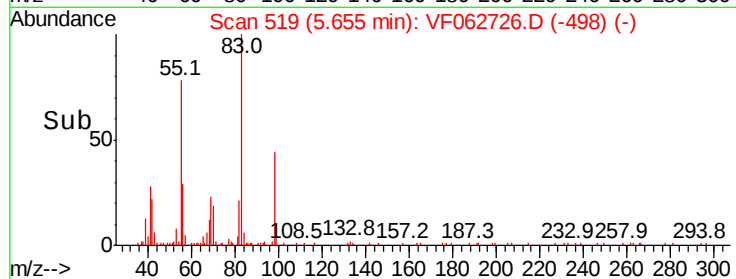
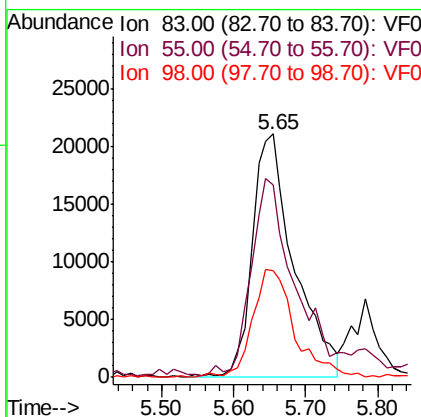
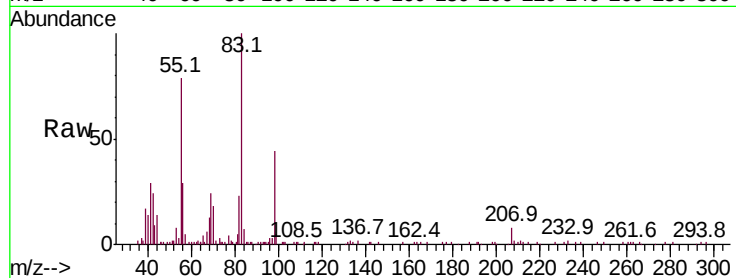
#39  
Methvlcvclohexane  
Concen: 4.485 ug/l  
RT: 5.65 min Scan# 519  
Delta R.T. 0.01 min  
Lab File: VF062726.D  
Acq: 23 May 2019 14:56

Instrument :  
MSVOA\_F  
ClientSampleId :  
EP1-SB-E-6R(17-20)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 55      | 78.9  | 57.9  | 86.9  |
| 98      | 43.5  | 34.6  | 52.0  |

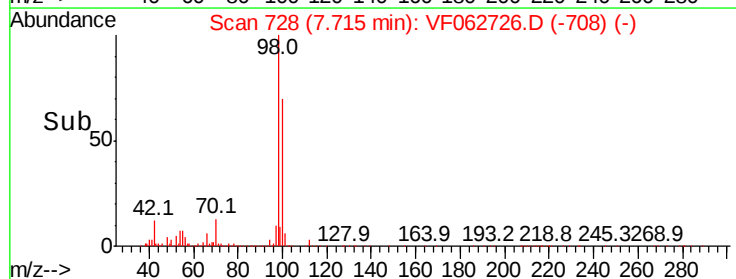
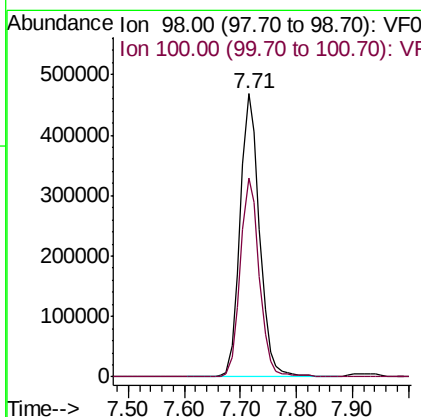
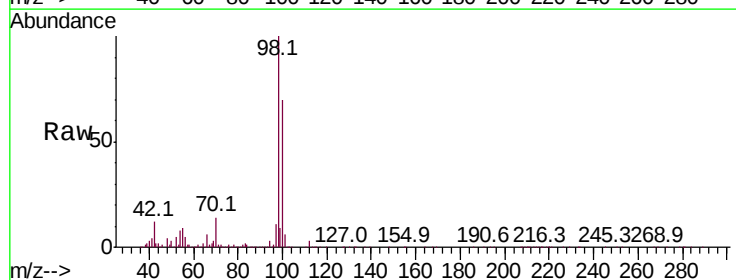
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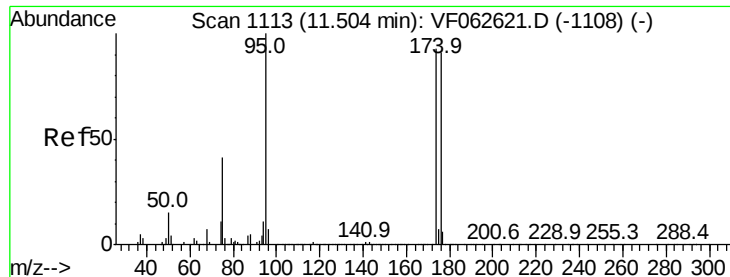
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#50  
Toluene-d8  
Concen: 40.225 ug/l  
RT: 7.71 min Scan# 728  
Delta R.T. -0.00 min  
Lab File: VF062726.D  
Acq: 23 May 2019 14:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 98      | 100   |       |       |
| 100     | 70.2  | 56.2  | 84.2  |





#62

4-Bromofluorobenzene

Concen: 71.760 ug/l

RT: 11.50 min Scan# 1112

Delta R.T. -0.00 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

Instrument :

MSVOA\_F

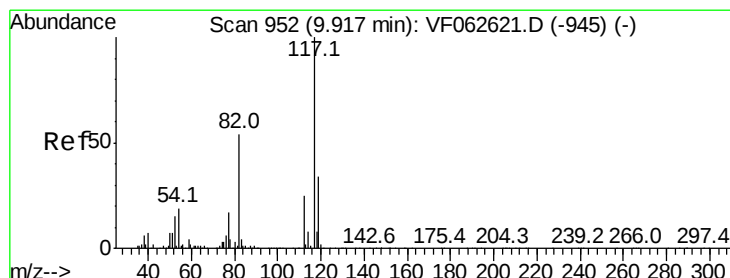
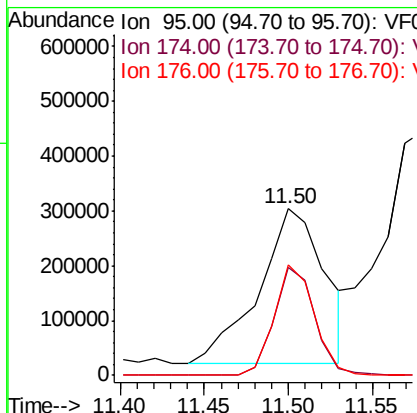
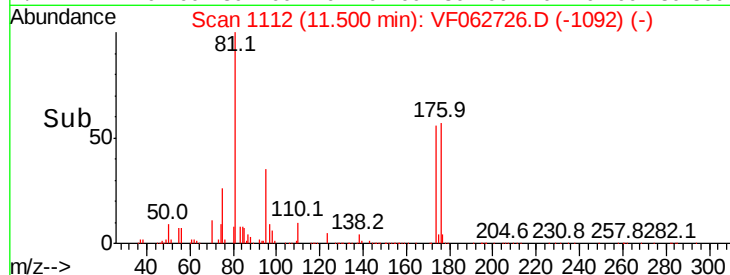
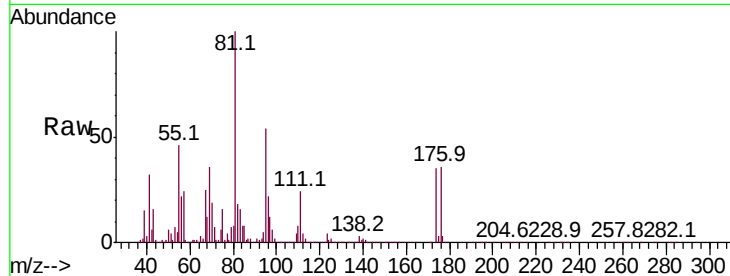
ClientSampleId :

EP1-SB-E-6R(17-20)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 95    | Resp: | 765466 |
| Ion Ratio | Lower | Upper |        |
| 95        | 100   |       |        |
| 174       | 65.0  | 0.0   | 185.6  |
| 176       | 66.6  | 0.0   | 182.4  |

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#63

Chlorobenzene-d5

Concen: 50.000 ug/l

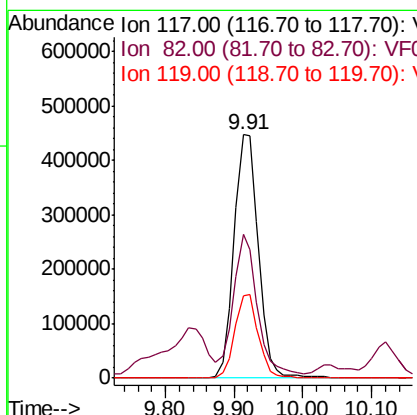
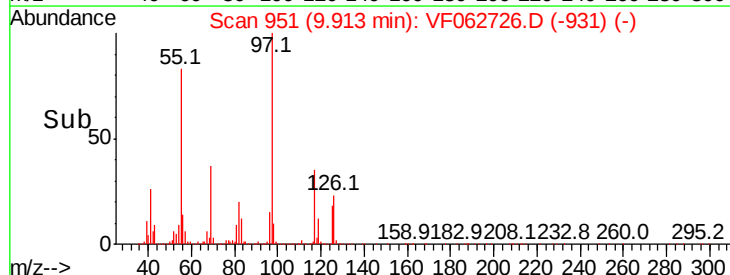
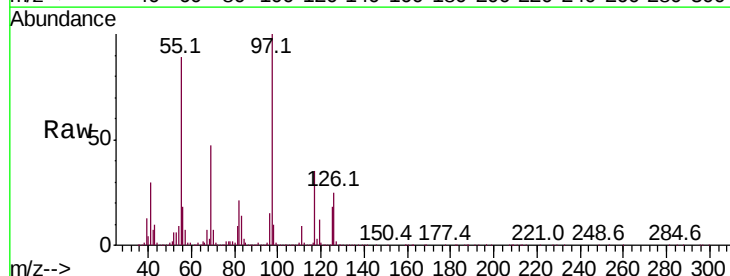
RT: 9.91 min Scan# 951

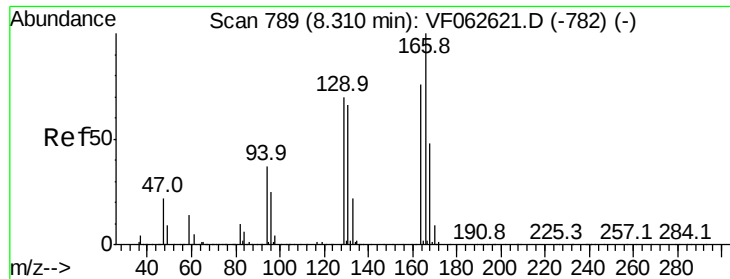
Delta R.T. -0.00 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 117   | Resp: | 1097101 |
| Ion Ratio | Lower | Upper |         |
| 117       | 100   |       |         |
| 82        | 59.2  | 43.3  | 64.9    |
| 119       | 34.0  | 27.4  | 41.0    |





#64

Tetrachloroethene

Concen: 2.128 ug/l

RT: 8.32 min Scan# 789

Delta R.T. 0.01 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

Instrument :

MSVOA\_F

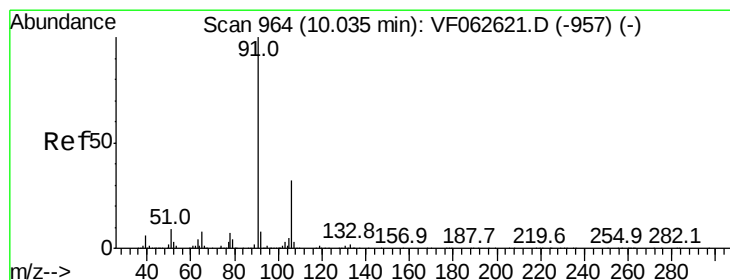
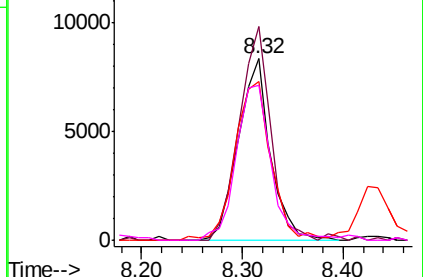
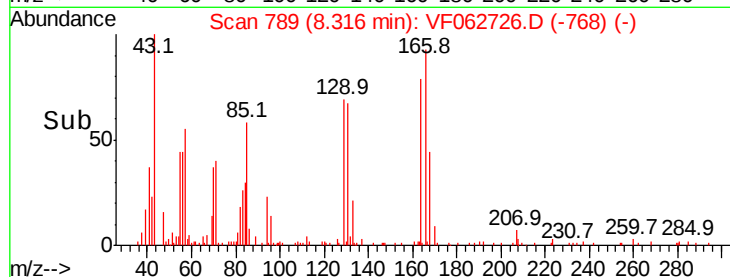
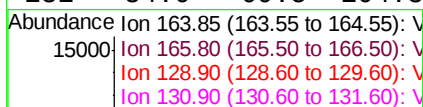
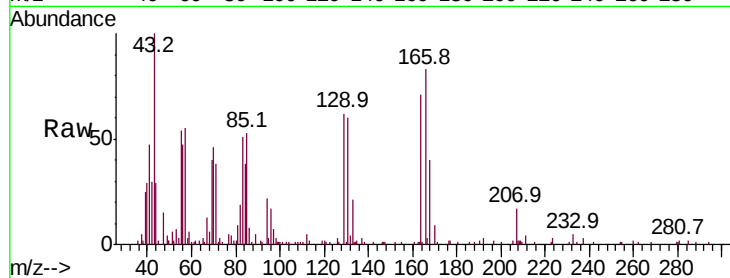
ClientSampleId :

EP1-SB-E-6R(17-20)

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 164   | Resp: | 18493 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 166      | 115.7 | 105.5 | 158.3 |
| 129      | 86.2  | 73.8  | 110.6 |
| 131      | 84.0  | 69.5  | 104.3 |

Manual Integrations  
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5/24/2019 11:16:06 AM



#67

Ethyl Benzene

Concen: 13.381 ug/l

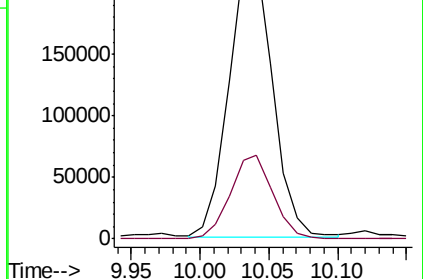
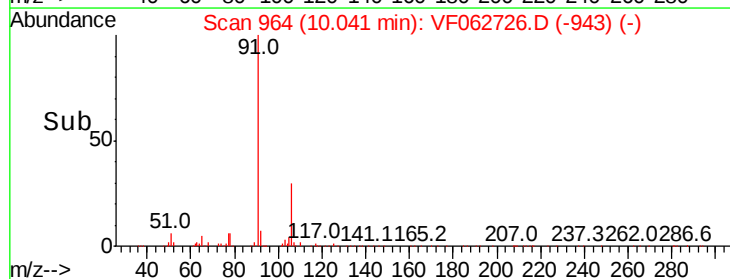
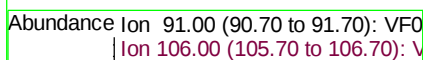
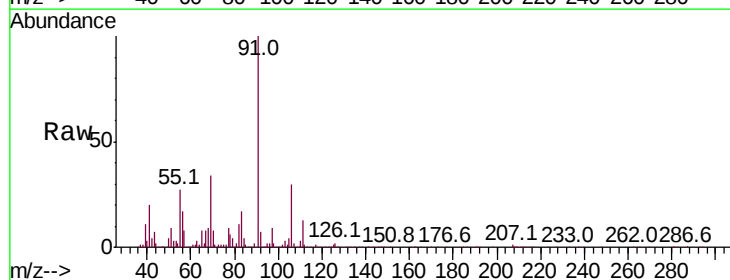
RT: 10.04 min Scan# 964

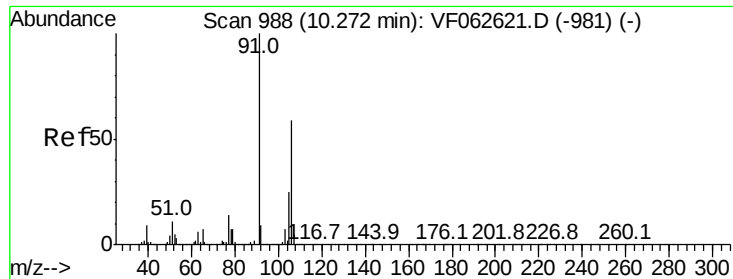
Delta R.T. 0.01 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 500919 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 106      | 29.5  | 25.8  | 38.8   |





#68

m/p-Xylenes

Concen: 38.068 ug/l

RT: 10.27 min Scan# 987

Delta R.T. -0.00 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

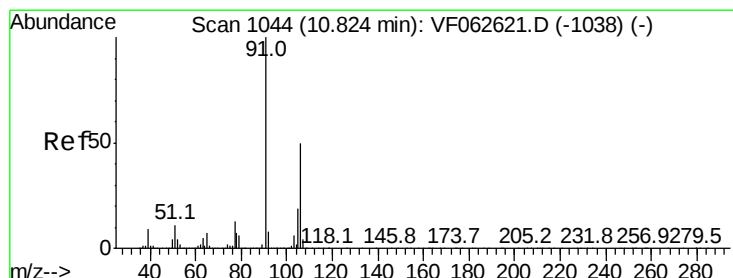
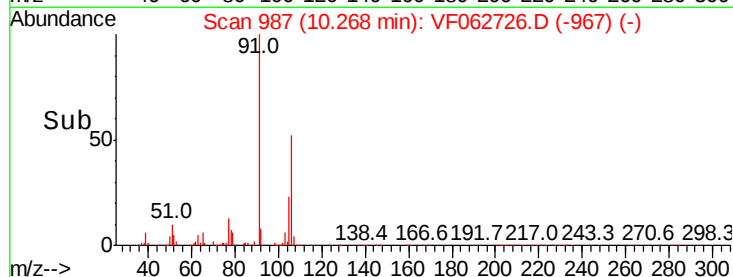
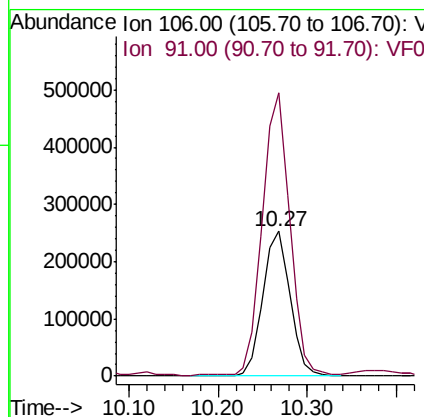
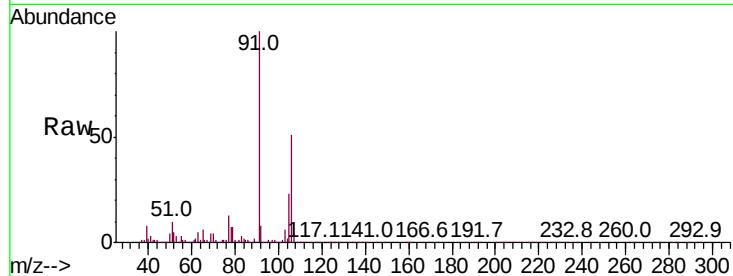
Instrument :  
MSVOA\_F

ClientSampleId :  
EP1-SB-E-6R(17-20)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 106     | 100   |       |       |
| 91      | 195.3 | 136.9 | 205.3 |

Manual Integrations  
APPROVED

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5/24/2019 11:16:06 AM



#69

o-Xylene

Concen: 3.230 ug/l

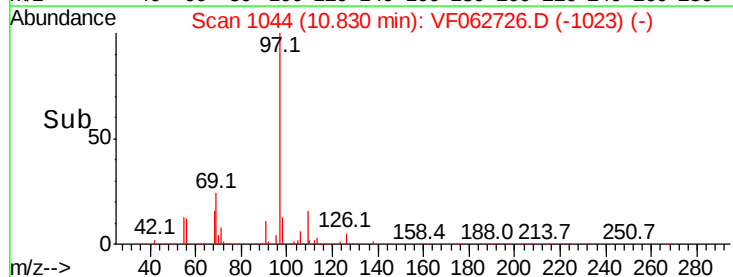
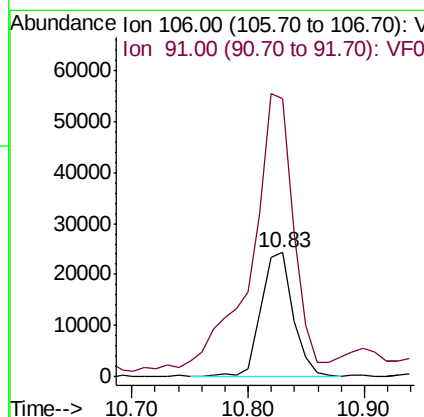
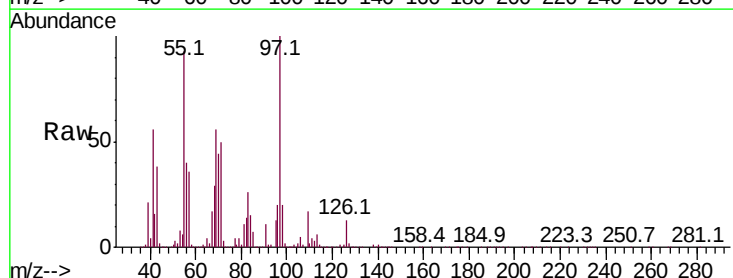
RT: 10.83 min Scan# 1044

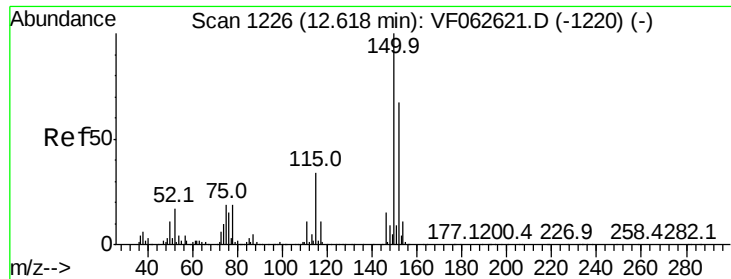
Delta R.T. 0.01 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 106     | 100   |       |       |
| 91      | 223.6 | 100.2 | 300.5 |





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.61 min Scan# 1225

Delta R.T. -0.00 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

Instrument :

MSVOA\_F

ClientSampleId :

EP1-SB-E-6R(17-20)

Tot Ion:152 Resp: 587489

Ion Ratio Lower Upper

152 100

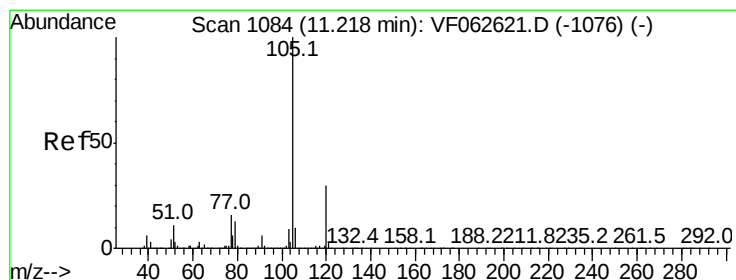
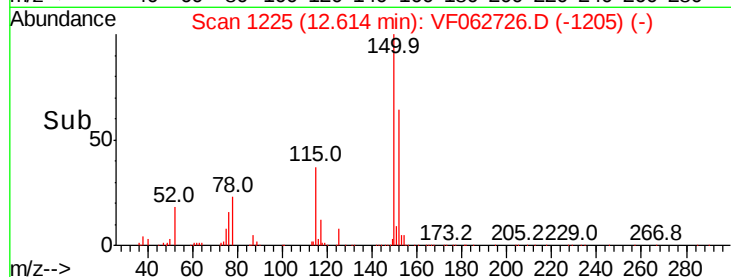
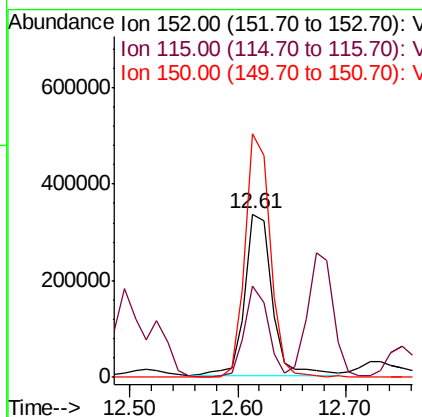
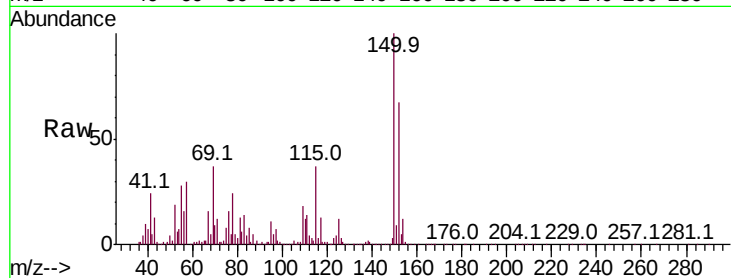
115 55.8 25.2 75.6

150 149.1 0.0 306.2

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#73

Isopropylbenzene

Concen: 54.198 ug/l

RT: 11.22 min Scan# 1084

Delta R.T. 0.01 min

Lab File: VF062726.D

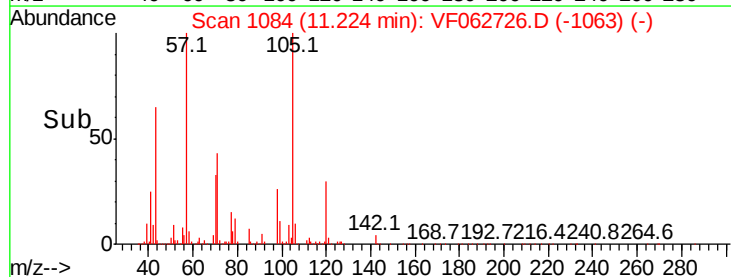
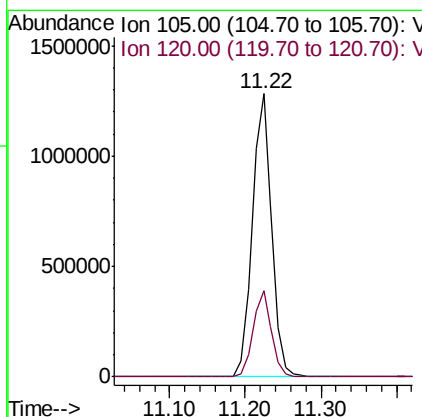
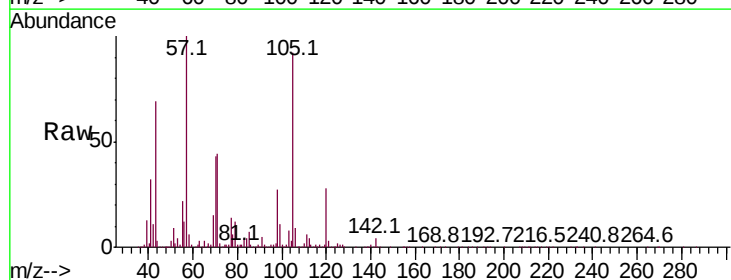
Acq: 23 May 2019 14:56

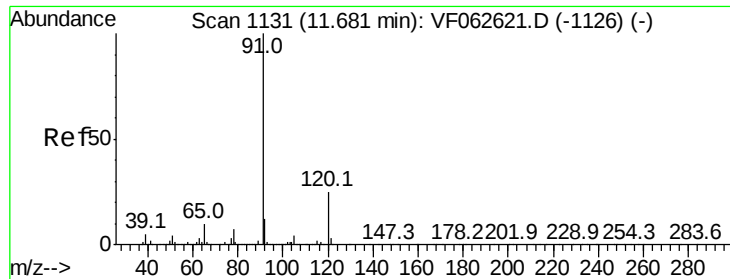
Tgt Ion:105 Resp: 2282061

Ion Ratio Lower Upper

105 100

120 30.3 14.8 44.4





#78

n-propylbenzene

Concen: 79.373 ug/l

RT: 11.68 min Scan# 1130

Delta R.T. -0.00 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

Instrument :

MSVOA\_F

ClientSampleId :

EP1-SB-E-6R(17-20)

Tot Ion: 91 Resp: 3955285

Ion Ratio Lower Upper

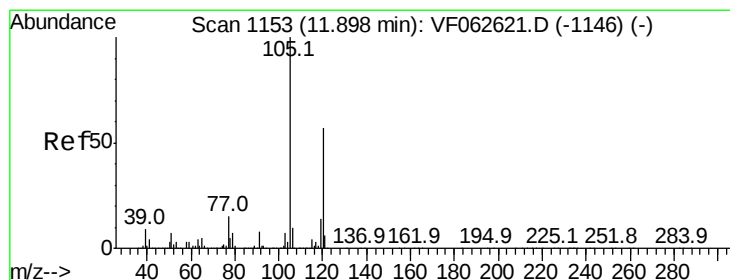
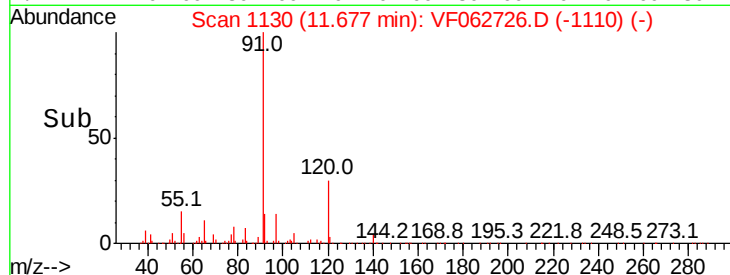
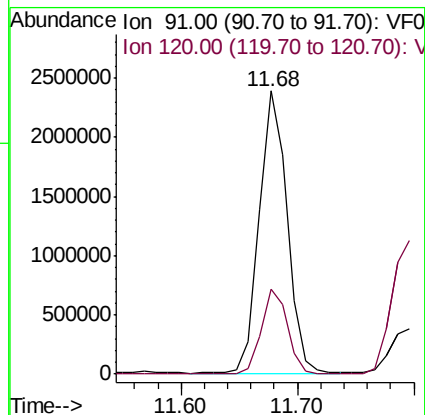
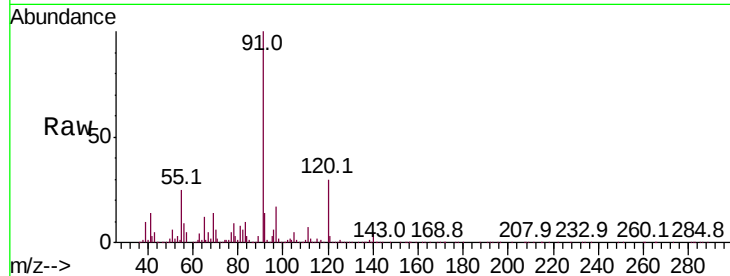
91 100

120 30.0 12.7 38.1

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#80

1,3,5-Trimethylbenzene

Concen: 187.535 ug/l

RT: 11.90 min Scan# 1153

Delta R.T. 0.01 min

Lab File: VF062726.D

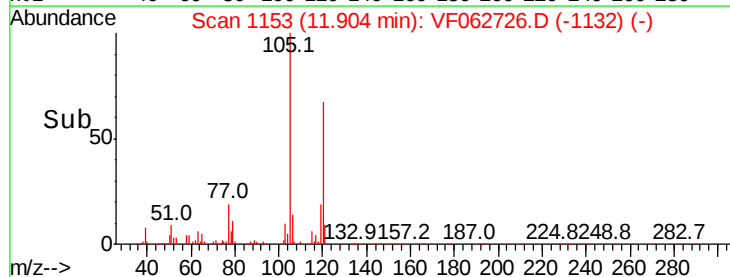
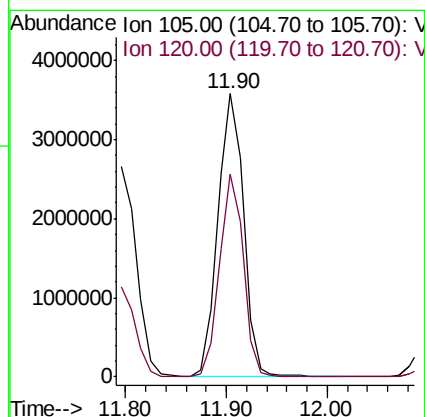
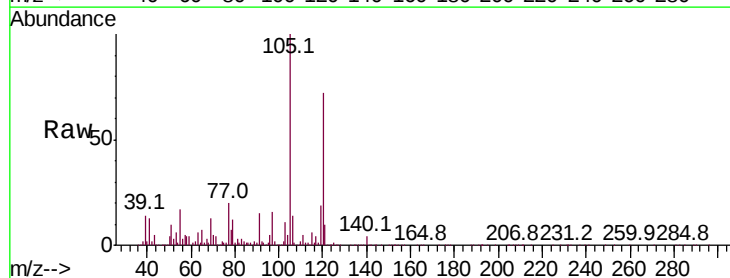
Acq: 23 May 2019 14:56

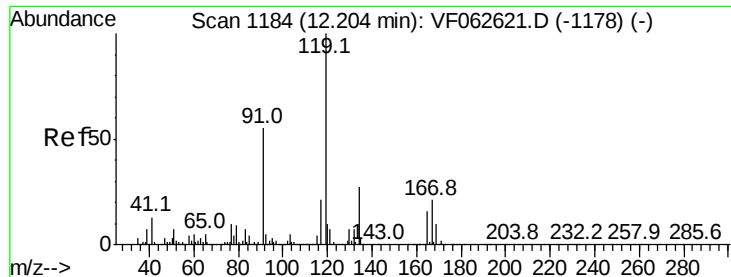
Tgt Ion:105 Resp: 6331698

Ion Ratio Lower Upper

105 100

120 71.5 28.7 86.3





#83

tert-Butylbenzene

Concen: 19.740 ug/l

RT: 12.20 min Scan# 1183

Delta R.T. -0.00 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

Instrument :

MSVOA\_F

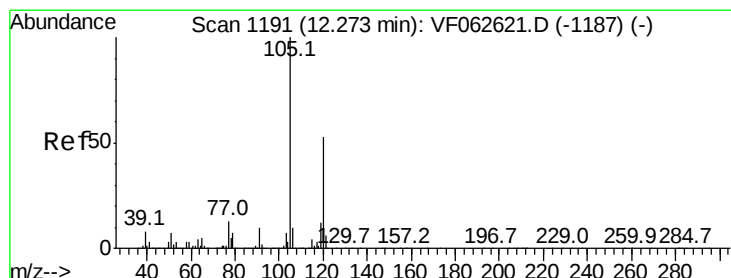
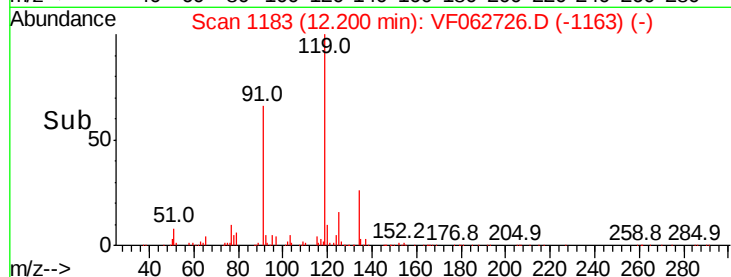
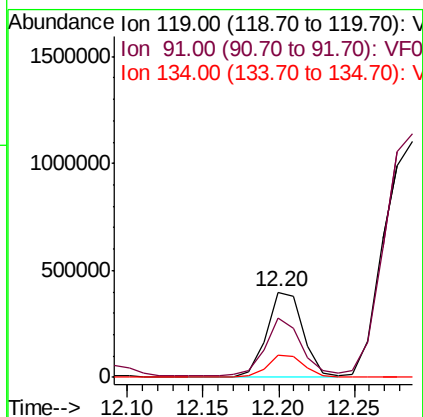
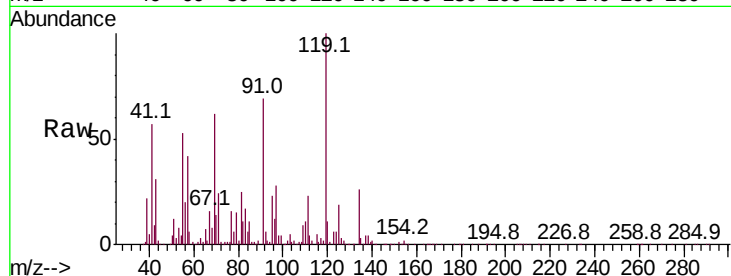
ClientSampleId :

EP1-SB-E-6R(17-20)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 119   | Resp: | 676162 |
| Ion Ratio | Lower | Upper |        |
| 119       | 100   |       |        |
| 91        | 68.9  | 27.3  | 81.9   |
| 134       | 26.3  | 13.6  | 40.7   |

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#84

1,2,4-Trimethylbenzene

Concen: 328.156 ug/l

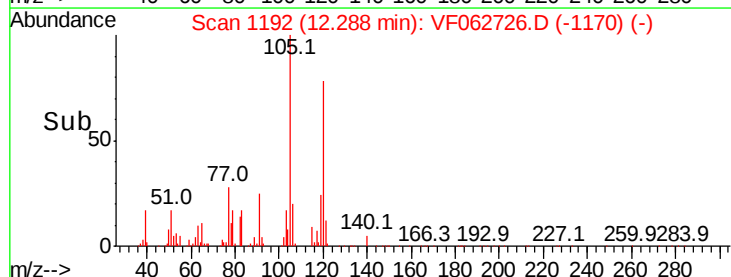
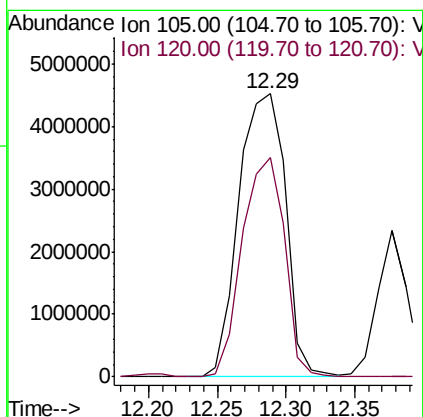
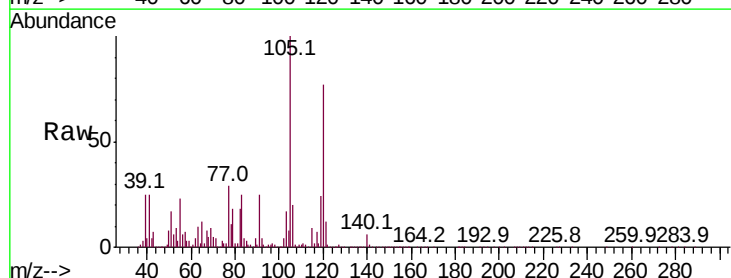
RT: 12.29 min Scan# 1192

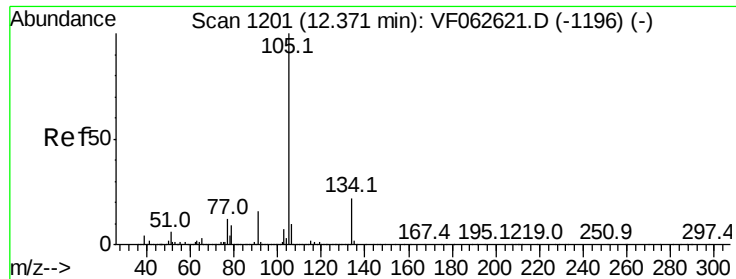
Delta R.T. 0.02 min

Lab File: VF062726.D

Acq: 23 May 2019 14:56

|           |       |       |          |
|-----------|-------|-------|----------|
| Tgt Ion:  | 105   | Resp: | 10723432 |
| Ion Ratio | Lower | Upper |          |
| 105       | 100   |       |          |
| 120       | 77.4  | 26.7  | 80.1     |





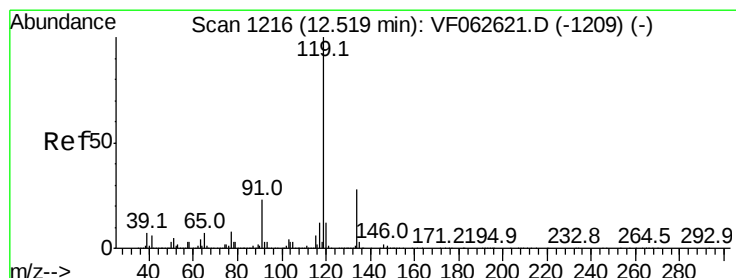
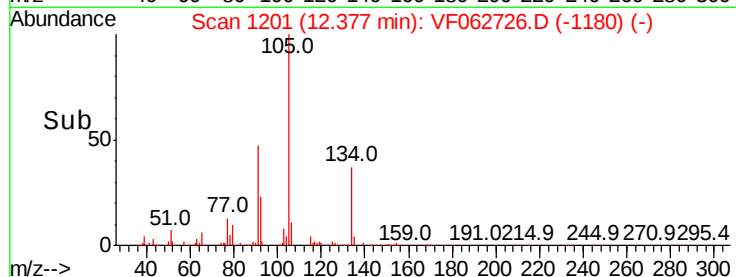
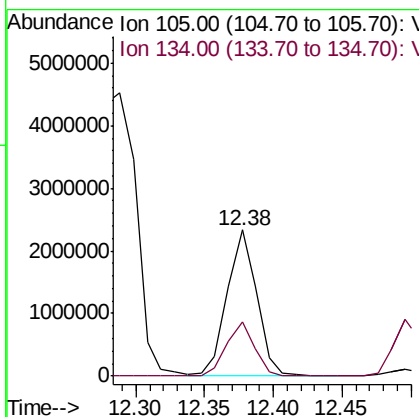
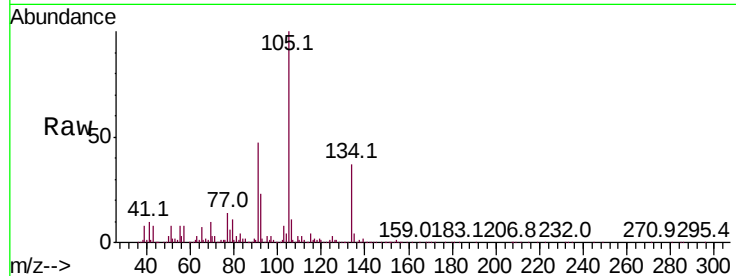
#85  
 sec-Butylbenzene  
 Concen: 75.252 ug/l  
 RT: 12.38 min Scan# 1201  
 Delta R.T. 0.01 min  
 Lab File: VF062726.D  
 Acq: 23 May 2019 14:56

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 EP1-SB-E-6R(17-20)

Tot Ion:105 Resp: 3459299  
 Ion Ratio Lower Upper  
 105 100  
 134 36.8 10.8 32.4#

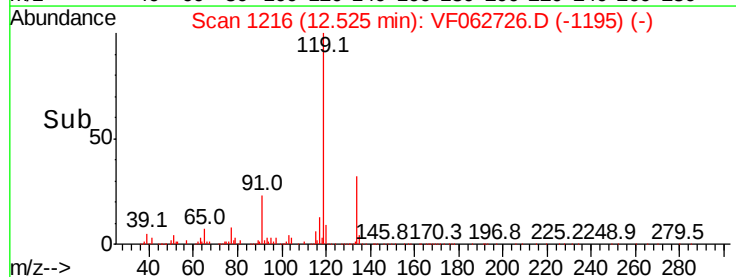
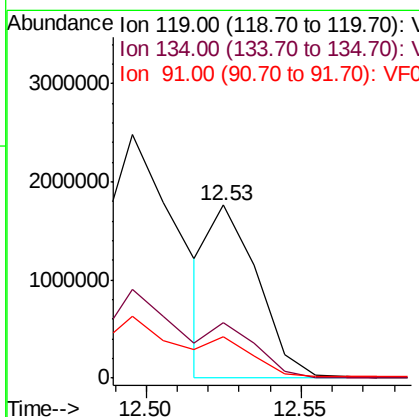
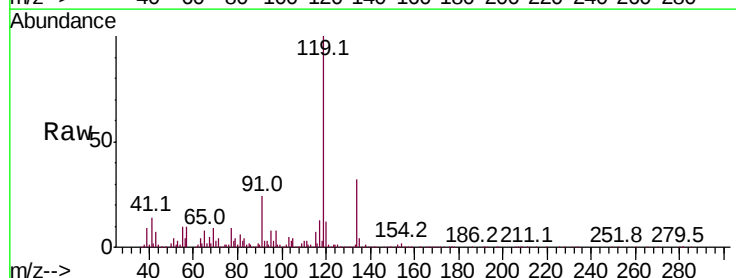
Manual Integrations  
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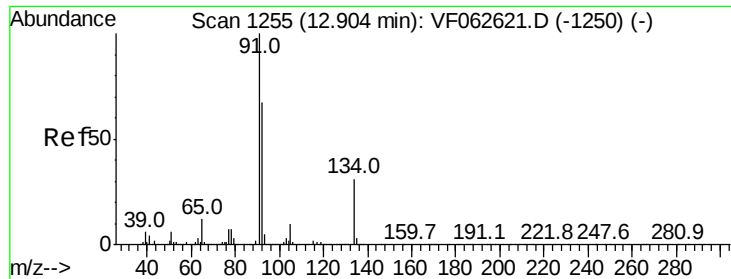
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 5/24/2019 11:16:06 AM



#86  
 p-Isopropyltoluene  
 Concen: 48.692 ug/l m  
 RT: 12.53 min Scan# 1216  
 Delta R.T. 0.01 min  
 Lab File: VF062726.D  
 Acq: 23 May 2019 14:56

Tgt Ion:119 Resp: 1886377  
 Ion Ratio Lower Upper  
 119 100  
 134 32.0 14.1 42.3  
 91 24.1 11.4 34.2





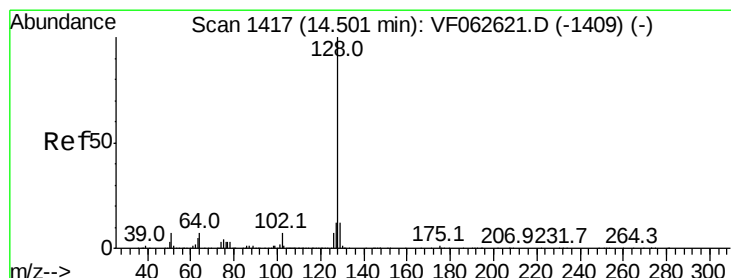
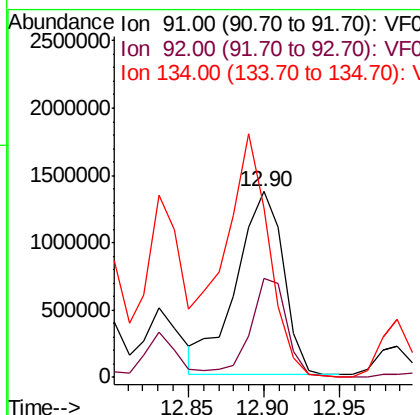
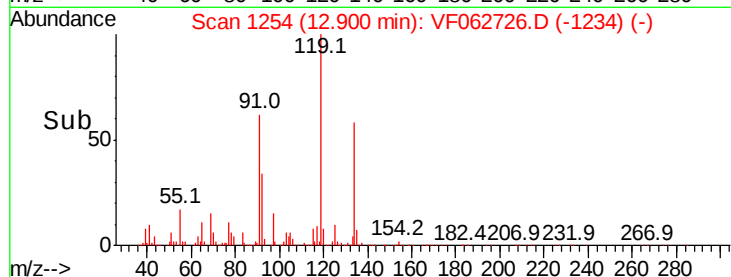
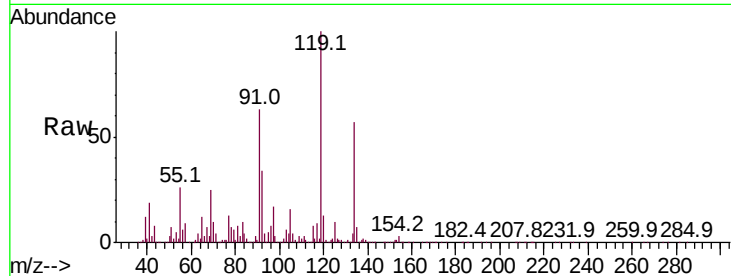
#89  
n-Butylbenzene  
Concen: 77.521 ug/l  
RT: 12.90 min Scan# 1254  
Delta R.T. -0.00 min  
Lab File: VF062726.D  
Acq: 23 May 2019 14:56

Instrument :  
MSVOA\_F  
ClientSampleId :  
EP1-SB-E-6R(17-20)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 53.3  | 33.3  | 99.8  |
| 134     | 91.2  | 15.4  | 46.4# |

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#95  
Naphthalene  
Concen: 22.641 ug/l  
RT: 14.50 min Scan# 1416  
Delta R.T. -0.00 min  
Lab File: VF062726.D  
Acq: 23 May 2019 14:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 11.9  | 9.7   | 14.5  |
| 129     | 13.0  | 9.3   | 13.9  |

