

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF121218\  
 Data File : VF061002.D  
 Acq On : 12 Dec 2018 18:16  
 Operator : VA/AP  
 Sample : J6189-05RE  
 Misc : 5.11g/5mL/MSVOA-F/SOIL  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 HR-05-121118-CRE

Manual Integrations  
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apatel  
 12/13/2018 3:42:00 PM

Quant Time: Dec 13 03:28:32 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F112618S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 27 01:36:26 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|---------|--------|----------|
| 1) Pentafluorobenzene       | 4.87  | 168  | 92652    | 50.00   | ug/l   | -0.04    |
| 34) 1,4-Difluorobenzene     | 5.59  | 114  | 133959   | 50.00   | ug/l   | -0.05    |
| 63) Chlorobenzene-d5        | 9.77  | 117  | 100038   | 50.00   | ug/l   | -0.04    |
| 72) 1,4-Dichlorobenzene-d4  | 12.54 | 152  | 36042    | 50.00   | ug/l   | -0.03    |
| System Monitoring Compounds |       |      |          |         |        |          |
| 33) 1,2-Dichloroethane-d4   | 4.84  | 65   | 33097    | 30.32   | ug/l   | -0.04    |
| Spiked Amount 50.000        |       |      | Recovery | =       | 60.64% |          |
| 35) Dibromofluoromethane    | 4.11  | 113  | 38771    | 36.48   | ug/l   | -0.04    |
| Spiked Amount 50.000        |       |      | Recovery | =       | 72.96% |          |
| 50) Toluene-d8              | 7.55  | 98   | 101494   | 32.42   | ug/l   | -0.04    |
| Spiked Amount 50.000        |       |      | Recovery | =       | 64.84% |          |
| 62) 4-Bromofluorobenzene    | 11.41 | 95   | 38280    | 26.91   | ug/l   | -0.03    |
| Spiked Amount 50.000        |       |      | Recovery | =       | 53.82% |          |
| Target Compounds            |       |      |          |         |        |          |
|                             |       |      |          |         | Qvalue |          |
| 16) Acetone                 | 2.23  | 43   | 9431m    | 46.857  | ug/l   |          |
| 20) Methylene Chloride      | 2.22  | 84   | 9966     | 13.497  | ug/l   | 93       |
| 52) Toluene                 | 7.62  | 92   | 13959    | 6.054   | ug/l   | 99       |
| 67) Ethyl Benzene           | 9.90  | 91   | 36652    | 10.116  | ug/l   | 98       |
| 68) m/p-Xylenes             | 10.13 | 106  | 52587    | 40.356  | ug/l   | 94       |
| 69) o-Xylene                | 10.71 | 106  | 34671    | 24.129  | ug/l   | 90       |
| 73) Isopropylbenzene        | 11.12 | 105  | 17064    | 5.991   | ug/l   | 99       |
| 78) n-propylbenzene         | 11.59 | 91   | 81675    | 24.487  | ug/l   | 96       |
| 80) 1,3,5-Trimethylbenzene  | 11.82 | 105  | 115335   | 49.880  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene  | 12.20 | 105  | 348939   | 151.208 | ug/l   | 98       |
| 85) sec-Butylbenzene        | 12.31 | 105  | 30371    | 9.419   | ug/l   | 96       |
| 86) p-Isopropyltoluene      | 12.45 | 119  | 16795m   | 6.213   | ug/l   |          |
| 95) Naphthalene             | 14.45 | 128  | 24803    | 13.721  | ug/l # | 84       |

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

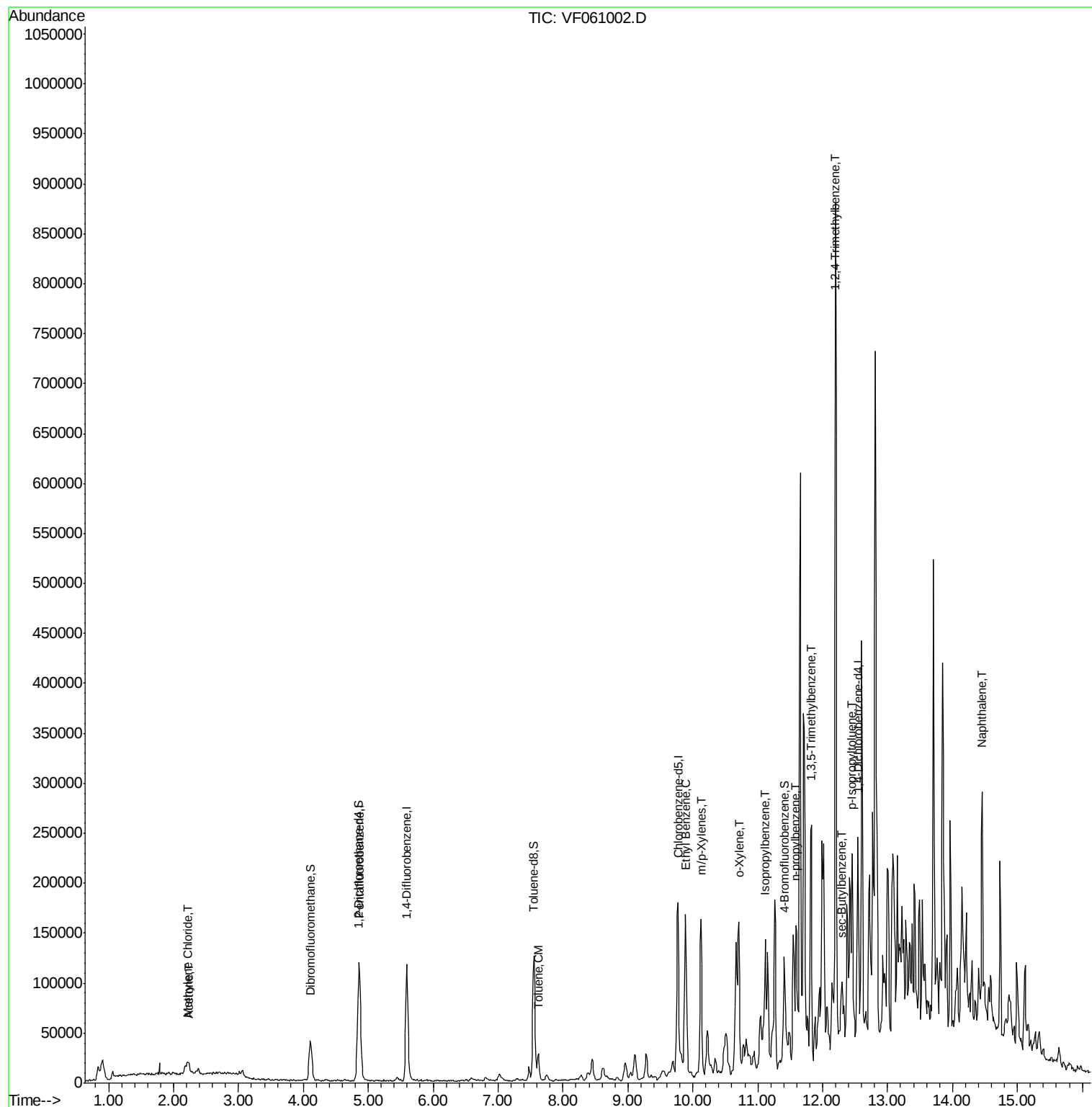
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF121218\  
Data File : VF061002.D  
Acq On : 12 Dec 2018 18:16  
Operator : VA/AP  
Sample : J6189-05RE  
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Instrument :  
MSVOA\_F  
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HR-05-121118-CRE

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Quant Time: Dec 13 03:28:32 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F112618S.M  
Quant Title : SW846 8260  
QLast Update : Tue Nov 27 01:36:26 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.87 min Scan# 430

Delta R.T. -0.04 min

Lab File: VF061002.D

Acq: 12 Dec 2018 18:16

Instrument :

MSVOA\_F

ClientSampleId :

HR-05-121118-CRE

Tot Ion:168 Resp: 92652

Ion Ratio Lower Upper

168 100

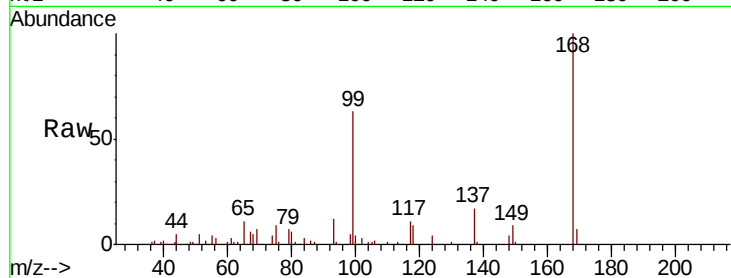
99 63.4 52.6 79.0

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Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.87

30000

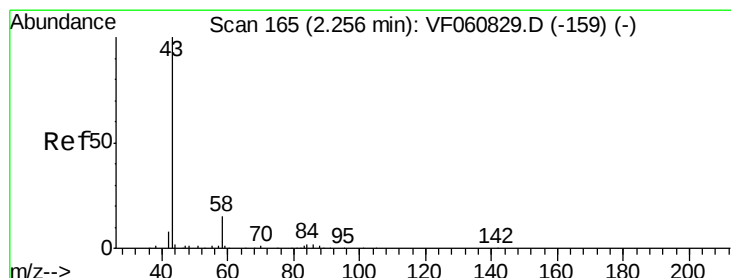
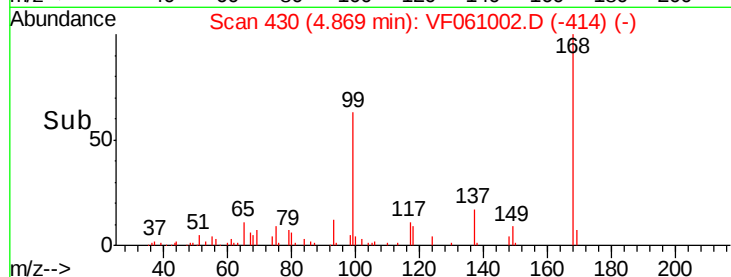
20000

10000

0

4.70 4.80 4.90 5.00 5.10

Time-->



#16

Acetone

Concen: 46.857 ug/l m

RT: 2.23 min Scan# 163

Delta R.T. -0.02 min

Lab File: VF061002.D

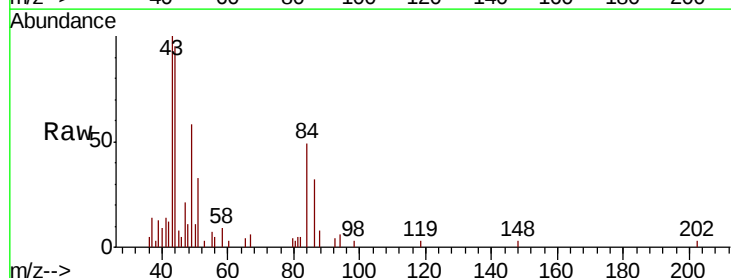
Acq: 12 Dec 2018 18:16

Tgt Ion: 43 Resp: 9431

Ion Ratio Lower Upper

43 100

58 8.7 11.4 17.2#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

2.23

4000

3000

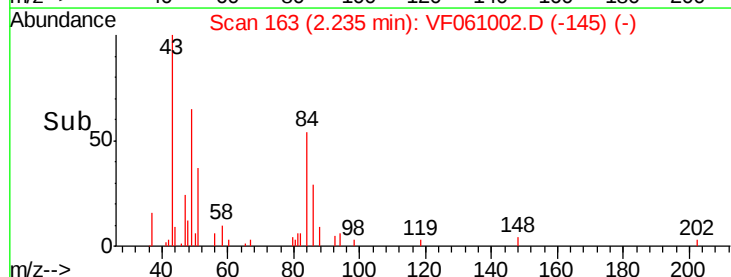
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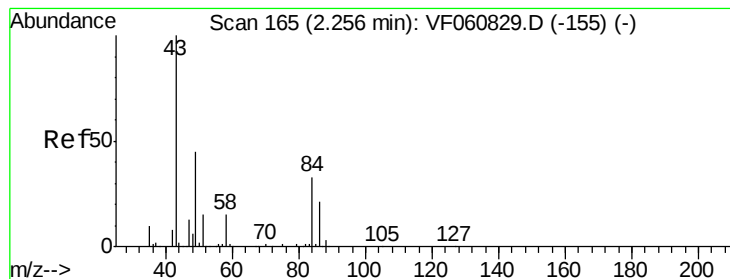
1000

0

2.15 2.20 2.25 2.30

Time-->





#20

Methylene Chloride

Concen: 13.497 ug/l

RT: 2.22 min Scan# 161

Delta R.T. -0.04 min

Lab File: VF061002.D

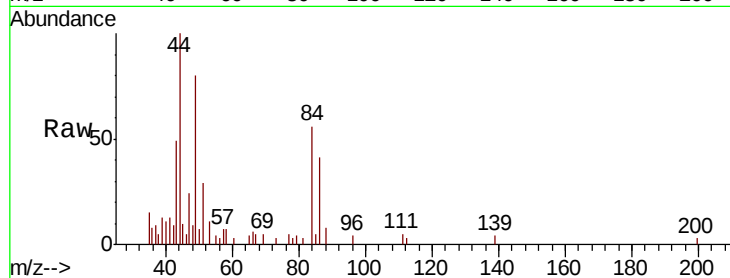
Acq: 12 Dec 2018 18:16

Instrument :  
MSVOA\_F  
ClientSampleId :  
HR-05-121118-CRE

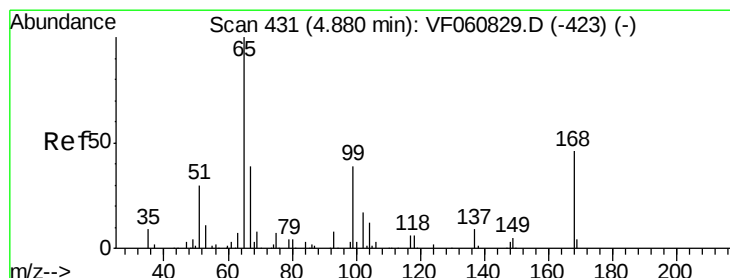
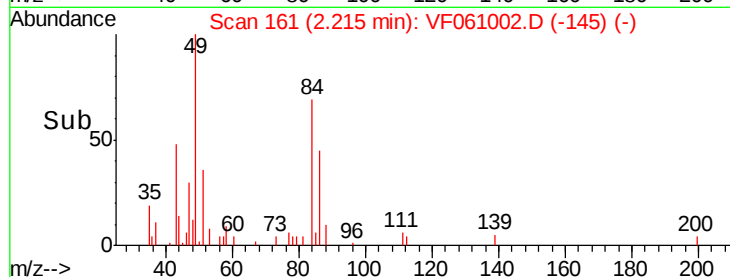
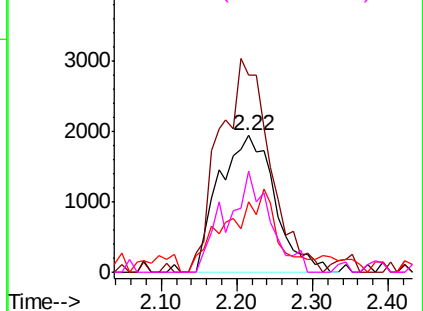
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 9966  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 144.1 | 111.3 | 166.9 |
| 51       | 51.6  | 38.0  | 57.0  |
| 86       | 73.9  | 49.8  | 74.8  |

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Abundance Ion 84.00 (83.70 to 84.70): VF0  
Ion 49.00 (48.70 to 49.70): VF0  
Ion 51.00 (50.70 to 51.70): VF0  
Ion 86.00 (85.70 to 86.70): VF0



#33

1,2-Dichloroethane-d4

Concen: 30.323 ug/l

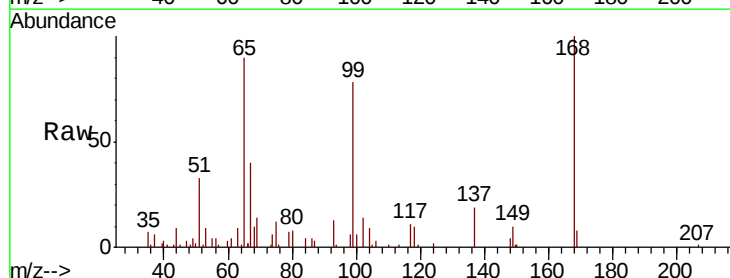
RT: 4.84 min Scan# 427

Delta R.T. -0.04 min

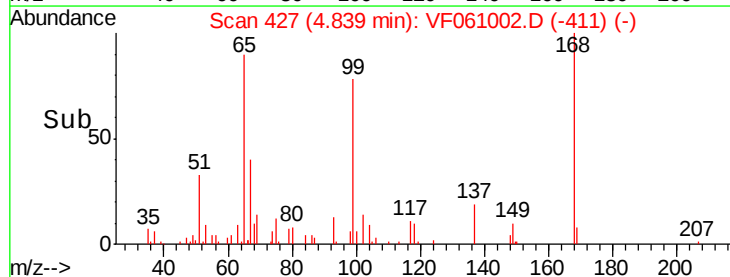
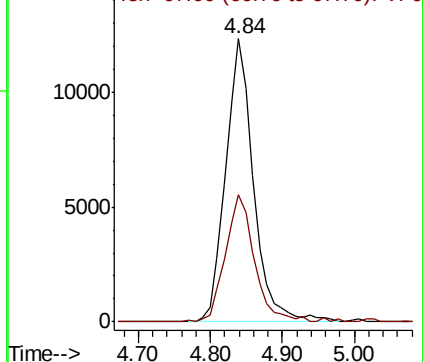
Lab File: VF061002.D

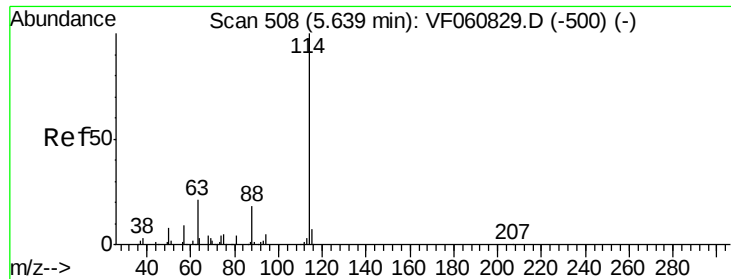
Acq: 12 Dec 2018 18:16

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 65    | Resp: | 33097 |
| Ion      | Ratio | Lower | Upper |
| 65       | 100   |       |       |
| 67       | 44.8  | 0.0   | 96.4  |



Abundance Ion 65.00 (64.70 to 65.70): VF0  
Ion 67.00 (66.70 to 67.70): VF0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.59 min Scan# 503

Delta R.T. -0.05 min

Lab File: VF061002.D

Acq: 12 Dec 2018 18:16

Instrument :

MSVOA\_F

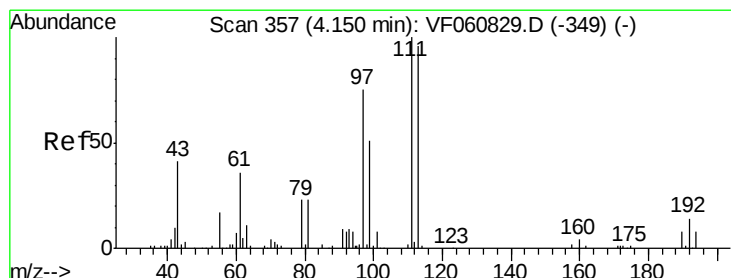
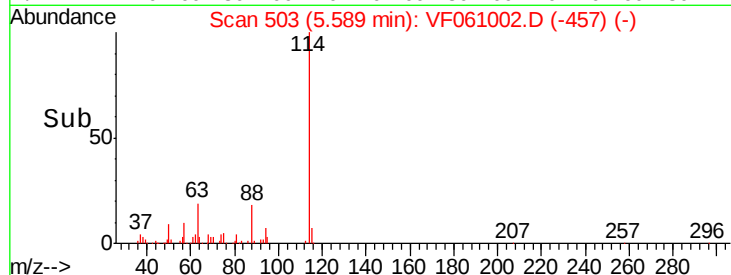
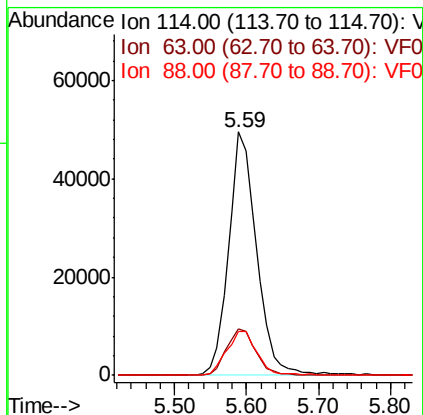
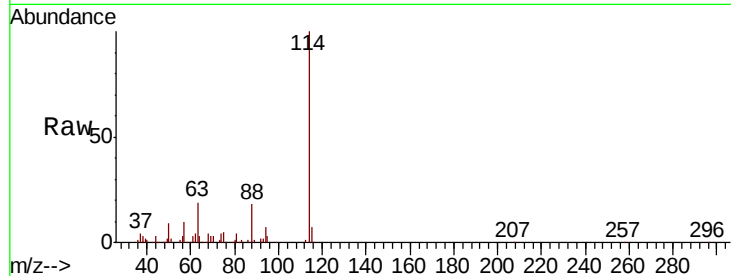
ClientSampleId :

HR-05-121118-CRE

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 114   | Resp: | 133959 |
| Ion Ratio | Lower | Upper |        |
| 114       | 100   |       |        |
| 63        | 19.2  | 0.0   | 41.6   |
| 88        | 17.8  | 0.0   | 36.6   |

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#35

Dibromofluoromethane

Concen: 36.482 ug/l

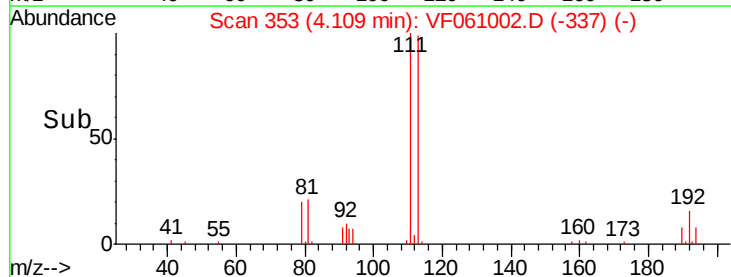
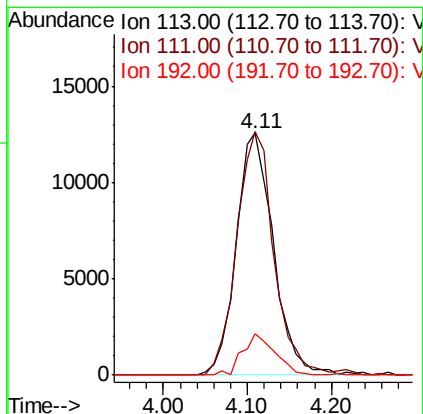
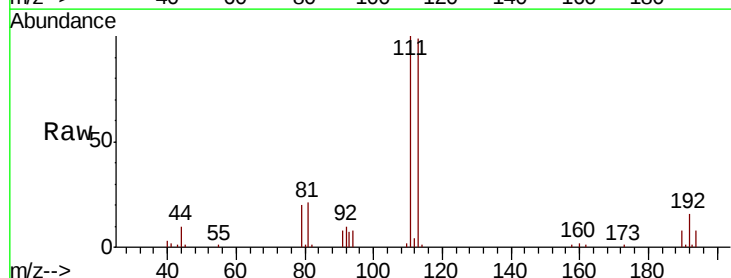
RT: 4.11 min Scan# 353

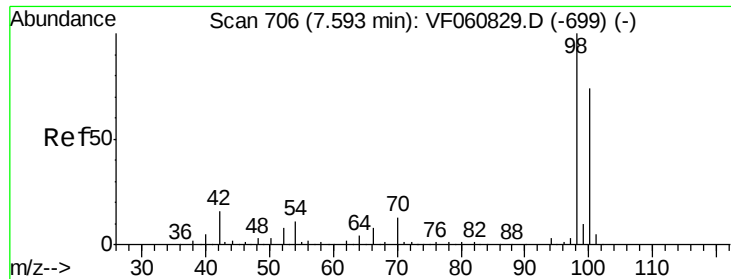
Delta R.T. -0.04 min

Lab File: VF061002.D

Acq: 12 Dec 2018 18:16

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 113   | Resp: | 38771 |
| Ion Ratio | Lower | Upper |       |
| 113       | 100   |       |       |
| 111       | 100.7 | 83.0  | 124.6 |
| 192       | 16.9  | 12.3  | 18.5  |





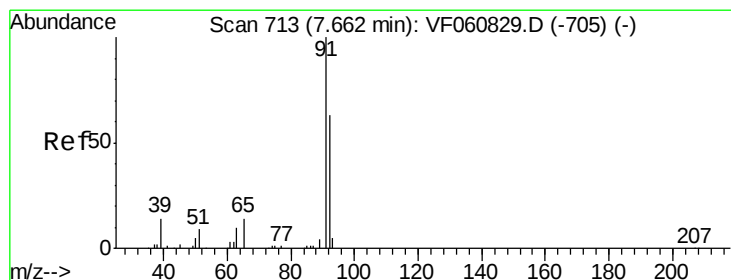
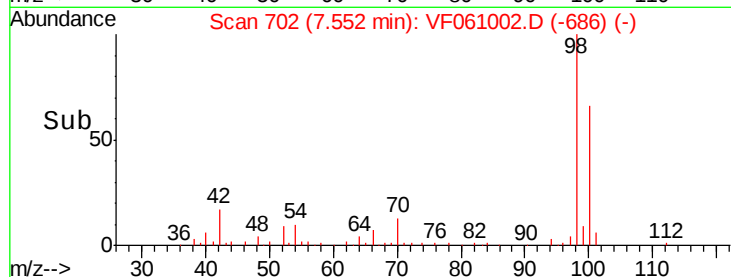
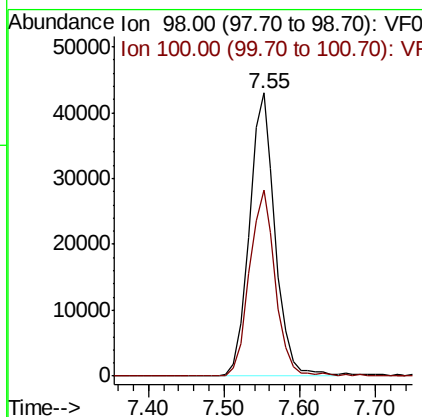
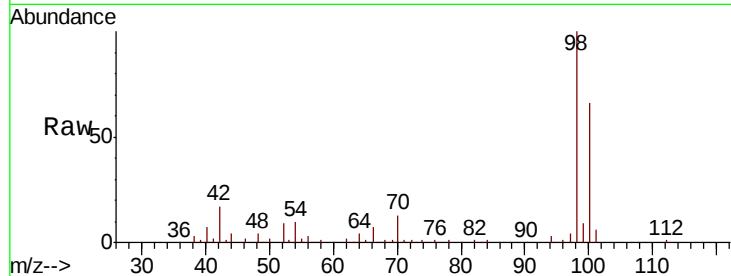
#50  
Toluene-d8  
Concen: 32.421 ug/l  
RT: 7.55 min Scan# 702  
Delta R.T. -0.04 min  
Lab File: VF061002.D  
Acq: 12 Dec 2018 18:16

Instrument :  
MSVOA\_F  
ClientSampleId :  
HR-05-121118-CRE

Tot Ion: 98 Resp: 101494  
Ion Ratio Lower Upper  
98 100  
100 65.9 59.3 88.9

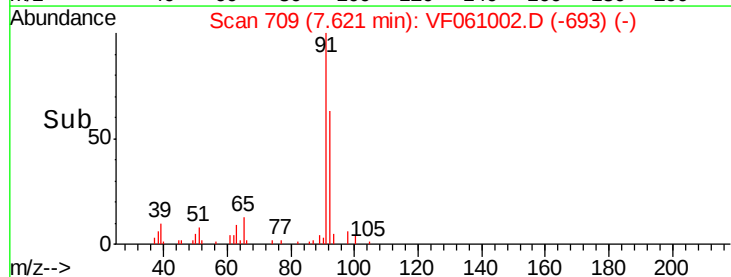
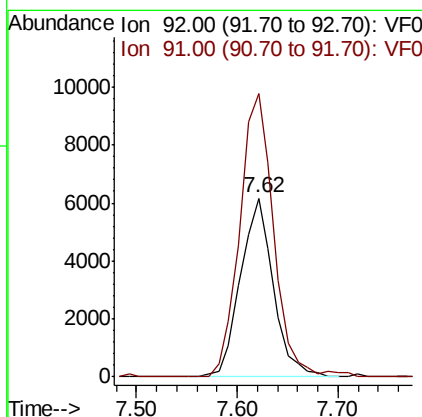
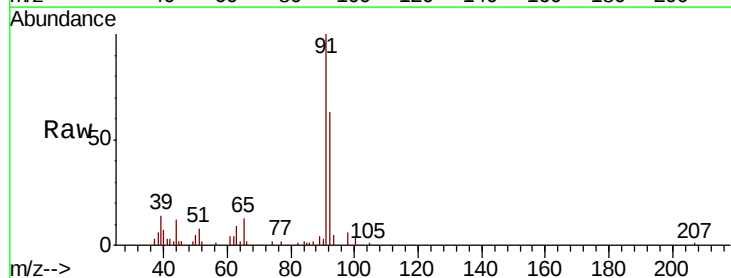
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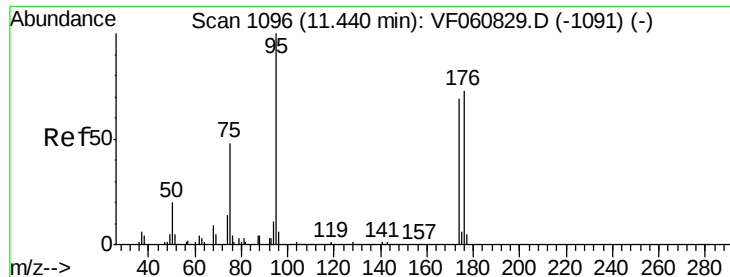
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#52  
Toluene  
Concen: 6.054 ug/l  
RT: 7.62 min Scan# 709  
Delta R.T. -0.04 min  
Lab File: VF061002.D  
Acq: 12 Dec 2018 18:16

Tgt Ion: 92 Resp: 13959  
Ion Ratio Lower Upper  
92 100  
91 158.7 126.2 189.2





#62

4-Bromofluorobenzene

Concen: 26.905 ug/l

RT: 11.41 min Scan# 1093

Delta R.T. -0.03 min

Lab File: VF061002.D

Acq: 12 Dec 2018 18:16

Instrument :

MSVOA\_F

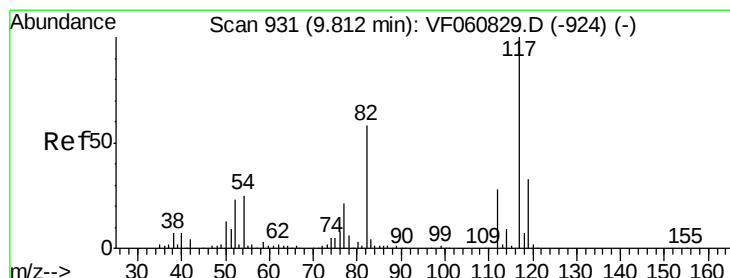
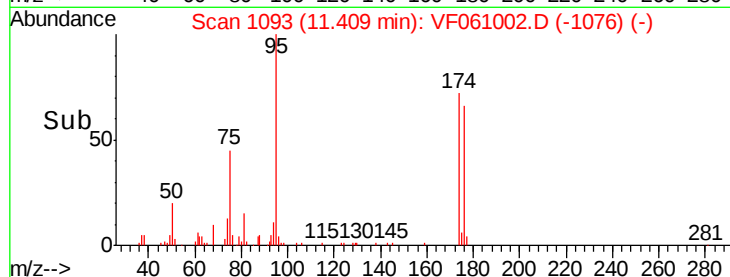
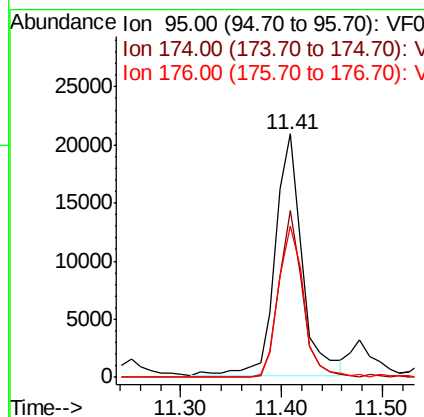
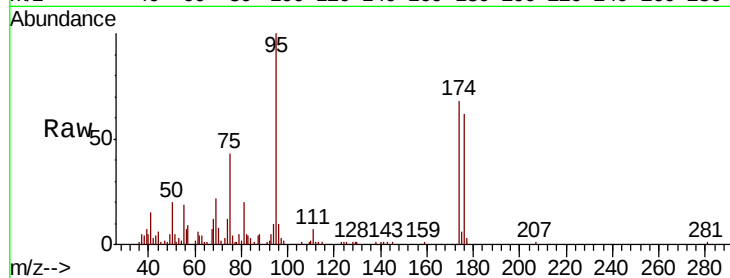
ClientSampleId :

HR-05-121118-CRE

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 95    | Resp: | 38280 |
| Ion Ratio | Lower | Upper |       |
| 95        | 100   |       |       |
| 174       | 68.3  | 0.0   | 138.2 |
| 176       | 62.3  | 0.0   | 146.2 |

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#63

Chlorobenzene-d5

Concen: 50.000 ug/l

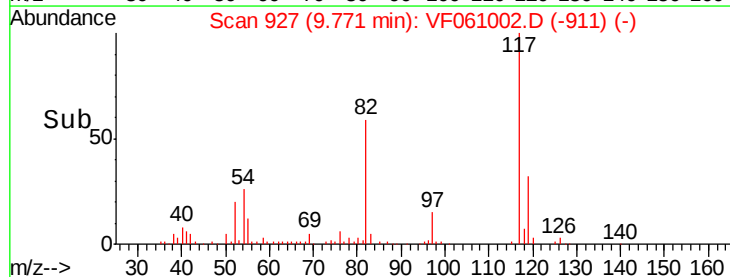
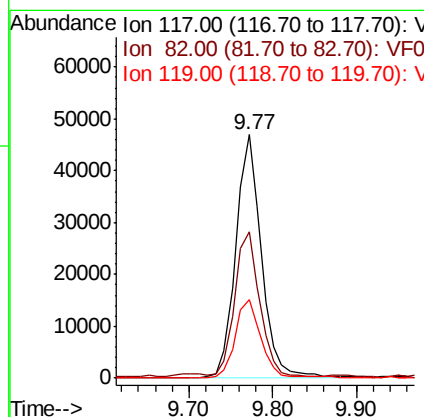
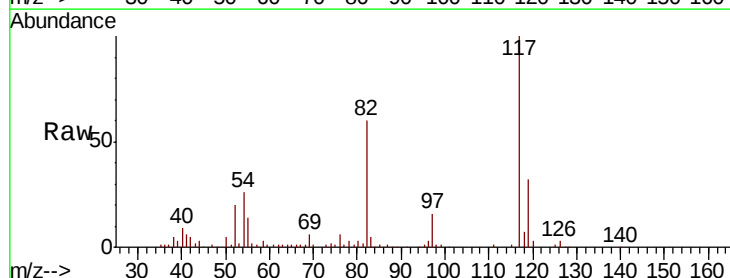
RT: 9.77 min Scan# 927

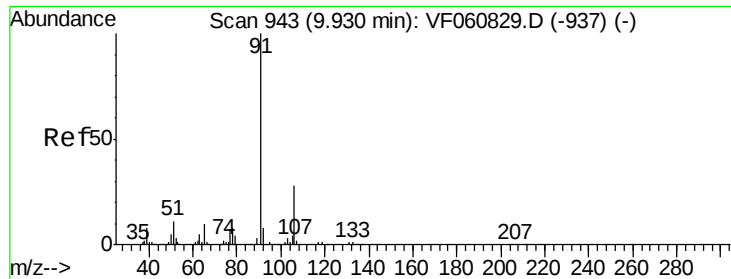
Delta R.T. -0.04 min

Lab File: VF061002.D

Acq: 12 Dec 2018 18:16

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 117   | Resp: | 100038 |
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 82        | 59.9  | 46.6  | 69.8   |
| 119       | 32.2  | 26.4  | 39.6   |





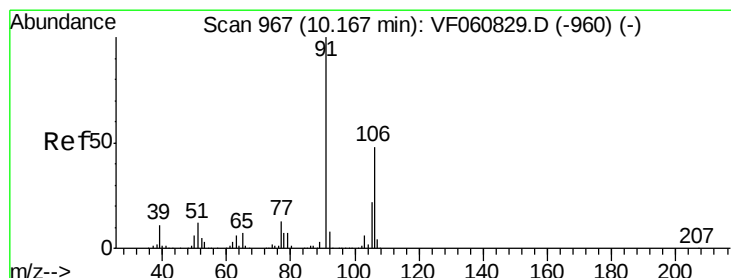
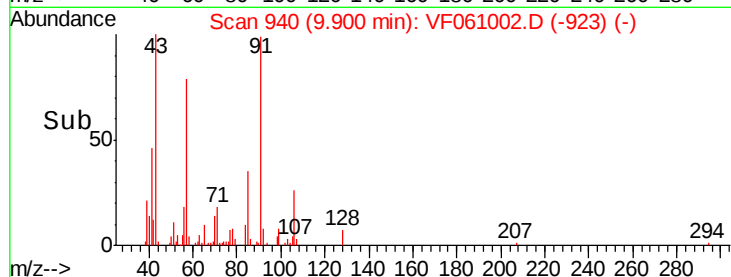
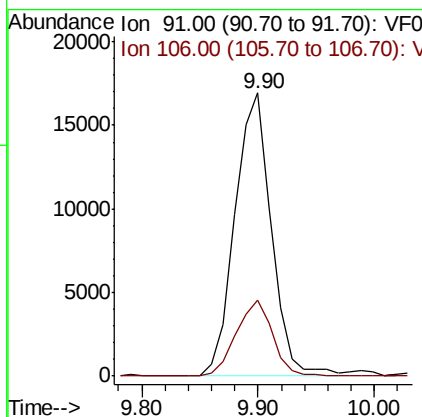
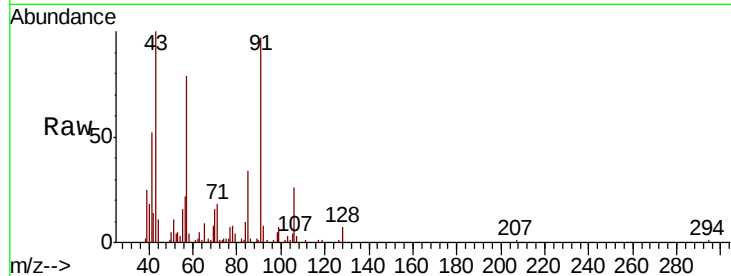
#67  
Ethyl Benzene  
Concen: 10.116 ug/l  
RT: 9.90 min Scan# 940  
Delta R.T. -0.03 min  
Lab File: VF061002.D  
Acq: 12 Dec 2018 18:16

Instrument :  
MSVOA\_F  
ClientSampleId :  
HR-05-121118-CRE

Tot Ion: 91 Resp: 36652  
Ion Ratio Lower Upper  
91 100  
106 26.7 22.2 33.2

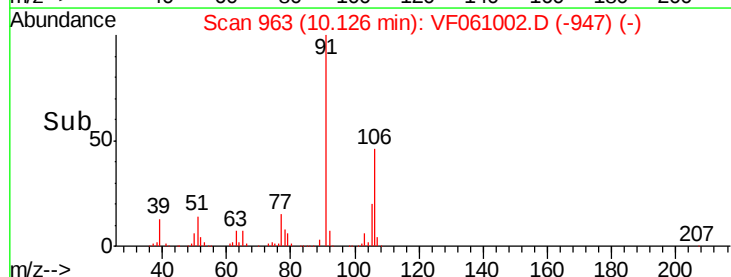
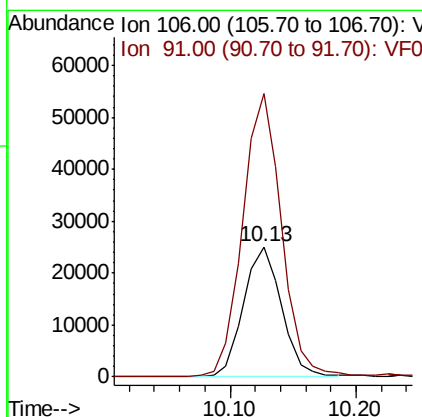
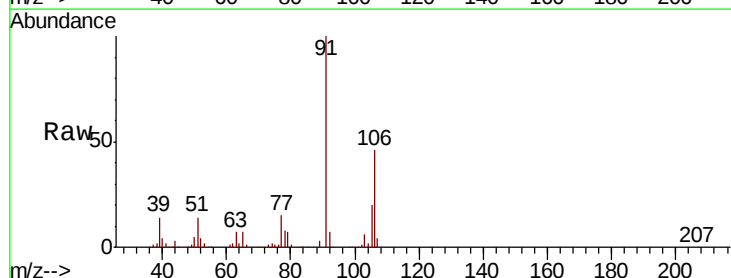
Manual Integrations  
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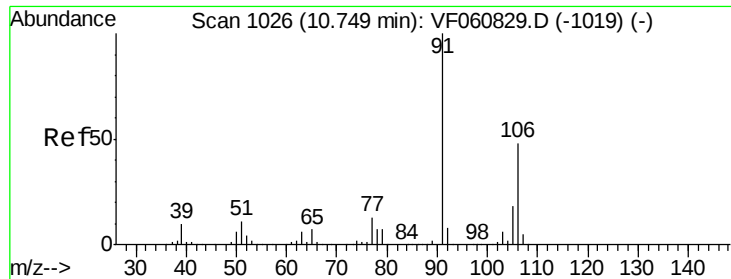
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#68  
m/p-Xylenes  
Concen: 40.356 ug/l  
RT: 10.13 min Scan# 963  
Delta R.T. -0.04 min  
Lab File: VF061002.D  
Acq: 12 Dec 2018 18:16

Tgt Ion: 106 Resp: 52587  
Ion Ratio Lower Upper  
106 100  
91 217.5 166.7 250.1





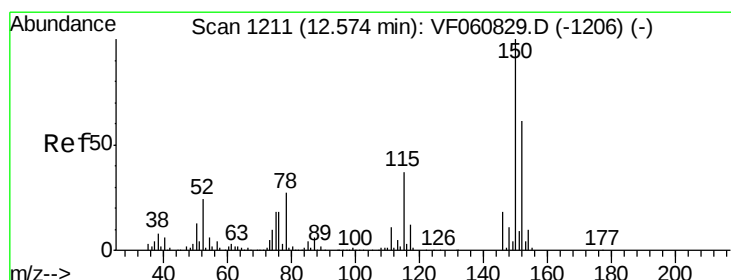
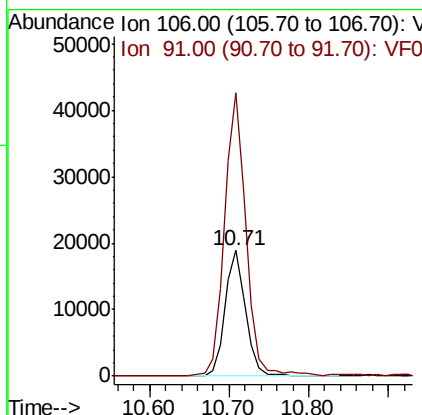
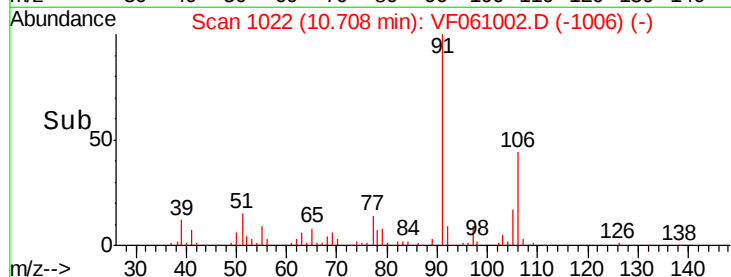
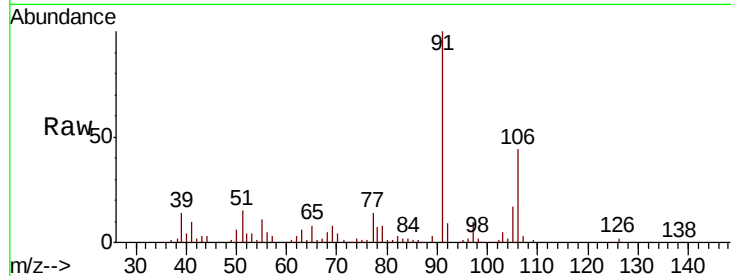
#69  
o-Xylene  
Concen: 24.129 ug/l  
RT: 10.71 min Scan# 1022  
Delta R.T. -0.04 min  
Lab File: VF061002.D  
Acq: 12 Dec 2018 18:16

Instrument :  
MSVOA\_F  
ClientSampleId :  
HR-05-121118-CRE

Tot Ion:106 Resp: 34671  
Ion Ratio Lower Upper  
106 100  
91 225.7 104.8 314.6

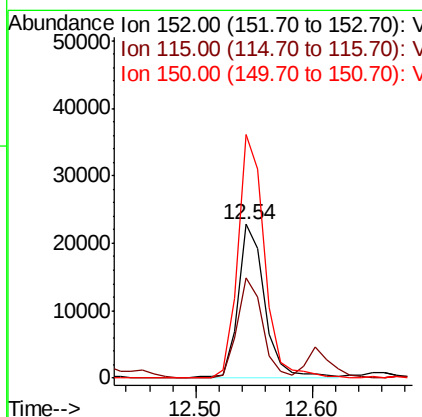
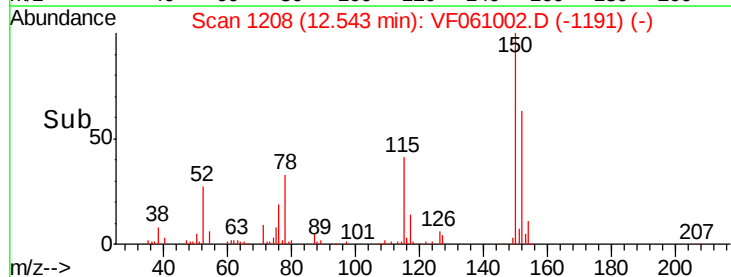
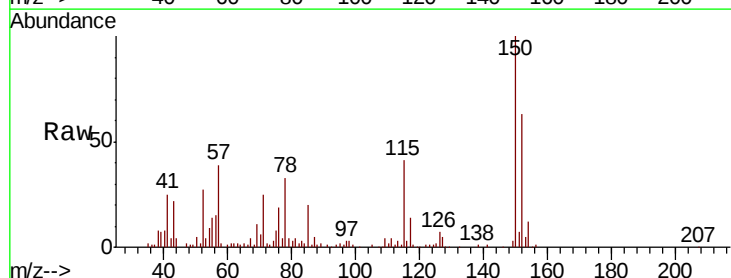
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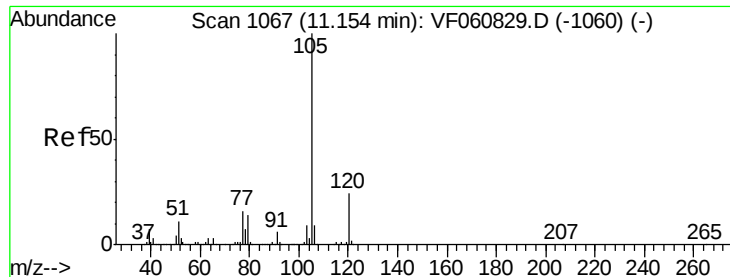
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#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.54 min Scan# 1208  
Delta R.T. -0.03 min  
Lab File: VF061002.D  
Acq: 12 Dec 2018 18:16

Tgt Ion:152 Resp: 36042  
Ion Ratio Lower Upper  
152 100  
115 65.6 30.1 90.5  
150 158.7 0.0 327.6





#73

Isopropylbenzene

Concen: 5.991 ug/l

RT: 11.12 min Scan# 1064

Delta R.T. -0.03 min

Lab File: VF061002.D

Acq: 12 Dec 2018 18:16

Instrument :

MSVOA\_F

ClientSampleId :

HR-05-121118-CRE

Tot Ion: 105 Resp: 17064

Ion Ratio Lower Upper

105 100

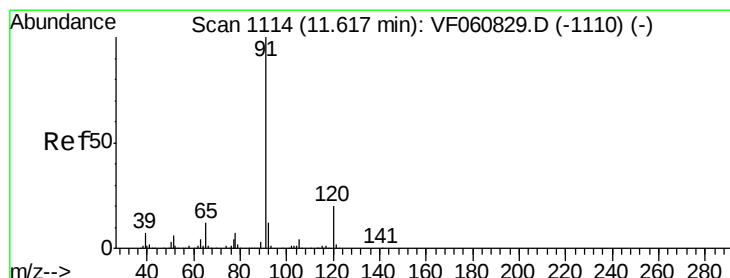
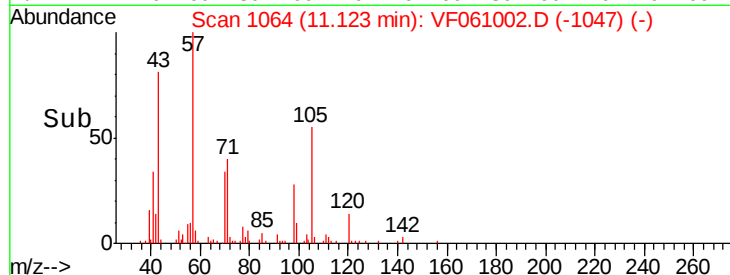
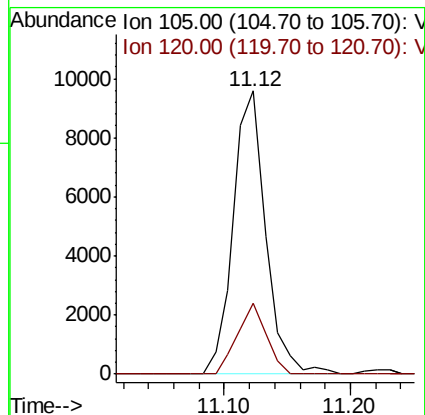
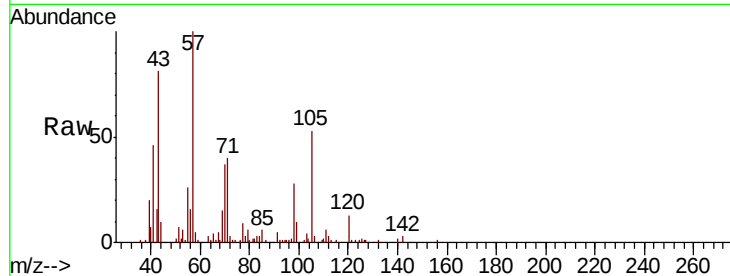
120 24.9 12.2 36.4

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#78

n-propylbenzene

Concen: 24.487 ug/l

RT: 11.59 min Scan# 1111

Delta R.T. -0.03 min

Lab File: VF061002.D

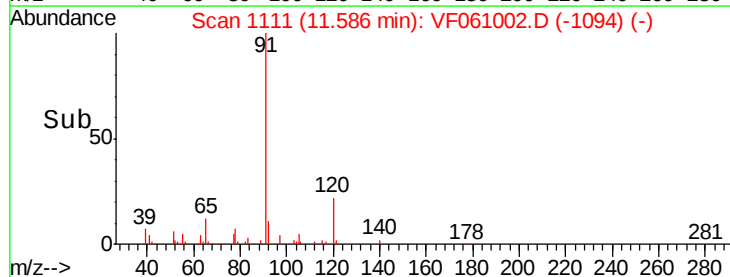
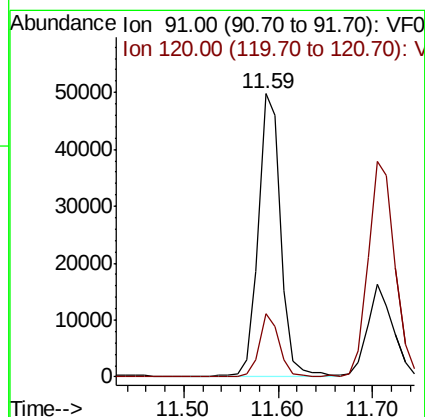
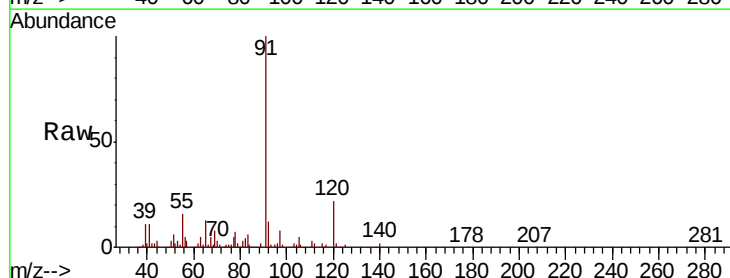
Acq: 12 Dec 2018 18:16

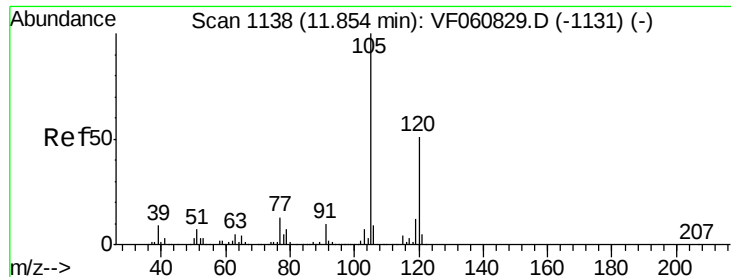
Tgt Ion: 91 Resp: 81675

Ion Ratio Lower Upper

91 100

120 22.4 10.3 30.8





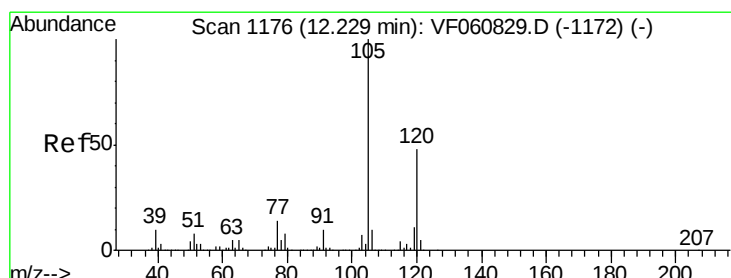
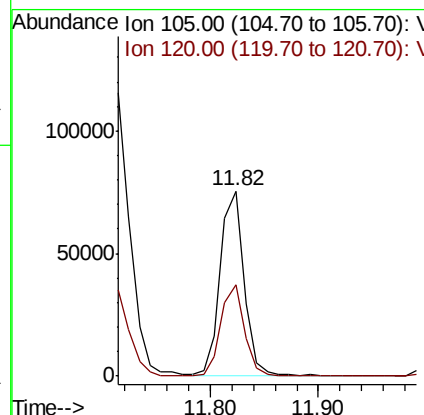
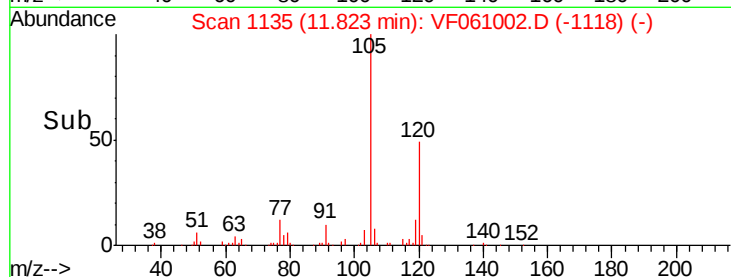
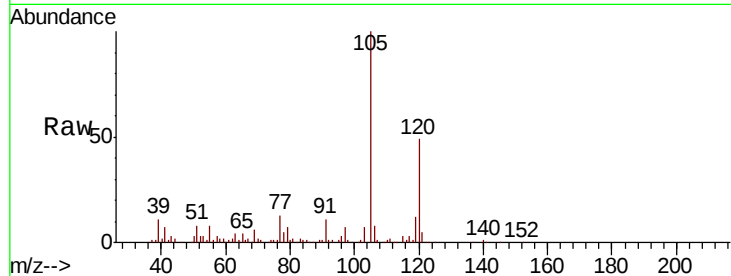
#80  
 1,3,5-Trimethylbenzene  
 Concen: 49.880 ug/l  
 RT: 11.82 min Scan# 1135  
 Delta R.T. -0.03 min  
 Lab File: VF061002.D  
 Acq: 12 Dec 2018 18:16

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 HR-05-121118-CRE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 49.1  | 25.8  | 77.3  |

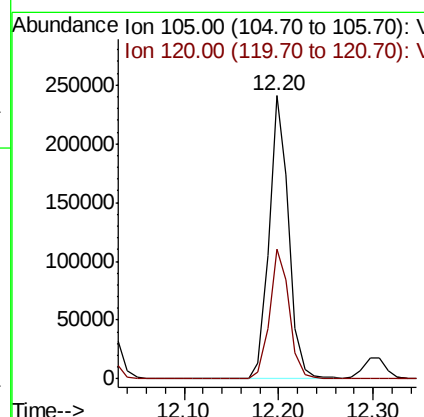
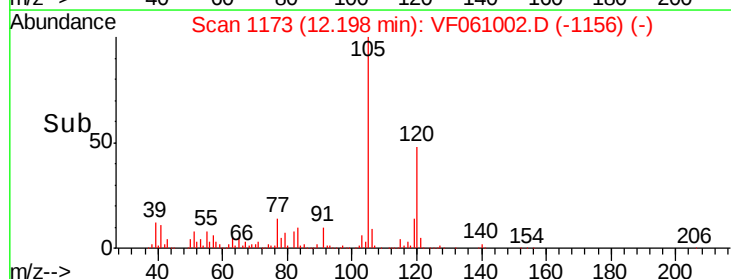
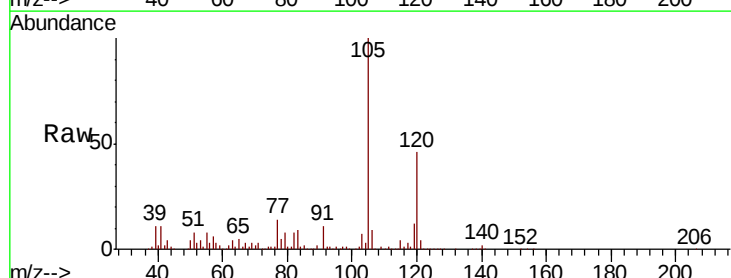
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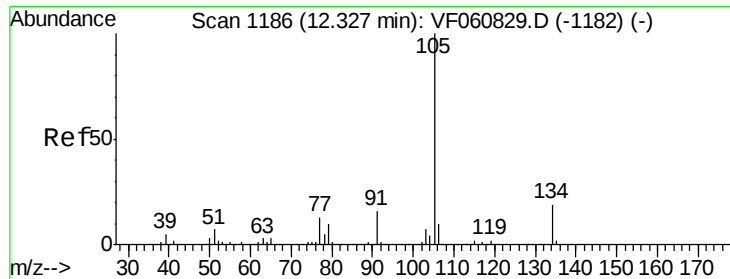
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#84  
 1,2,4-Trimethylbenzene  
 Concen: 151.208 ug/l  
 RT: 12.20 min Scan# 1173  
 Delta R.T. -0.03 min  
 Lab File: VF061002.D  
 Acq: 12 Dec 2018 18:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 46.1  | 23.8  | 71.5  |





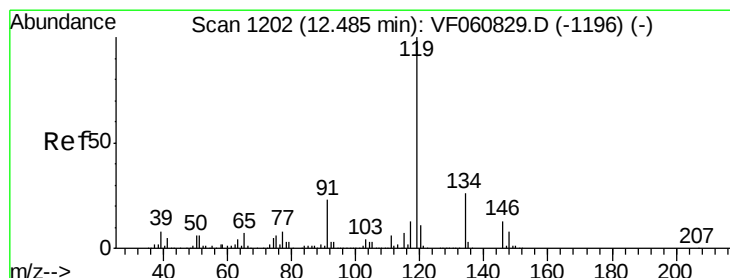
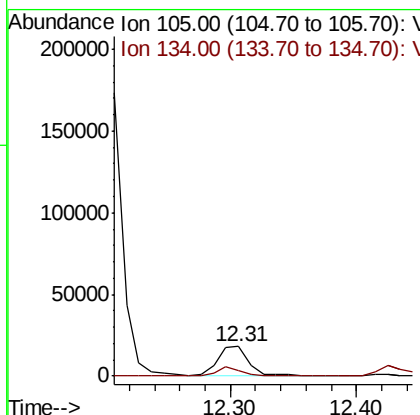
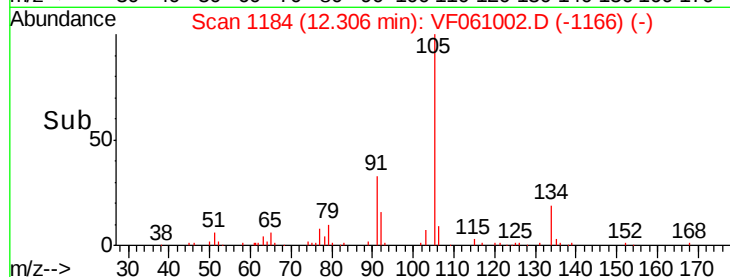
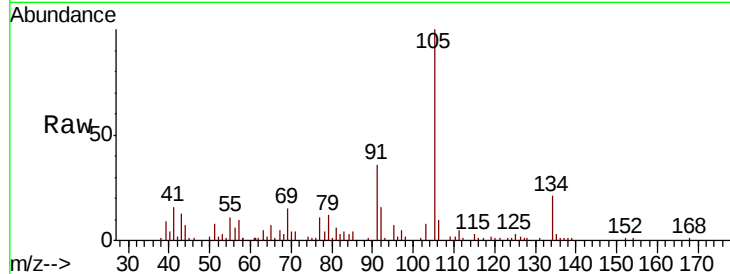
#85  
 sec-Butylbenzene  
 Concen: 9.419 ug/l  
 RT: 12.31 min Scan# 1184  
 Delta R.T. -0.02 min  
 Lab File: VF061002.D  
 Acq: 12 Dec 2018 18:16

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 HR-05-121118-CRE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 134     | 21.0  | 9.5   | 28.5  |

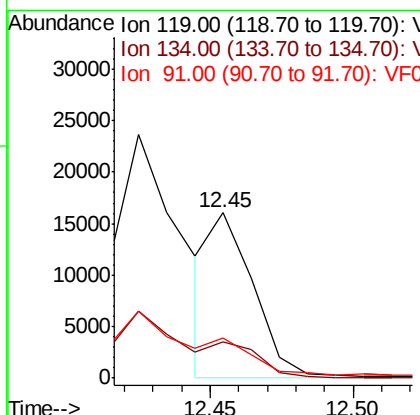
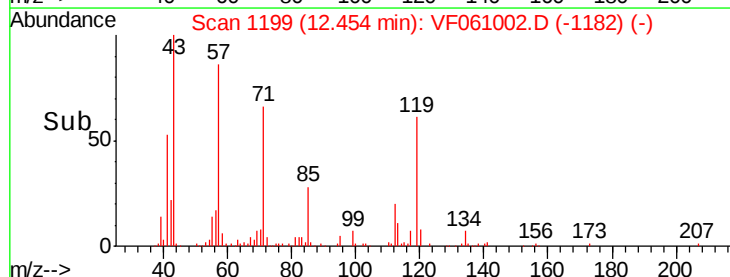
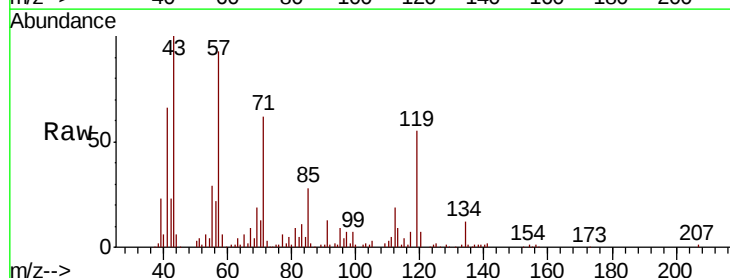
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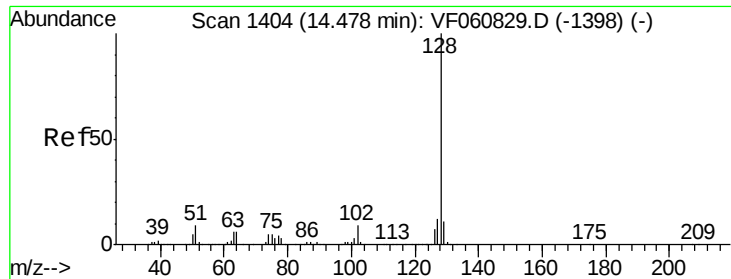
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#86  
 p-Isopropyltoluene  
 Concen: 6.213 ug/l m  
 RT: 12.45 min Scan# 1199  
 Delta R.T. -0.03 min  
 Lab File: VF061002.D  
 Acq: 12 Dec 2018 18:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 21.6  | 12.9  | 38.6  |
| 91      | 24.3  | 11.8  | 35.3  |





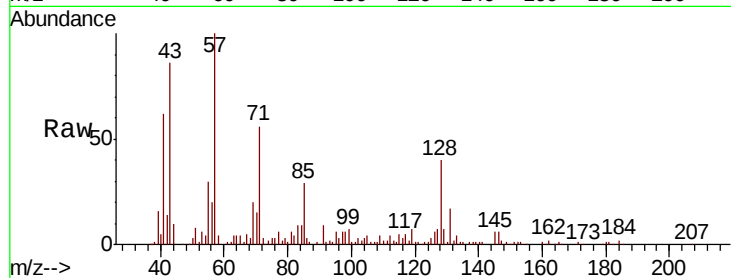
#95  
Naphthalene  
Concen: 13.721 ug/l  
RT: 14.45 min Scan# 1401  
Delta R.T. -0.03 min  
Lab File: VF061002.D  
Acq: 12 Dec 2018 18:16

Instrument :  
MSVOA\_F  
ClientSampleId :  
HR-05-121118-CRE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 18.4  | 9.9   | 14.9# |
| 129     | 17.6  | 9.1   | 13.7# |

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Abundance

Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

