

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_F\DATA\VF122218\  
 Data File : VF061150.D  
 Acq On : 22 Dec 2018 17:54  
 Operator : VA/AP  
 Sample : J6191-01  
 Misc : 6.14g/5mL/MSVOA-F/SOIL  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 NB-07-122018-A

Manual Integrations  
 APPROVED

MMDadoda  
 12/26/2018 11:05:41 AM

Quant Time: Dec 24 03:36:14 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F121918S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 00:56:59 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|--------|---------|----------|
| 1) Pentafluorobenzene       | 4.88  | 168  | 143349   | 50.00  | ug/l    | 0.01     |
| 34) 1,4-Difluorobenzene     | 5.61  | 114  | 256173   | 50.00  | ug/l    | 0.02     |
| 63) Chlorobenzene-d5        | 9.80  | 117  | 162775   | 50.00  | ug/l    | 0.02     |
| 72) 1,4-Dichlorobenzene-d4  | 12.56 | 152  | 48360    | 50.00  | ug/l    | 0.01     |
| System Monitoring Compounds |       |      |          |        |         |          |
| 33) 1,2-Dichloroethane-d4   | 4.86  | 65   | 109469   | 59.37  | ug/l    | 0.02     |
| Spiked Amount 50.000        |       |      | Recovery | =      | 118.74% |          |
| 35) Dibromofluoromethane    | 4.13  | 113  | 127099   | 61.94  | ug/l    | 0.02     |
| Spiked Amount 50.000        |       |      | Recovery | =      | 123.88% |          |
| 50) Toluene-d8              | 7.58  | 98   | 245609   | 42.23  | ug/l    | 0.02     |
| Spiked Amount 50.000        |       |      | Recovery | =      | 84.46%  |          |
| 62) 4-Bromofluorobenzene    | 11.42 | 95   | 80048    | 29.86  | ug/l    | 0.01     |
| Spiked Amount 50.000        |       |      | Recovery | =      | 59.72%  |          |
| Target Compounds            |       |      |          |        |         |          |
| 16) Acetone                 | 2.26  | 43   | 17701    | 48.025 | ug/l    | 94       |
| 18) Methyl Acetate          | 2.36  | 43   | 22172    | 29.076 | ug/l    | 99       |
| 39) Methylcyclohexane       | 5.48  | 83   | 5128     | 1.849  | ug/l #  | 87       |
| 40) Benzene                 | 4.65  | 78   | 27716    | 4.168  | ug/l    | 99       |
| 52) Toluene                 | 7.65  | 92   | 34011    | 7.727  | ug/l    | 96       |
| 67) Ethyl Benzene           | 9.92  | 91   | 9465     | 1.545  | ug/l    | 96       |
| 68) m/p-Xylenes             | 10.15 | 106  | 13808    | 6.405  | ug/l    | 89       |
| 69) o-Xylene                | 10.72 | 106  | 6165     | 2.578  | ug/l    | 98       |
| 78) n-propylbenzene         | 11.60 | 91   | 7455     | 1.152  | ug/l    | 92       |
| 80) 1,3,5-Trimethylbenzene  | 11.84 | 105  | 9105     | 2.653  | ug/l    | 87       |
| 84) 1,2,4-Trimethylbenzene  | 12.21 | 105  | 32018    | 9.356  | ug/l    | 99       |
| 89) n-Butylbenzene          | 12.85 | 91   | 5636m    | 1.485  | ug/l    |          |
| 95) Naphthalene             | 14.47 | 128  | 4509m    | 2.171  | ug/l    |          |

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

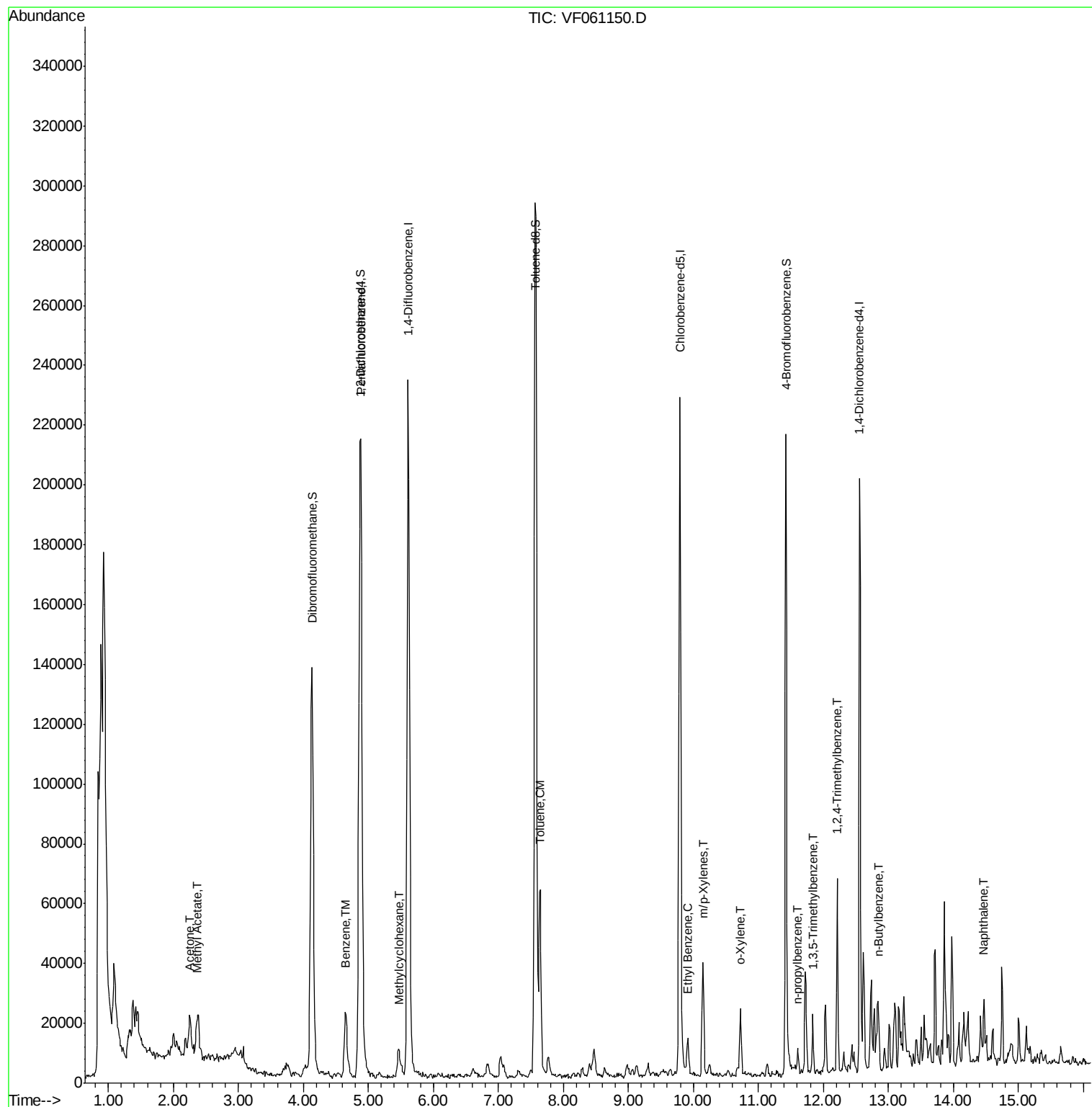
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_F\DATA\VF122218\  
Data File : VF061150.D  
Acq On : 22 Dec 2018 17:54  
Operator : VA/AP  
Sample : J6191-01  
Misc : 6.14g/5mL/MSVOA-F/SOIL  
ALS Vial : 12 Sample Multiplier: 1

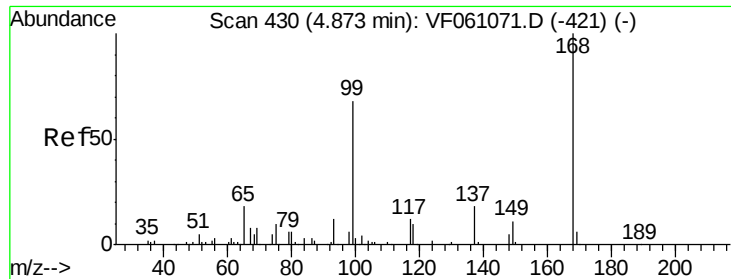
Instrument :  
MSVOA\_F  
ClientSampleId :  
NB-07-122018-A

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12/26/2018 11:05:41 AM

Quant Time: Dec 24 03:36:14 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F121918S.M  
Quant Title : SW846 8260  
QLast Update : Thu Dec 20 00:56:59 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.88 min Scan# 431

Delta R.T. 0.01 min

Lab File: VF061150.D

Acq: 22 Dec 2018 17:54

Instrument :

MSVOA\_F

ClientSampleId :

NB-07-122018-A

Tgt Ion: 168 Resp: 143349

Ion Ratio Lower Upper

168 100

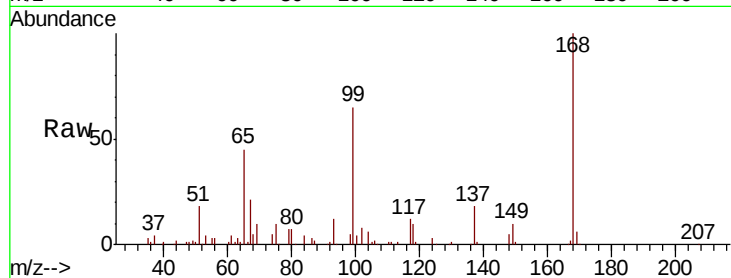
99 64.6 54.4 81.6

Manual Integrations

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12/26/2018 11:05:41 AM



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.88

50000

40000

30000

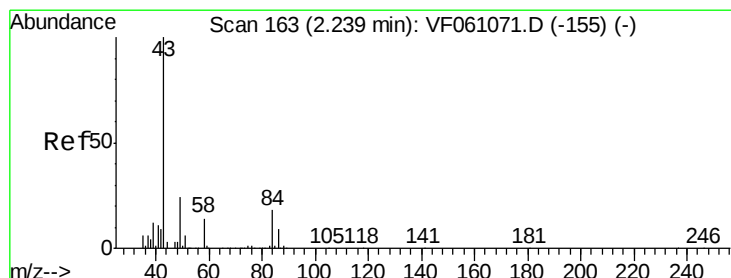
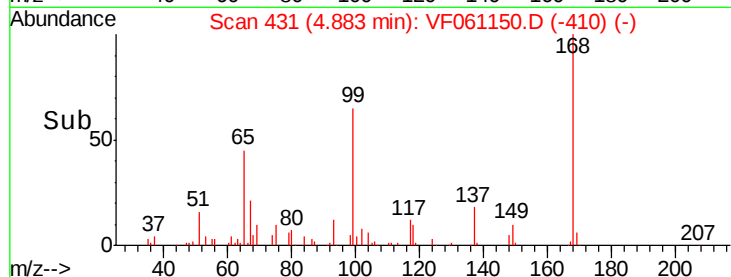
20000

10000

0

4.70 4.80 4.90 5.00 5.10

Time-->



#16

Acetone

Concen: 48.025 ug/l

RT: 2.26 min Scan# 165

Delta R.T. 0.02 min

Lab File: VF061150.D

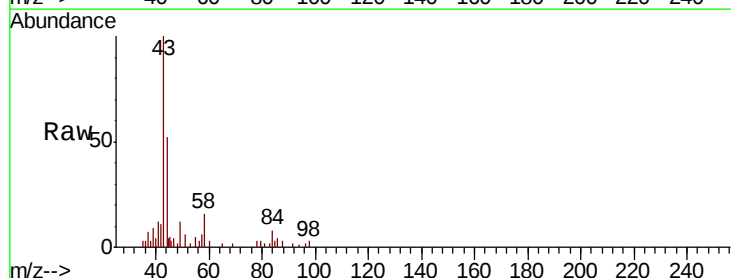
Acq: 22 Dec 2018 17:54

Tgt Ion: 43 Resp: 17701

Ion Ratio Lower Upper

43 100

58 16.2 11.1 16.7



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

2.26

8000

6000

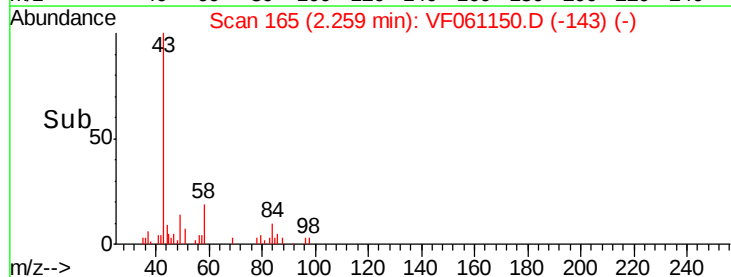
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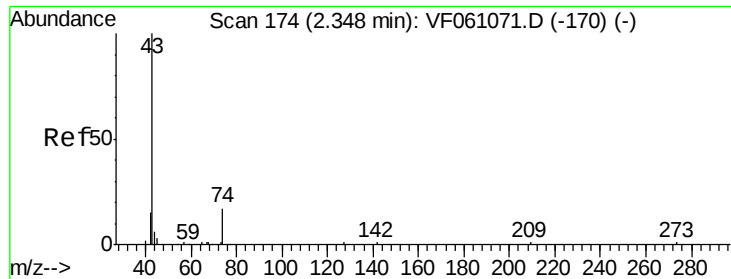
2000

0

2.20 2.25 2.30 2.35

Time-->





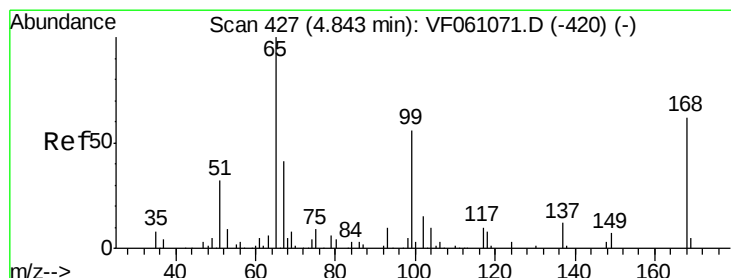
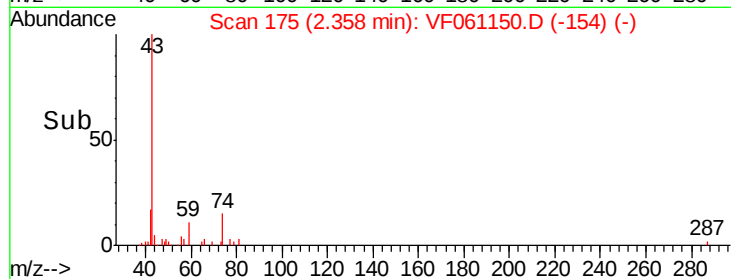
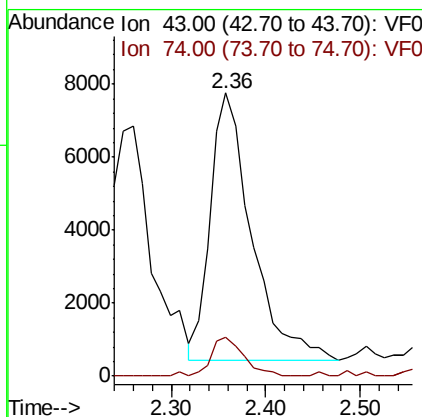
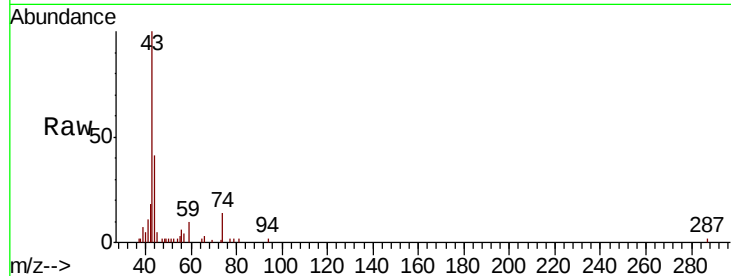
#18  
Methyl Acetate  
Concen: 29.076 ug/l  
RT: 2.36 min Scan# 175  
Delta R.T. 0.01 min  
Lab File: VF061150.D  
Acq: 22 Dec 2018 17:54

Instrument :  
MSVOA\_F  
ClientSampleId :  
NB-07-122018-A

Tgt Ion: 43 Resp: 22172  
Ion Ratio Lower Upper  
43 100  
74 13.5 11.0 16.6

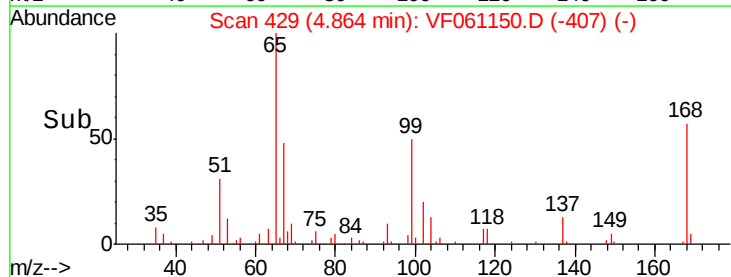
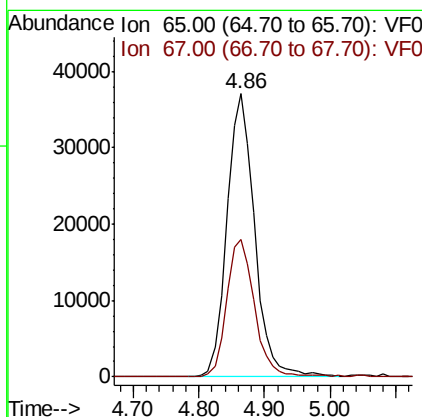
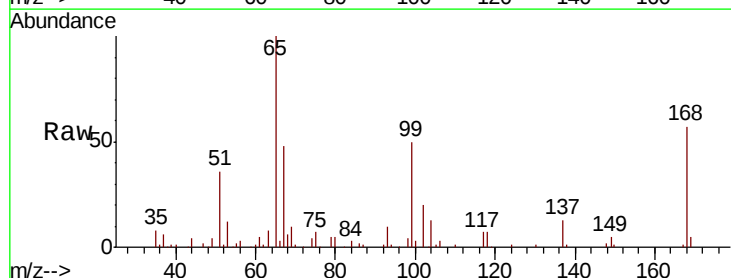
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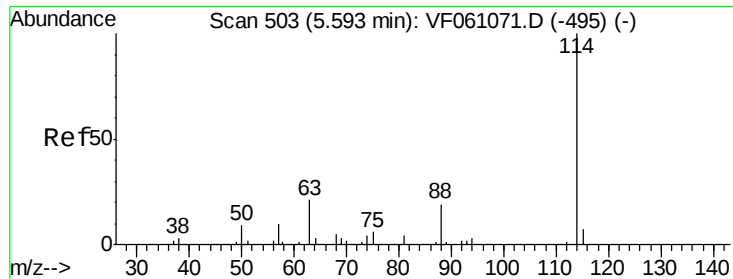
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#33  
1,2-Dichloroethane-d4  
Concen: 59.374 ug/l  
RT: 4.86 min Scan# 429  
Delta R.T. 0.02 min  
Lab File: VF061150.D  
Acq: 22 Dec 2018 17:54

Tgt Ion: 65 Resp: 109469  
Ion Ratio Lower Upper  
65 100  
67 48.4 0.0 94.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.61 min Scan# 505

Delta R.T. 0.02 min

Lab File: VF061150.D

Acq: 22 Dec 2018 17:54

Instrument :

MSVOA\_F

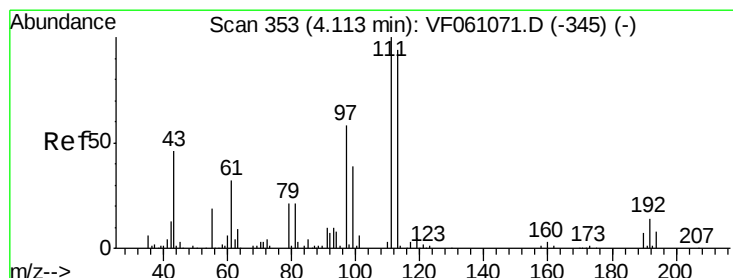
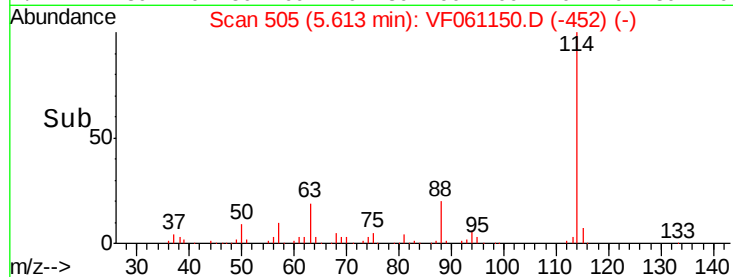
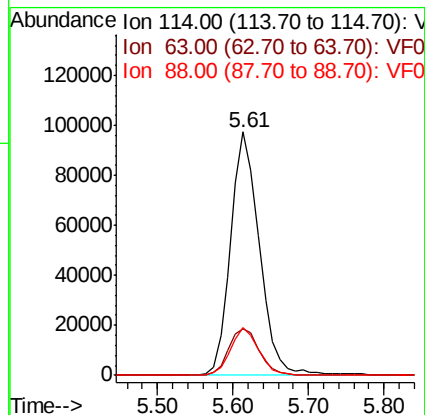
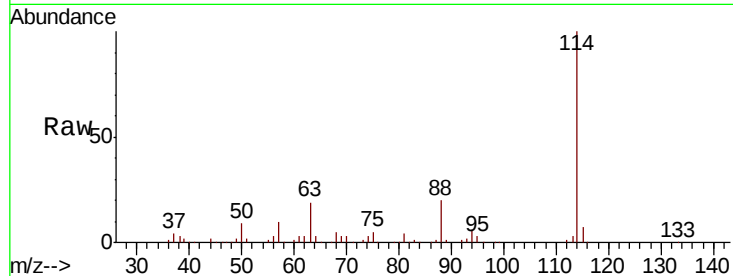
ClientSampleId :

NB-07-122018-A

|     |         |       |        |
|-----|---------|-------|--------|
| Tgt | Ion:114 | Resp: | 256173 |
| Ion | Ratio   | Lower | Upper  |
| 114 | 100     |       |        |
| 63  | 18.8    | 0.0   | 41.6   |
| 88  | 19.9    | 0.0   | 38.0   |

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#35

Dibromofluoromethane

Concen: 61.936 ug/l

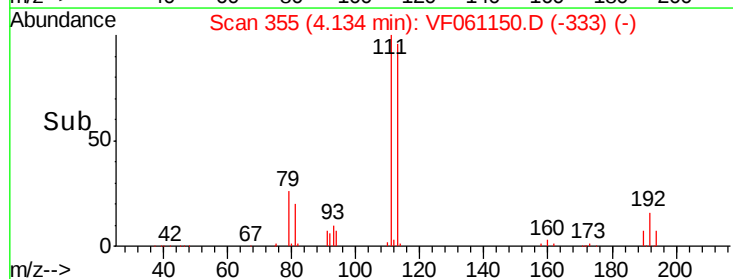
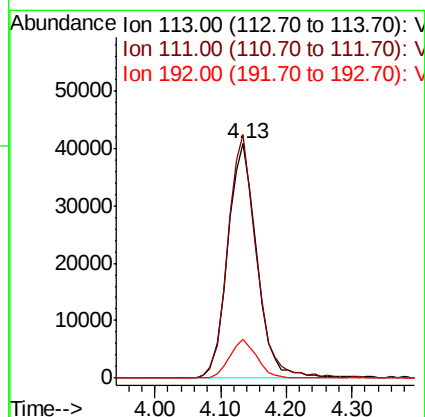
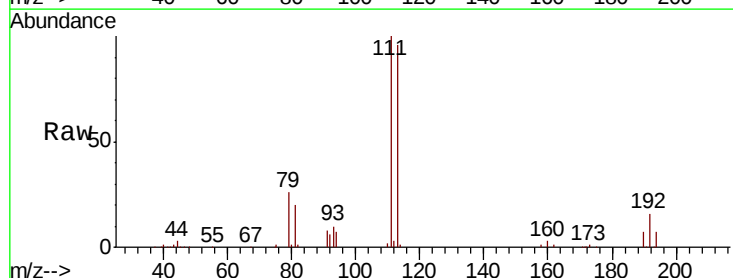
RT: 4.13 min Scan# 355

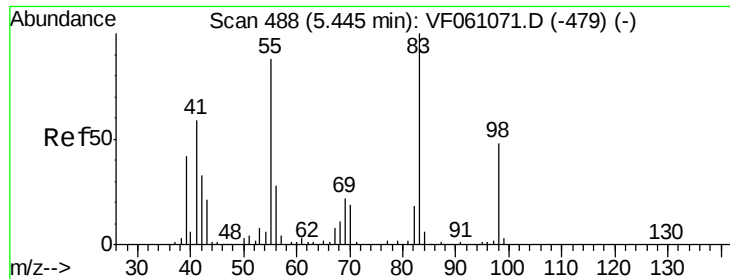
Delta R.T. 0.02 min

Lab File: VF061150.D

Acq: 22 Dec 2018 17:54

|     |         |       |        |
|-----|---------|-------|--------|
| Tgt | Ion:113 | Resp: | 127099 |
| Ion | Ratio   | Lower | Upper  |
| 113 | 100     |       |        |
| 111 | 104.0   | 85.2  | 127.8  |
| 192 | 16.3    | 12.8  | 19.2   |





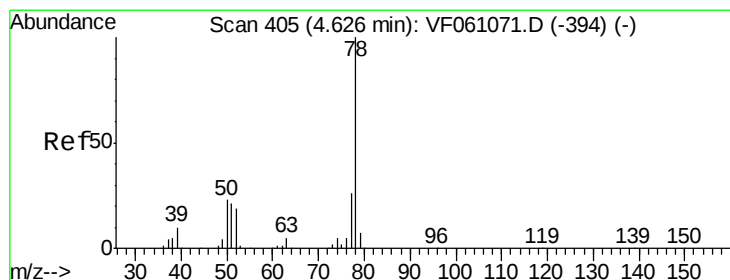
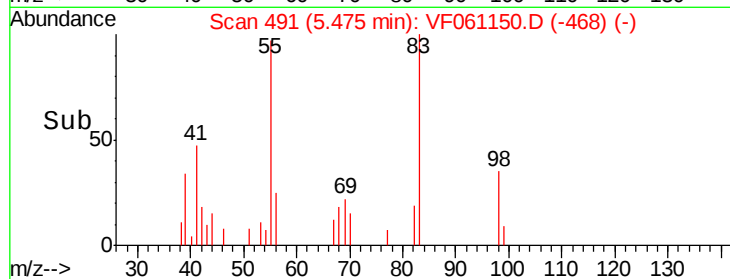
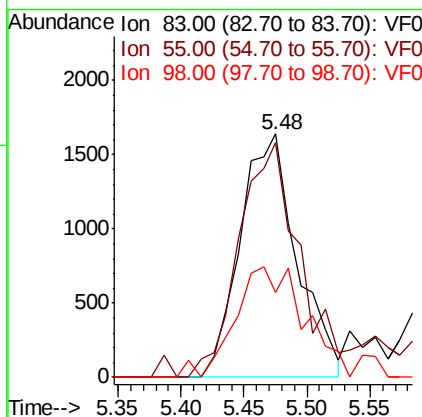
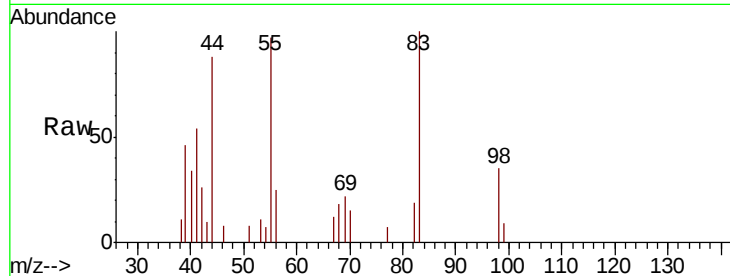
#39  
Methylcyclohexane  
Concen: 1.849 ug/l  
RT: 5.48 min Scan# 491  
Delta R.T. 0.03 min  
Lab File: VF061150.D  
Acq: 22 Dec 2018 17:54

Instrument :  
MSVOA\_F  
ClientSampleId :  
NB-07-122018-A

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 55      | 96.5  | 70.6  | 105.8 |
| 98      | 34.9  | 38.5  | 57.7# |

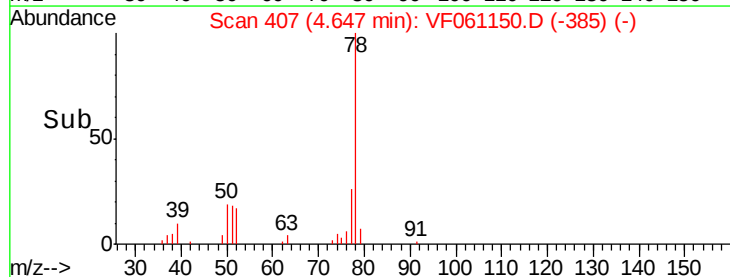
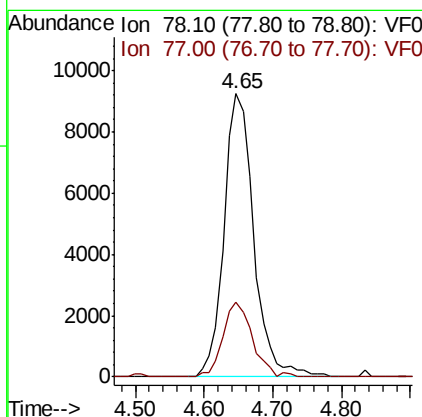
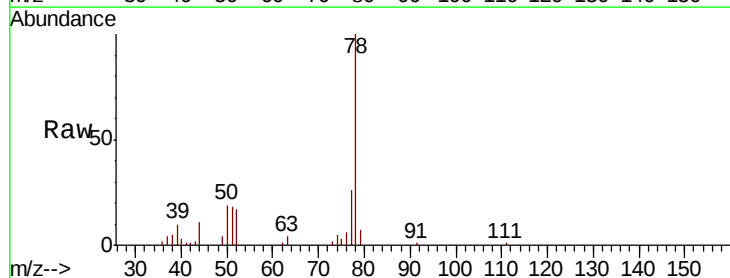
Manual Integrations  
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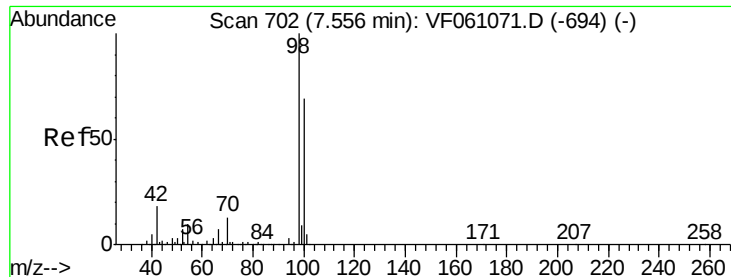
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#40  
Benzene  
Concen: 4.168 ug/l  
RT: 4.65 min Scan# 407  
Delta R.T. 0.02 min  
Lab File: VF061150.D  
Acq: 22 Dec 2018 17:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 78      | 100   |       |       |
| 77      | 26.2  | 20.7  | 31.1  |





#50

Toluene-d8

Concen: 42.234 ug/l

RT: 7.58 min Scan# 704

Delta R.T. 0.02 min

Lab File: VF061150.D

Acq: 22 Dec 2018 17:54

Instrument :

MSVOA\_F

ClientSampleId :

NB-07-122018-A

Tgt Ion: 98 Resp: 245609

Ion Ratio Lower Upper

98 100

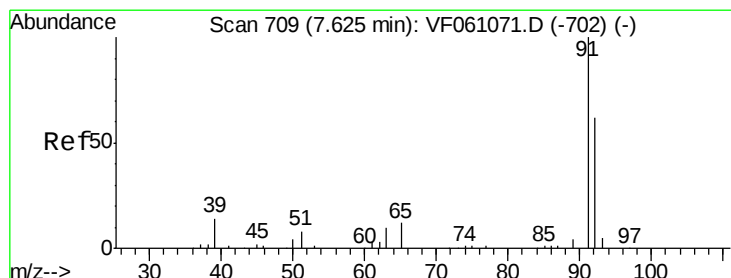
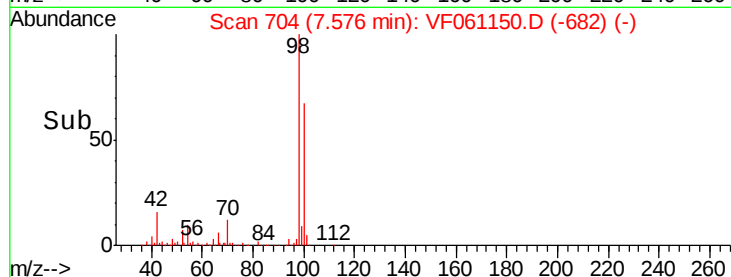
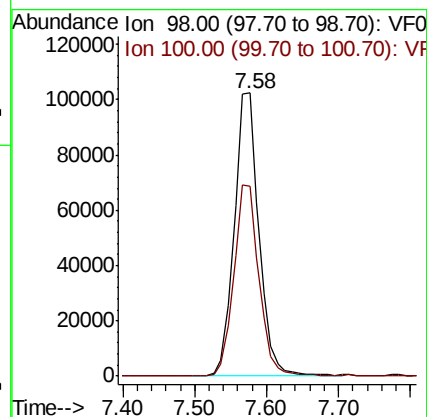
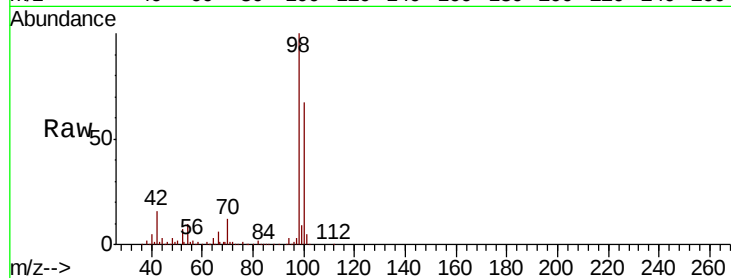
100 67.3 55.3 82.9

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#52

Toluene

Concen: 7.727 ug/l

RT: 7.65 min Scan# 711

Delta R.T. 0.02 min

Lab File: VF061150.D

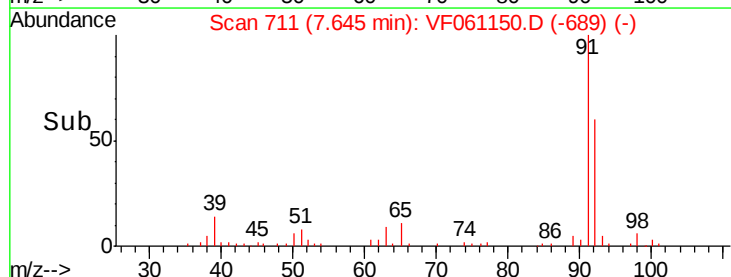
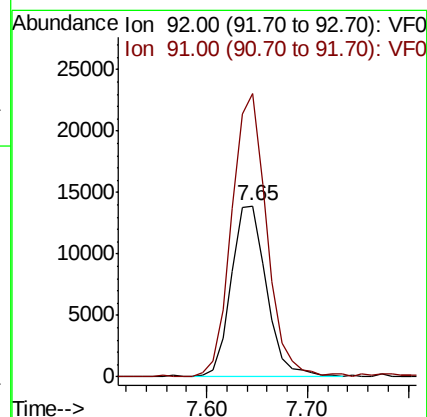
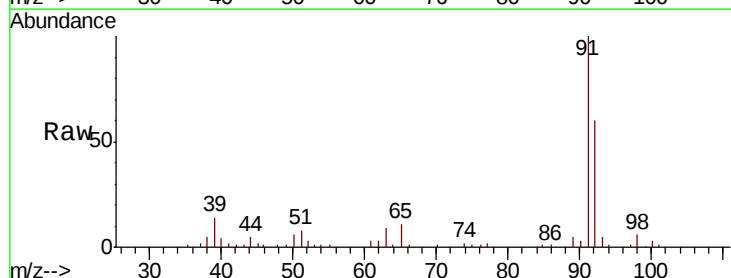
Acq: 22 Dec 2018 17:54

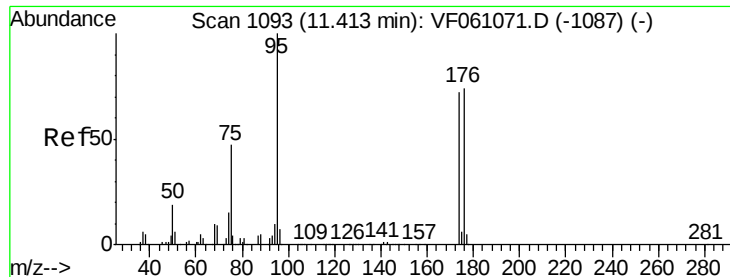
Tgt Ion: 92 Resp: 34011

Ion Ratio Lower Upper

92 100

91 165.6 128.8 193.2





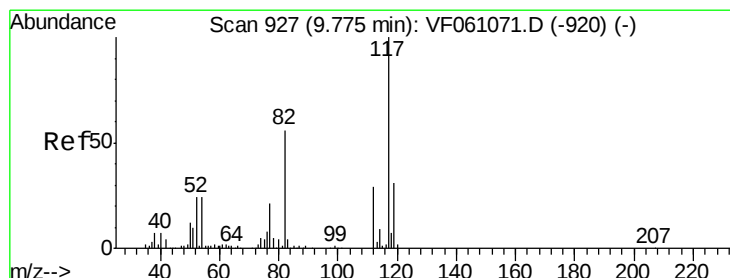
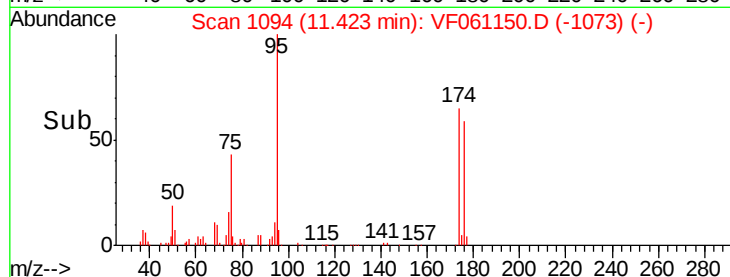
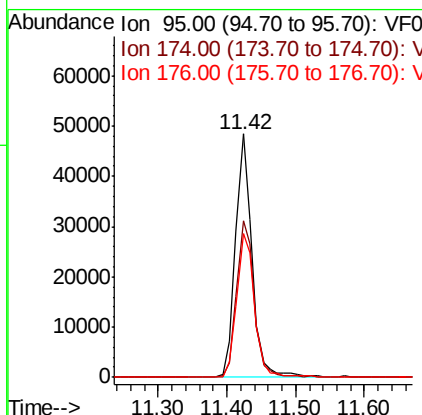
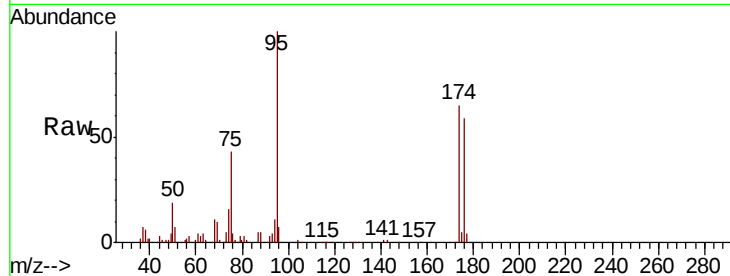
#62  
4-Bromofluorobenzene  
Concen: 29.858 ug/l  
RT: 11.42 min Scan# 1094  
Delta R.T. 0.01 min  
Lab File: VF061150.D  
Acq: 22 Dec 2018 17:54

Instrument :  
MSVOA\_F  
ClientSampleId :  
NB-07-122018-A

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 174     | 64.6  | 0.0   | 143.8 |
| 176     | 59.1  | 0.0   | 147.6 |

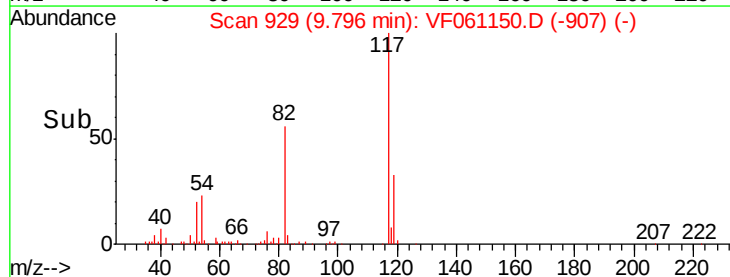
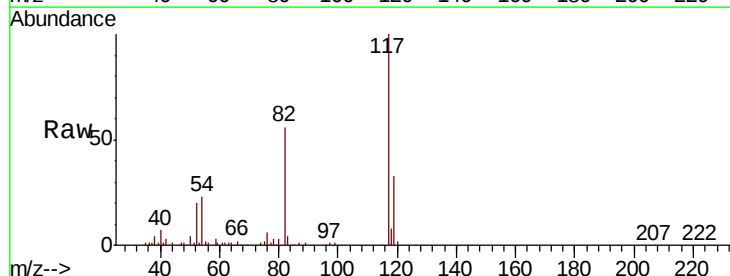
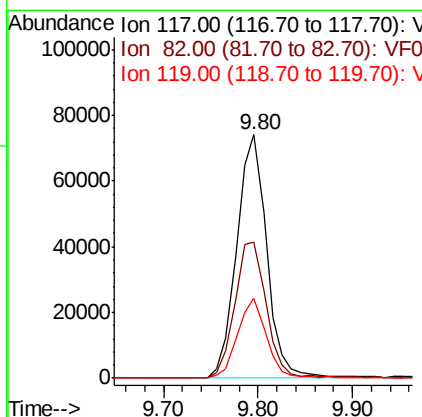
Manual Integrations  
APPROVED

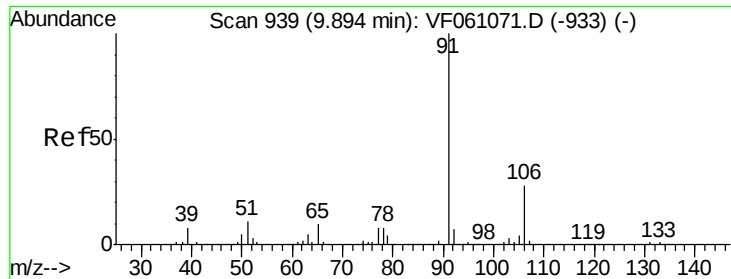
MMDadoda  
12/26/2018 11:05:41 AM



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.80 min Scan# 929  
Delta R.T. 0.02 min  
Lab File: VF061150.D  
Acq: 22 Dec 2018 17:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 56.0  | 45.0  | 67.4  |
| 119     | 32.7  | 24.8  | 37.2  |





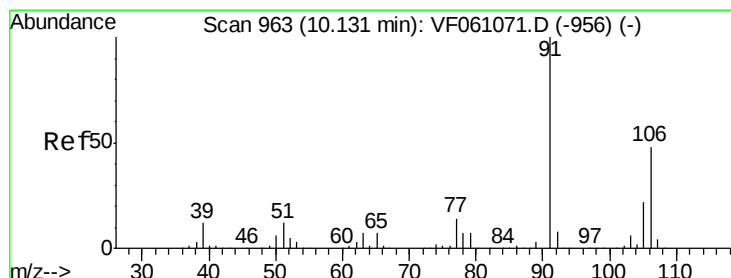
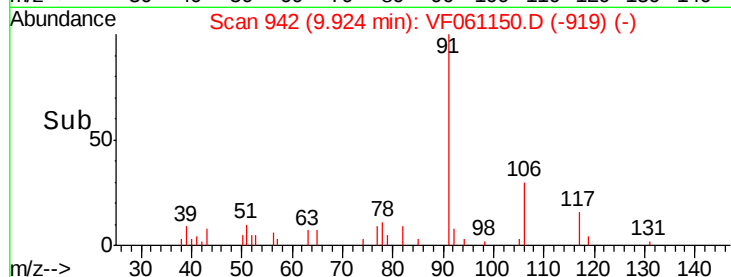
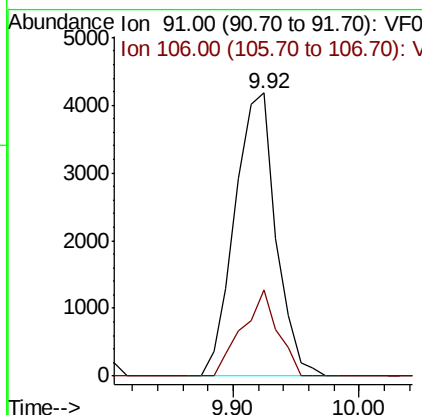
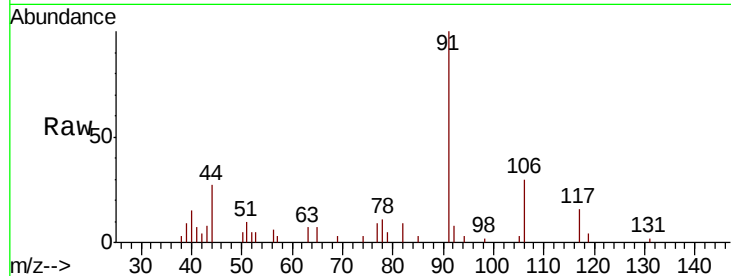
#67  
Ethyl Benzene  
Concen: 1.545 ug/l  
RT: 9.92 min Scan# 942  
Delta R.T. 0.03 min  
Lab File: VF061150.D  
Acq: 22 Dec 2018 17:54

Instrument :  
MSVOA\_F  
ClientSampleId :  
NB-07-122018-A

Tgt Ion: 91 Resp: 9465  
Ion Ratio Lower Upper  
91 100  
106 30.5 22.5 33.7

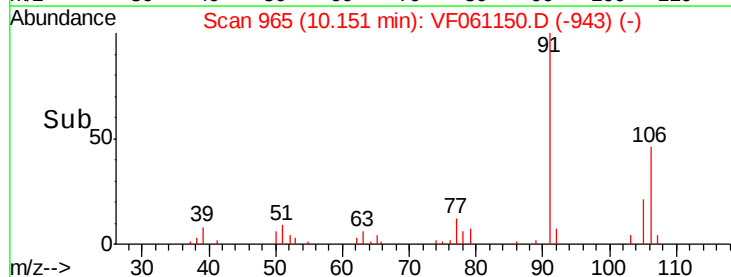
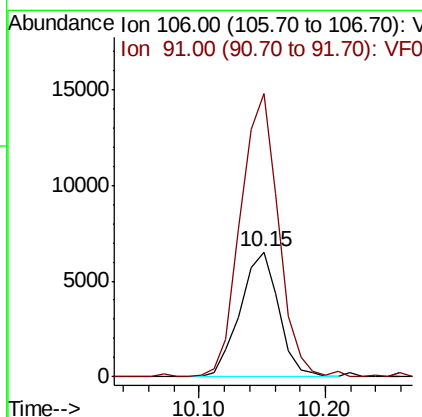
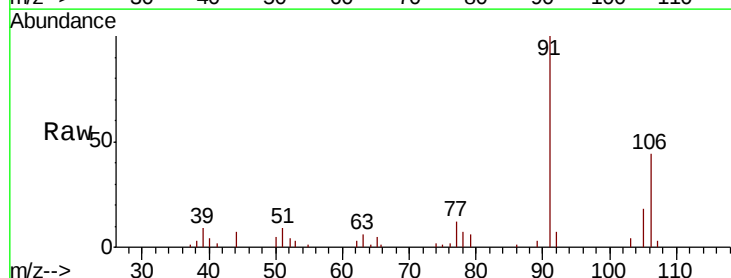
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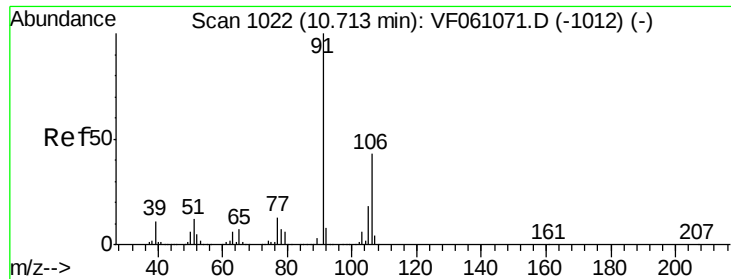
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#68  
m/p-Xylenes  
Concen: 6.405 ug/l  
RT: 10.15 min Scan# 965  
Delta R.T. 0.02 min  
Lab File: VF061150.D  
Acq: 22 Dec 2018 17:54

Tgt Ion: 106 Resp: 13808  
Ion Ratio Lower Upper  
106 100  
91 227.1 168.2 252.2





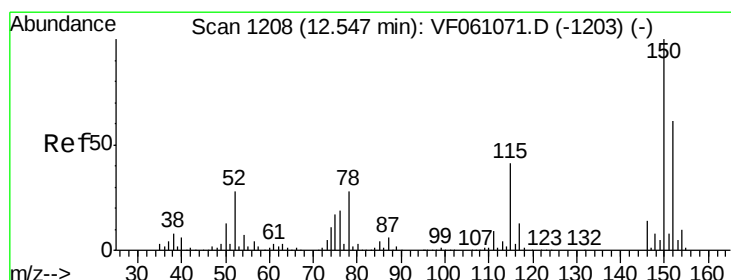
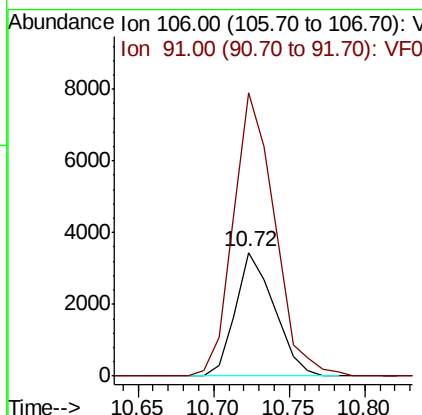
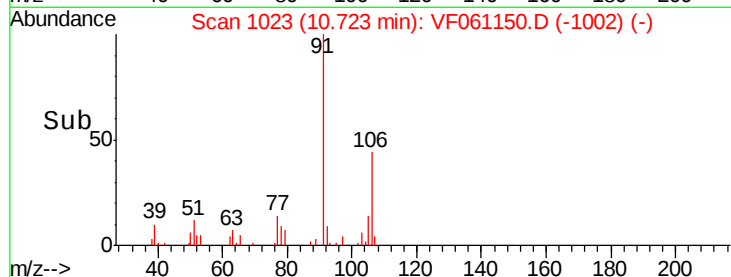
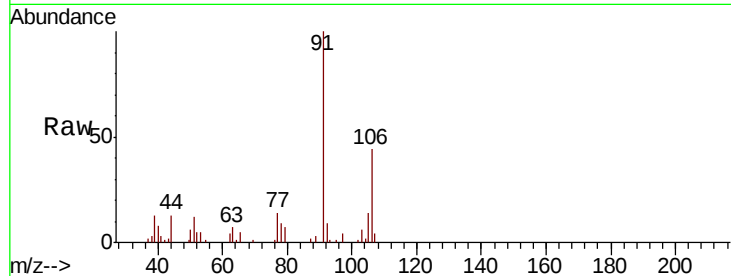
#69  
o-Xylene  
Concen: 2.578 ug/l  
RT: 10.72 min Scan# 1023  
Delta R.T. 0.01 min  
Lab File: VF061150.D  
Acq: 22 Dec 2018 17:54

Instrument :  
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ClientSampleId :  
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Tgt Ion:106 Resp: 6165  
Ion Ratio Lower Upper  
106 100  
91 228.8 115.9 347.7

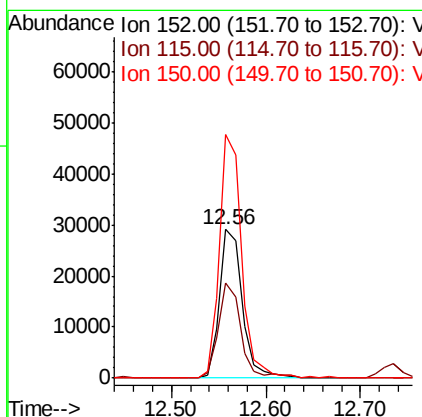
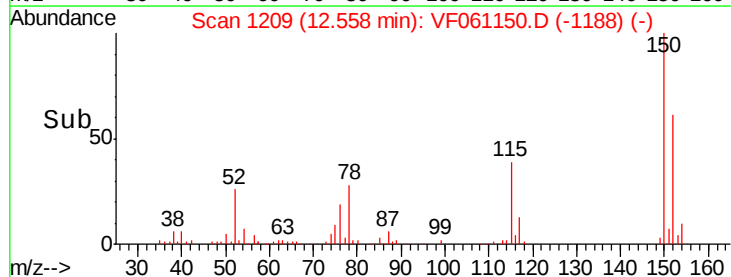
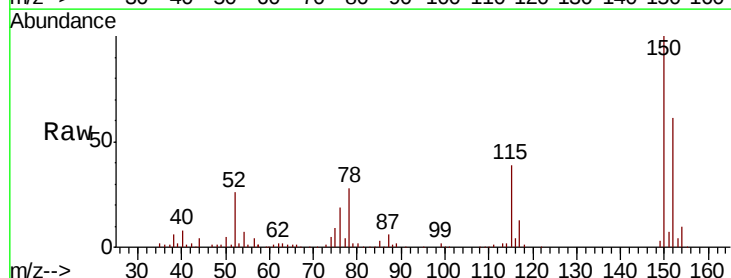
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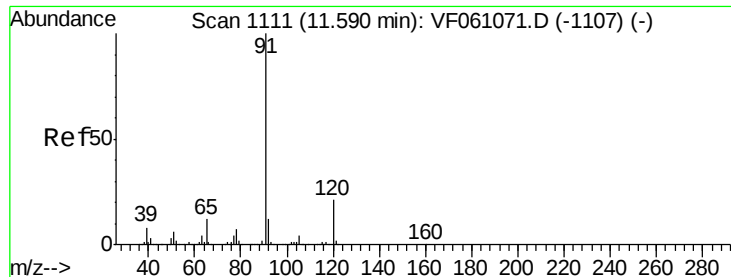
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#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.56 min Scan# 1209  
Delta R.T. 0.01 min  
Lab File: VF061150.D  
Acq: 22 Dec 2018 17:54

Tgt Ion:152 Resp: 48360  
Ion Ratio Lower Upper  
152 100  
115 64.3 33.3 99.9  
150 164.1 0.0 328.2





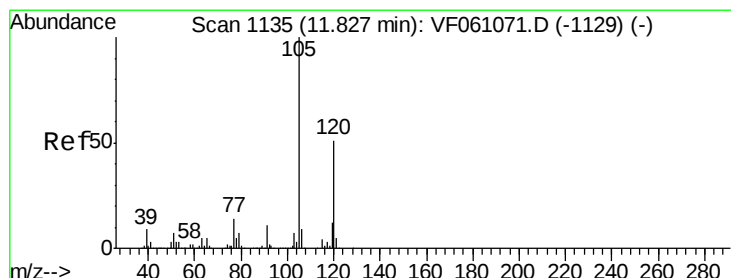
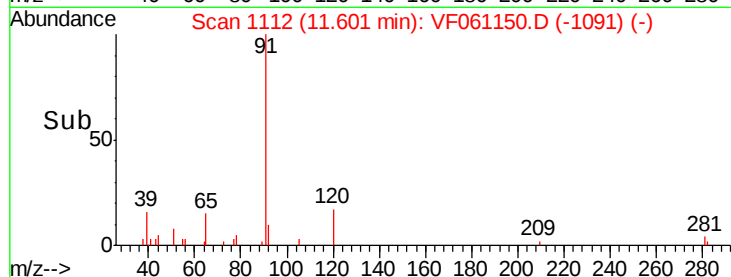
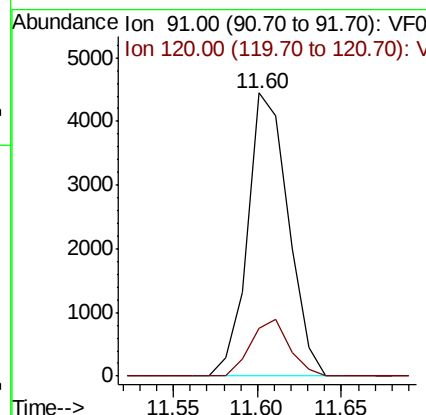
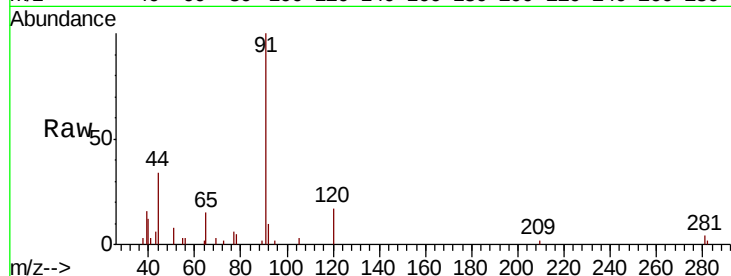
#78  
n-propylbenzene  
Concen: 1.152 ug/l  
RT: 11.60 min Scan# 1112  
Delta R.T. 0.01 min  
Lab File: VF061150.D  
Acq: 22 Dec 2018 17:54

Instrument :  
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ClientSampleId :  
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Tgt Ion: 91 Resp: 7455  
Ion Ratio Lower Upper  
91 100  
120 16.9 10.4 31.2

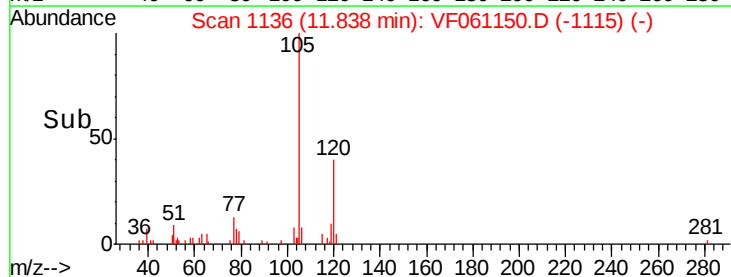
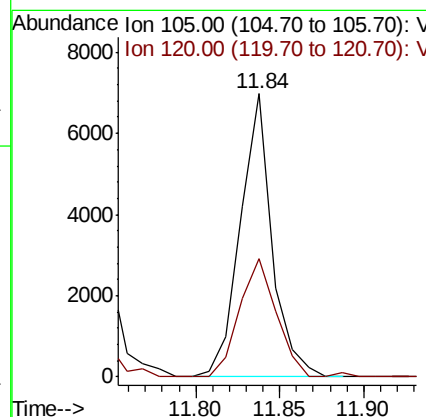
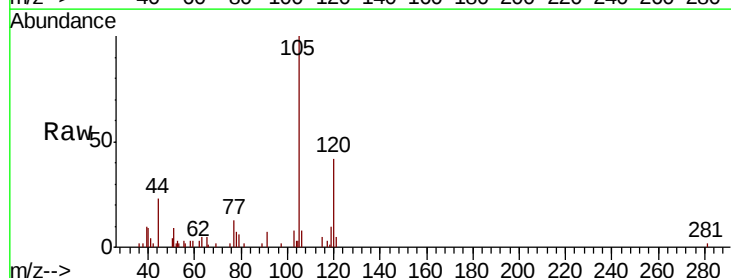
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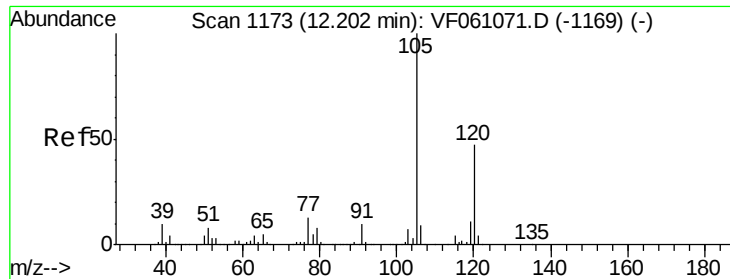
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#80  
1,3,5-Trimethylbenzene  
Concen: 2.653 ug/l  
RT: 11.84 min Scan# 1136  
Delta R.T. 0.01 min  
Lab File: VF061150.D  
Acq: 22 Dec 2018 17:54

Tgt Ion: 105 Resp: 9105  
Ion Ratio Lower Upper  
105 100  
120 41.9 25.4 76.4





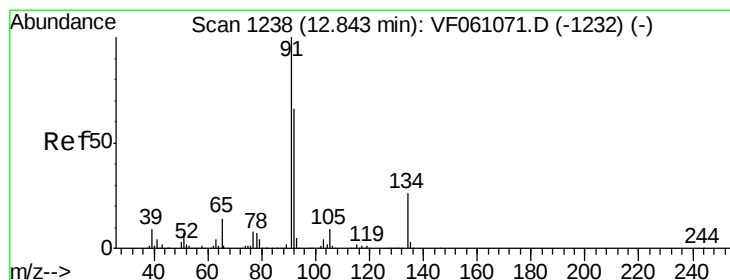
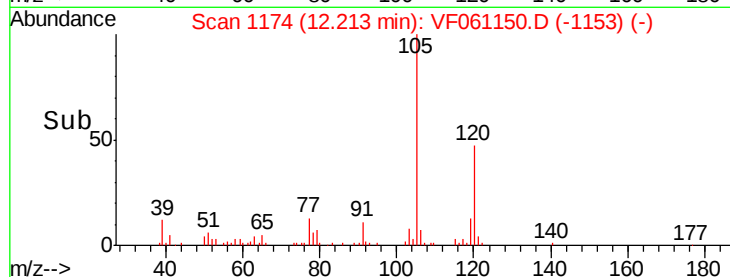
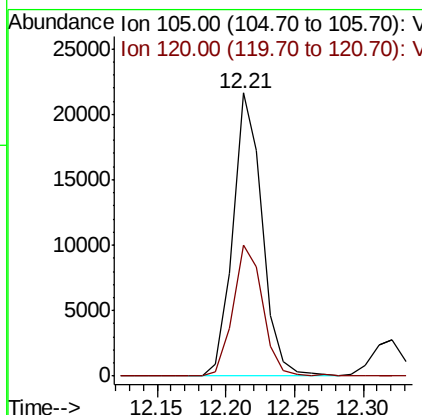
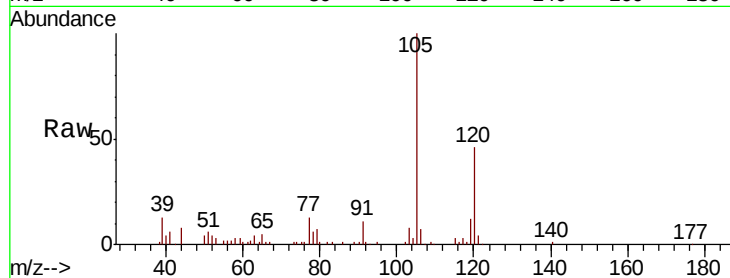
#84  
 1,2,4-Trimethylbenzene  
 Concen: 9.356 ug/l  
 RT: 12.21 min Scan# 1174  
 Delta R.T. 0.01 min  
 Lab File: VF061150.D  
 Acq: 22 Dec 2018 17:54

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
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| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 46.4  | 23.6  | 71.0  |

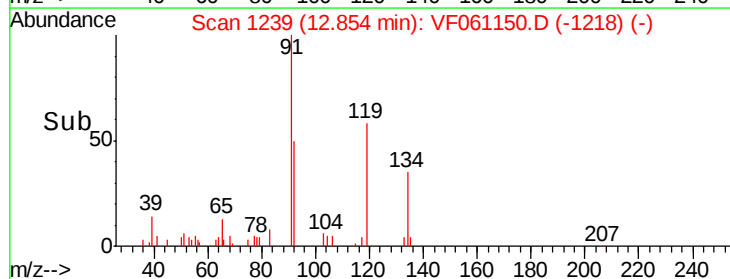
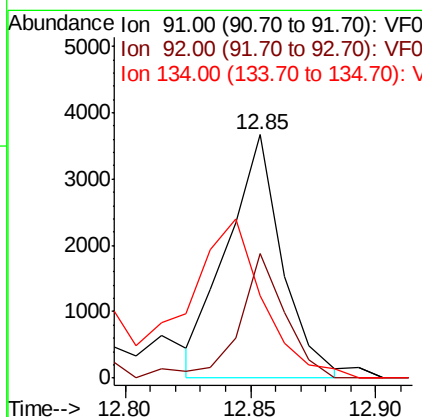
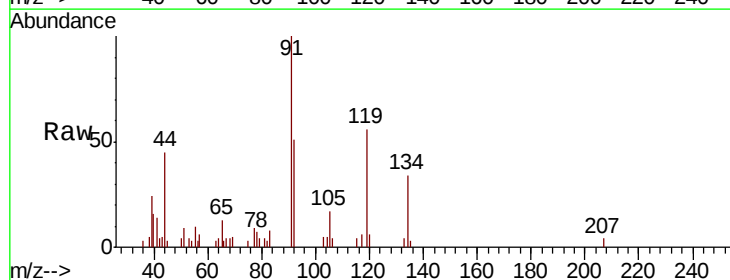
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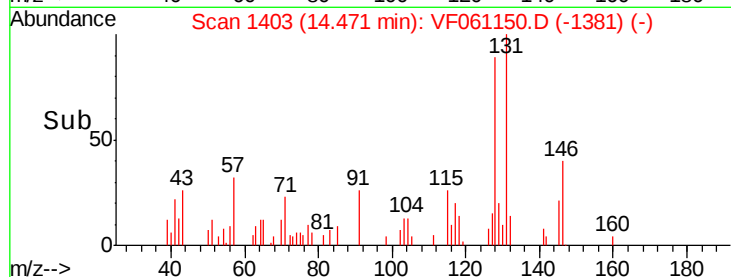
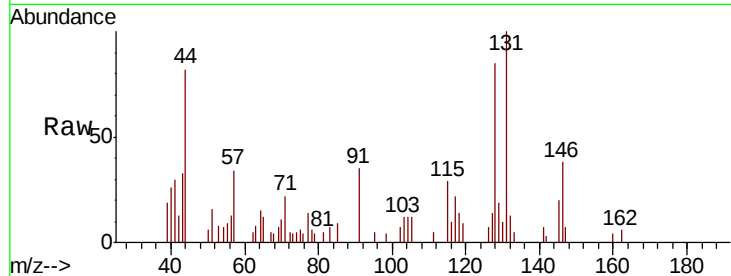
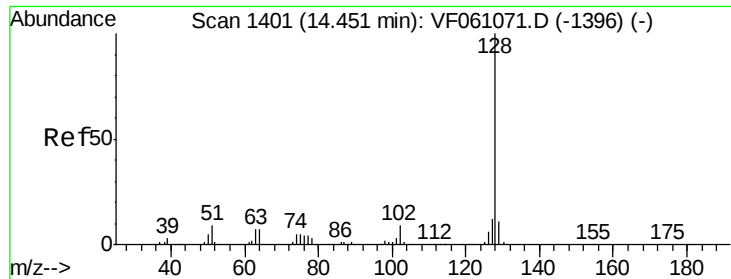
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#89  
 n-Butylbenzene  
 Concen: 1.485 ug/l m  
 RT: 12.85 min Scan# 1239  
 Delta R.T. 0.01 min  
 Lab File: VF061150.D  
 Acq: 22 Dec 2018 17:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 51.1  | 32.8  | 98.4  |
| 134     | 34.0  | 13.2  | 39.5  |





#95

Naphthalene

Concen: 2.171 ug/l m

RT: 14.47 min Scan# 1403

Delta R.T. 0.02 min

Lab File: VF061150.D

Acq: 22 Dec 2018 17:54

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 128   | Resp: | 4509  |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 127       | 16.7  | 9.4   | 14.2# |
| 129       | 22.7  | 8.8   | 13.2# |

Instrument :

MSVOA\_F

ClientSampleId :

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