

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF040219\  
 Data File : BF113511.D  
 Acq On : 2 Apr 2019 17:50  
 Operator : JU/SJ  
 Sample : K2190-01  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 VN-SP-1

Manual Integrations  
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Sohil  
 4/3/2019 12:42:28 PM

Quant Time: Apr 03 07:54:56 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF032519.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Mar 26 03:32:08 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.69  | 152  | 127111   | 20.00  | ng    | -0.01    |
| 21) Naphthalene-d8          | 7.97  | 136  | 471834   | 20.00  | ng    | -0.01    |
| 39) Acenaphthene-d10        | 9.72  | 164  | 225658   | 20.00  | ng    | -0.02    |
| 64) Phenanthrene-d10        | 11.20 | 188  | 406325   | 20.00  | ng    | -0.02    |
| 76) Chrysene-d12            | 13.83 | 240  | 295368   | 20.00  | ng    | -0.02    |
| 87) Perylene-d12            | 15.23 | 264  | 351044   | 20.00  | ng    | -0.01    |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.30  | 112  | 710488   | 91.40  | ng    | -0.01    |
| 7) Phenol-d6                | 6.34  | 99   | 942133   | 95.80  | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.26  | 82   | 553763   | 69.66  | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol    | 10.51 | 330  | 262938   | 94.33  | ng    | -0.02    |
| 45) 2-Fluorobiphenyl        | 9.05  | 172  | 1043938  | 69.24  | ng    | -0.02    |
| 79) Terphenyl-d14           | 12.78 | 244  | 905131   | 67.54  | ng    | -0.02    |
| Target Compounds            |       |      |          |        |       |          |
| 49) Acenaphthylene          | 9.58  | 152  | 94429    | 4.025  | ng    | 98       |
| 50) Dimethylphthalate       | 9.44  | 163  | 86136    | 5.151  | ng    | 98       |
| 71) Phenanthrene            | 11.22 | 178  | 159092   | 7.884  | ng    | 97       |
| 72) Anthracene              | 11.27 | 178  | 46545    | 2.271  | ng    | 98       |
| 75) Fluoranthene            | 12.41 | 202  | 430665   | 18.880 | ng    | 99       |
| 78) Pyrene                  | 12.63 | 202  | 606650   | 29.639 | ng    | 99       |
| 81) Benzo(a)anthracene      | 13.82 | 228  | 177892m  | 10.522 | ng    |          |
| 83) Chrysene                | 13.86 | 228  | 188313   | 10.965 | ng    | 100      |
| 86) Indeno(1,2,3-cd)pyrene  | 16.59 | 276  | 207478   | 14.077 | ng    | 95       |
| 88) Benzo(b)fluoranthene    | 14.84 | 252  | 318446m  | 14.603 | ng    |          |
| 89) Benzo(k)fluoranthene    | 14.86 | 252  | 69540m   | 3.631  | ng    |          |
| 90) Benzo(a)pyrene          | 15.17 | 252  | 236747   | 12.246 | ng    | 99       |
| 91) Dibenzo(a,h)anthracene  | 16.59 | 278  | 35925m   | 2.149  | ng    |          |
| 92) Benzo(g,h,i)perylene    | 16.99 | 276  | 271448   | 16.105 | ng    | 99       |

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

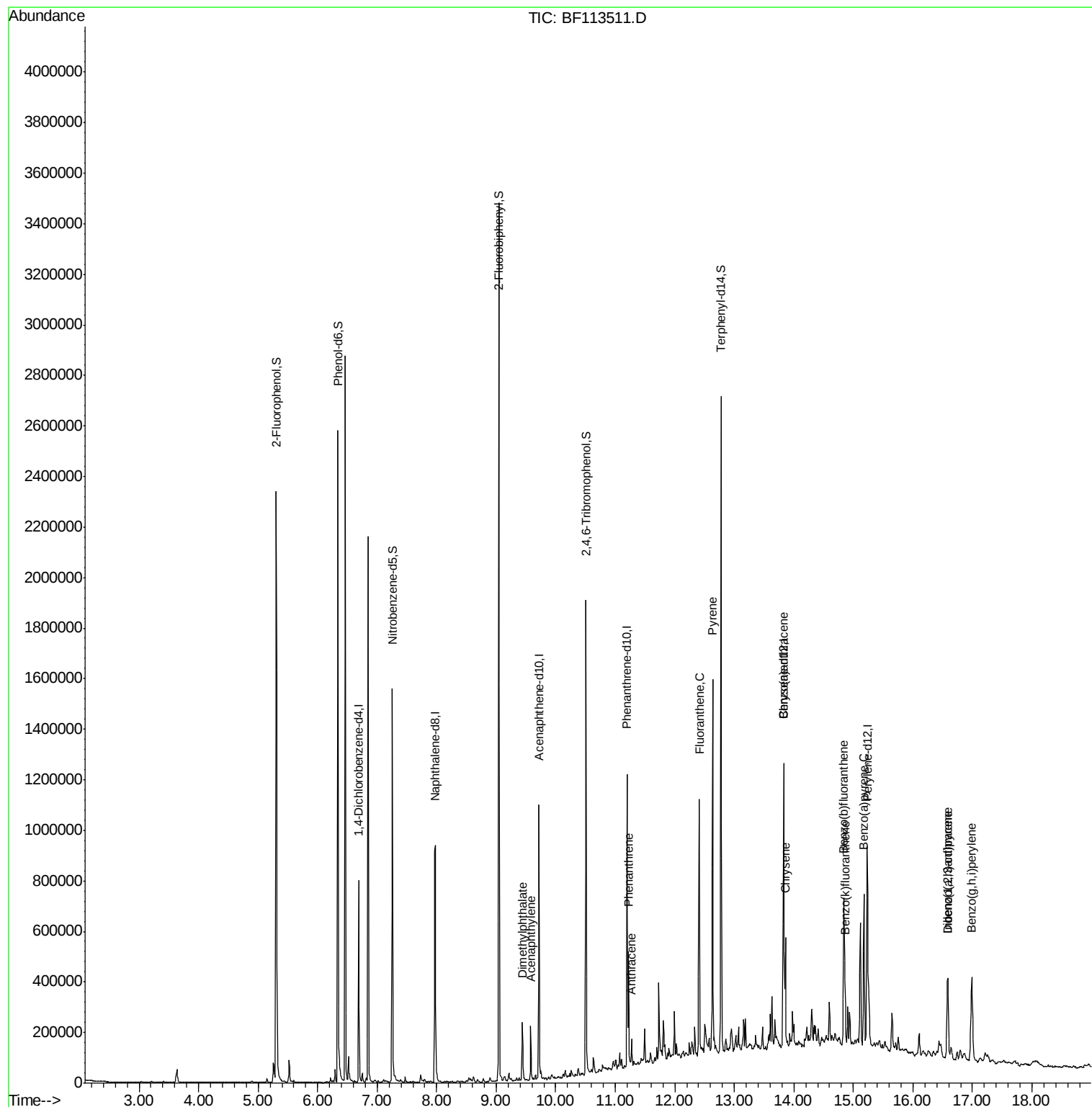
Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF040219\  
Data File : BF113511.D  
Acq On : 2 Apr 2019 17:50  
Operator : JU/SJ  
Sample : K2190-01  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
VN-SP-1

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Quant Time: Apr 03 07:54:56 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF032519.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Mar 26 03:32:08 2019  
Response via : Initial Calibration





#1

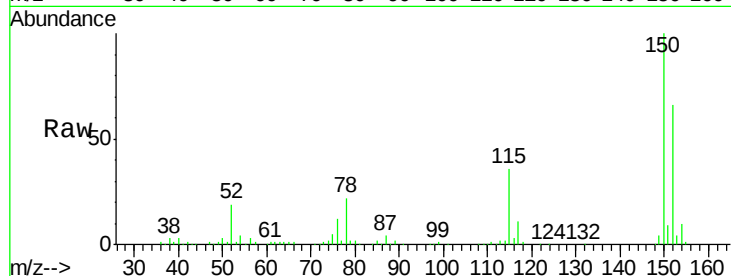
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.69 min Scan# 783  
Delta R.T. -0.01 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

Instrument :  
BNA\_F  
ClientSampleId :  
VN-SP-1

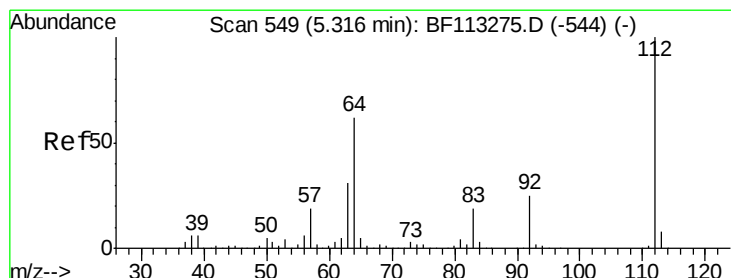
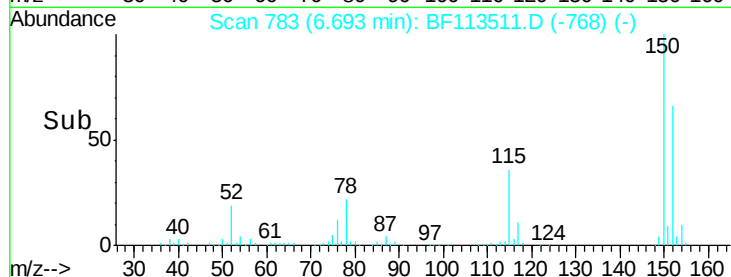
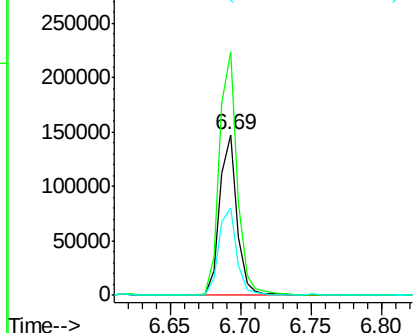
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 151.6 | 124.7 | 187.1 |
| 115     | 54.6  | 46.0  | 69.0  |

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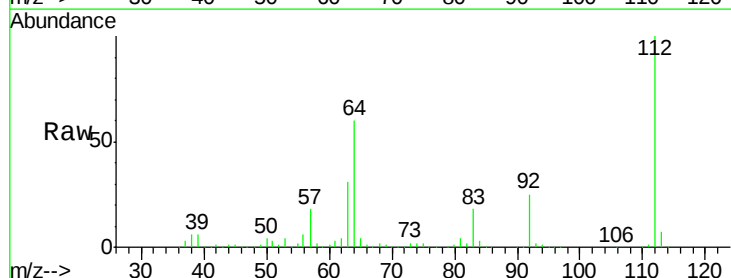
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



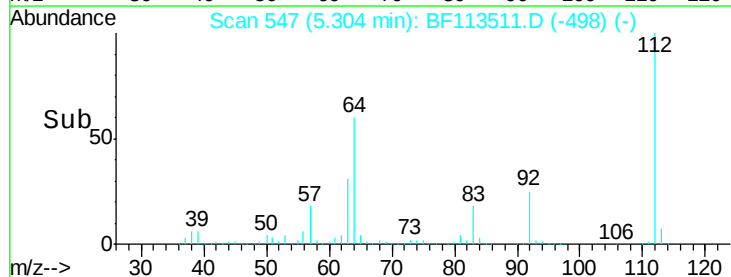
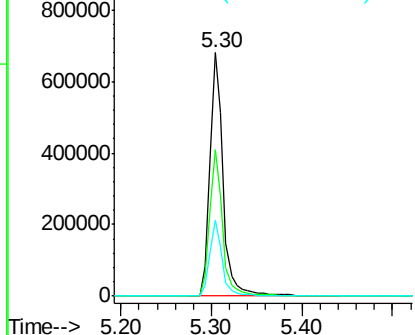
#5

2-Fluorophenol  
Concen: 91.395 ng  
RT: 5.30 min Scan# 547  
Delta R.T. -0.01 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 59.9  | 49.2  | 73.8  |
| 63      | 30.9  | 24.9  | 37.3  |



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BF1  
Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 95.801 ng

RT: 6.34 min Scan# 723

Delta R.T. -0.02 min

Lab File: BF113511.D

Acq: 2 Apr 2019 17:50

Instrument :

BNA\_F

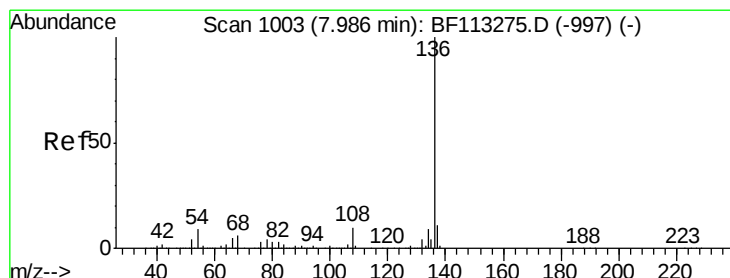
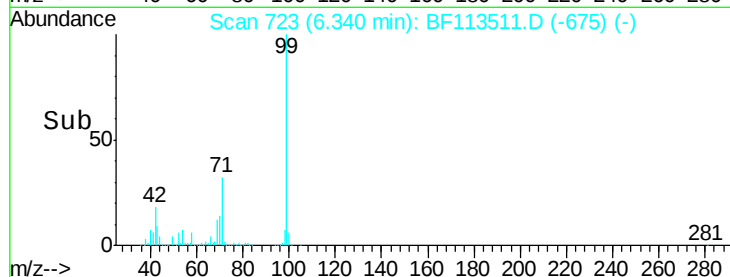
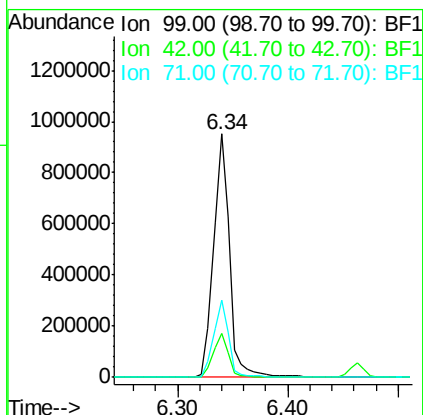
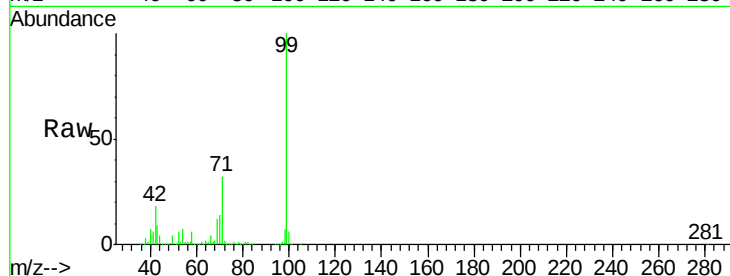
ClientSampleId :

VN-SP-1

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 99    | Resp: | 942133 |
| Ion      | Ratio | Lower | Upper  |
| 99       | 100   |       |        |
| 42       | 18.1  | 14.8  | 22.2   |
| 71       | 31.5  | 24.9  | 37.3   |

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#21

Naphthalene-d8

Concen: 20.000 ng

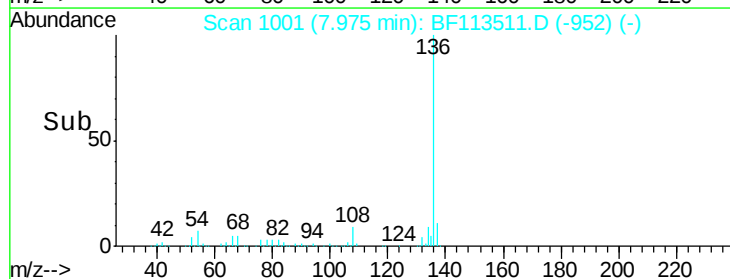
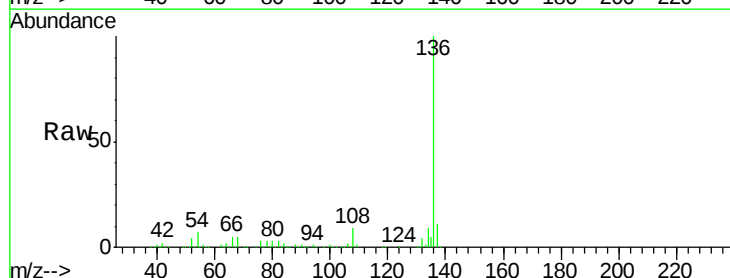
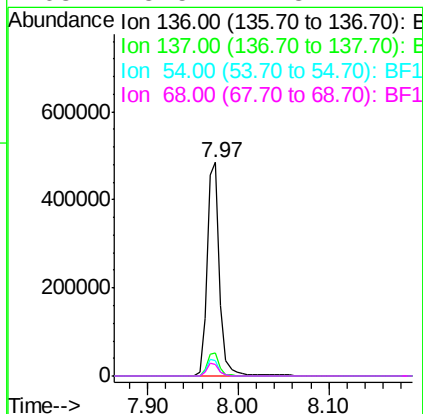
RT: 7.97 min Scan# 1001

Delta R.T. -0.01 min

Lab File: BF113511.D

Acq: 2 Apr 2019 17:50

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 471834 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 10.7  | 8.9   | 13.3   |
| 54       | 7.3   | 7.0   | 10.6   |
| 68       | 5.5   | 4.8   | 7.2    |





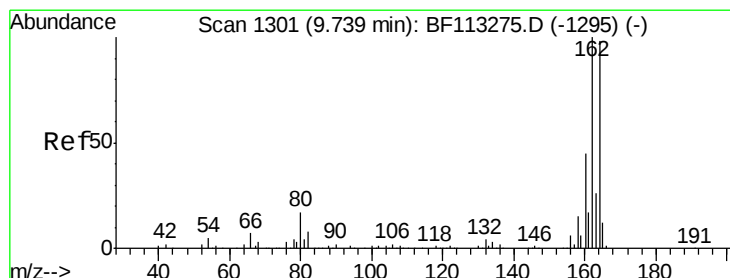
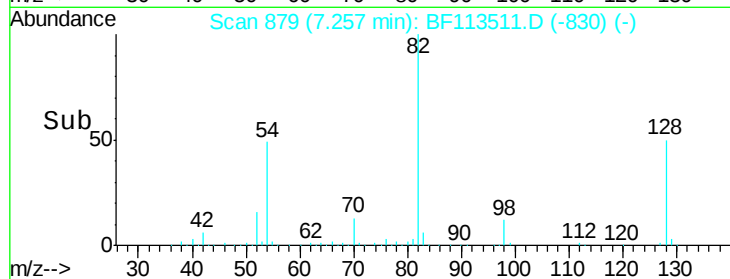
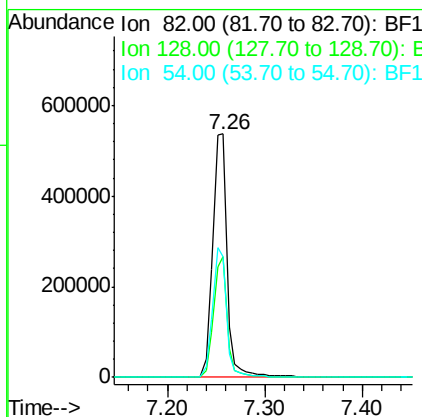
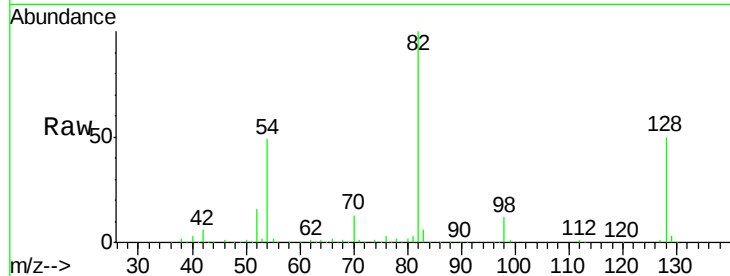
#23  
Nitrobenzene-d5  
Concen: 69.660 ng  
RT: 7.26 min Scan# 879  
Delta R.T. -0.01 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

Instrument :  
BNA\_F  
ClientSampleId :  
VN-SP-1

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 82      | 100   | 553763 |       |       |
| 128     | 49.6  | 36.5   | 54.7  |       |
| 54      | 49.5  | 42.2   | 63.2  |       |

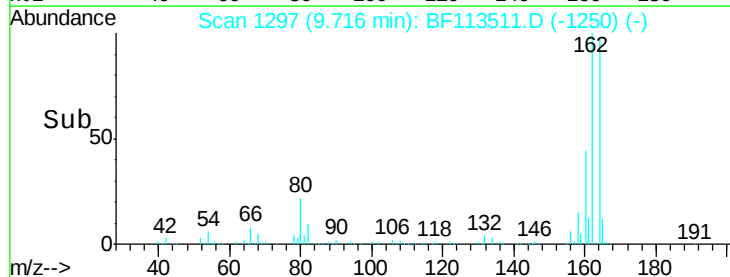
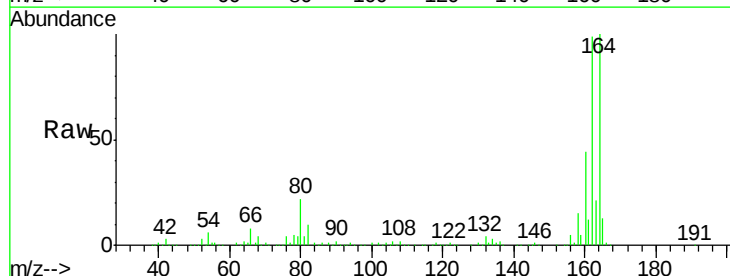
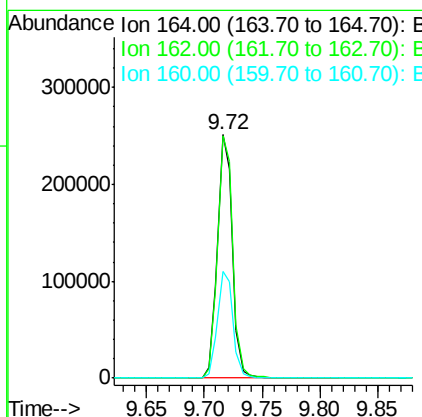
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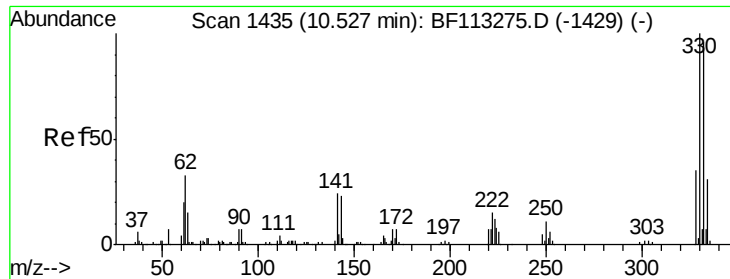
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#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.72 min Scan# 1297  
Delta R.T. -0.02 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 164     | 100   | 225658 |       |       |
| 162     | 99.5  | 81.8   | 122.6 |       |
| 160     | 43.9  | 36.4   | 54.6  |       |





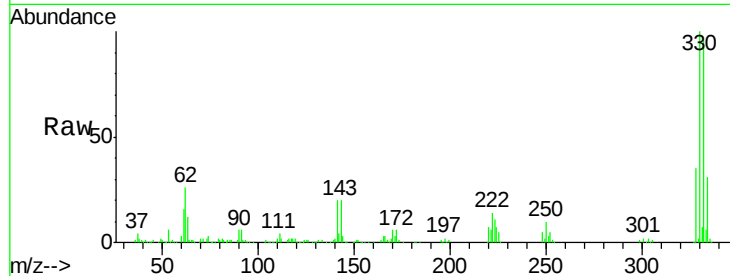
#42  
 2,4,6-Tribromophenol  
 Concen: 94.331 ng  
 RT: 10.51 min Scan# 1432  
 Delta R.T. -0.02 min  
 Lab File: BF113511.D  
 Acq: 2 Apr 2019 17:50

Instrument :  
 BNA\_F  
 ClientSampleId :  
 VN-SP-1

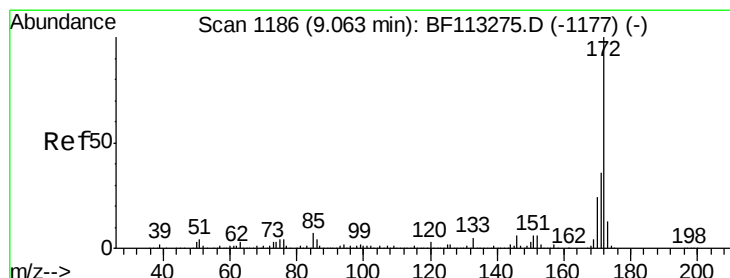
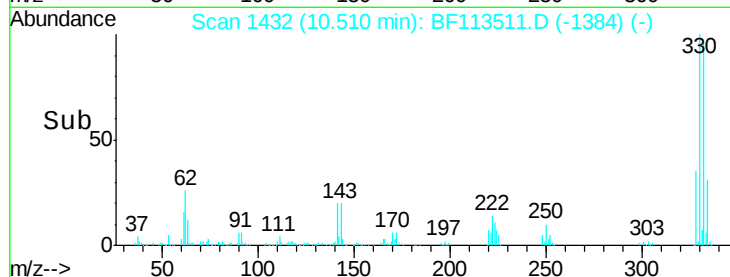
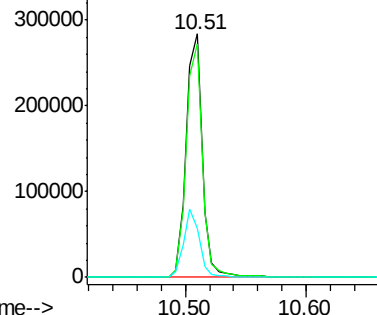
| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 262938 |       |       |
| 332     | 95.8  | 77.8   | 116.6 |       |
| 141     | 27.1  | 22.7   | 34.1  |       |

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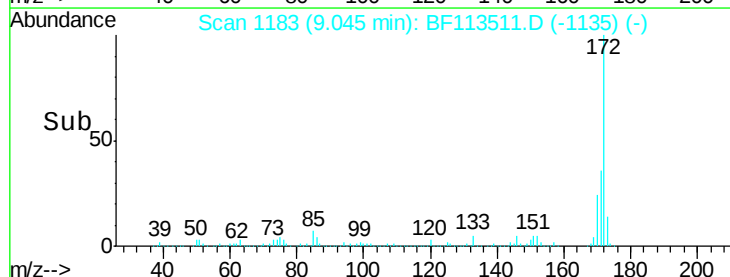
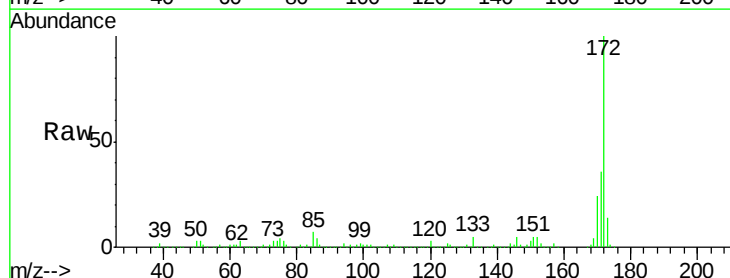
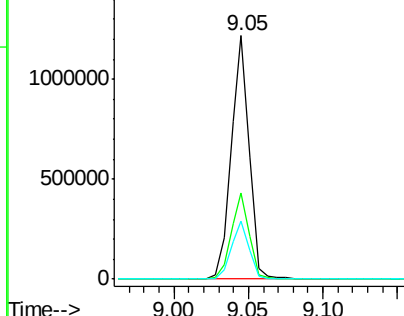
Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

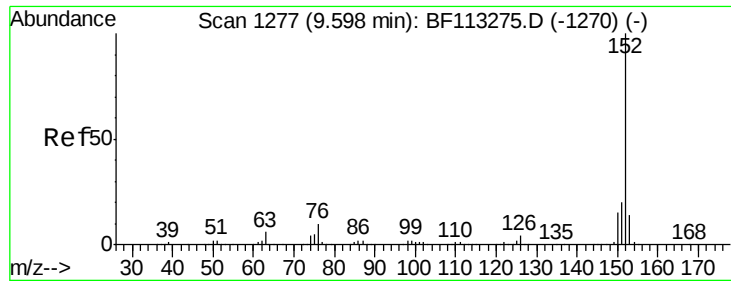


#45  
 2-Fluorobiphenyl  
 Concen: 69.239 ng  
 RT: 9.05 min Scan# 1183  
 Delta R.T. -0.02 min  
 Lab File: BF113511.D  
 Acq: 2 Apr 2019 17:50

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 172     | 100   | 1043938 |       |       |
| 171     | 35.6  | 29.0    | 43.6  |       |
| 170     | 24.1  | 19.5    | 29.3  |       |

Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E





#49

Acenaphthylene

Concen: 4.025 ng

RT: 9.58 min Scan# 1274

Delta R.T. -0.02 min

Lab File: BF113511.D

Acq: 2 Apr 2019 17:50

Instrument :

BNA\_F

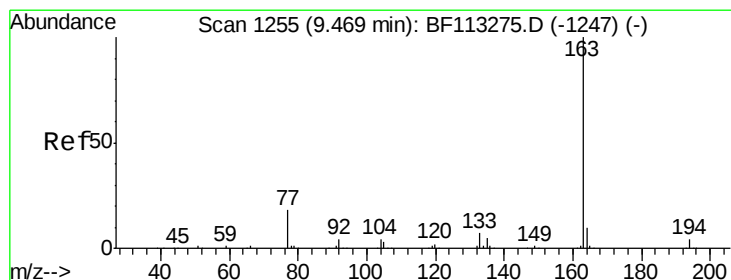
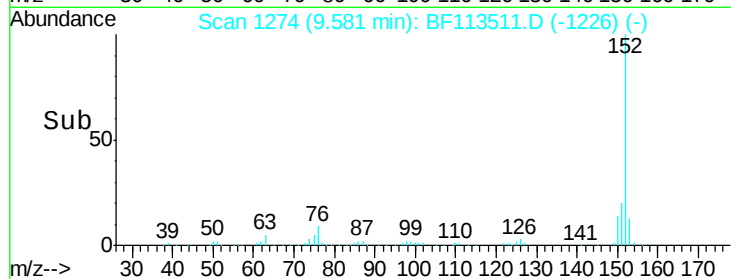
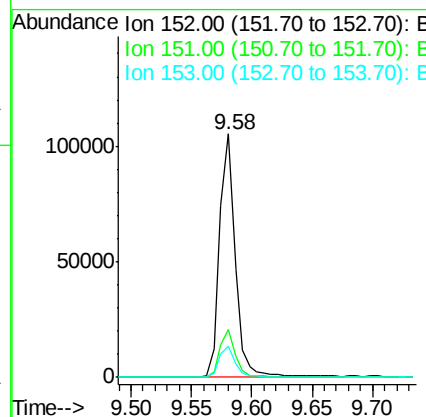
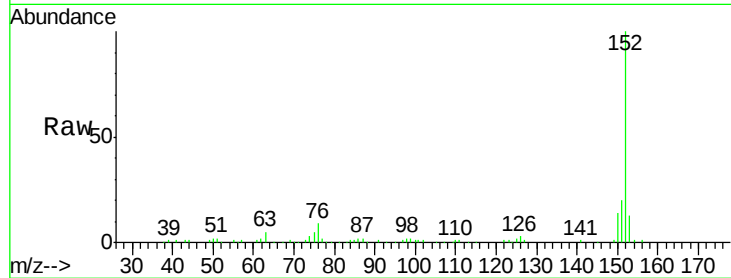
ClientSampleId :

VN-SP-1

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 152   | Resp: | 94429 |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 19.8  | 16.2  | 24.4  |
| 153       | 12.7  | 11.0  | 16.6  |

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#50

Dimethylphthalate

Concen: 5.151 ng

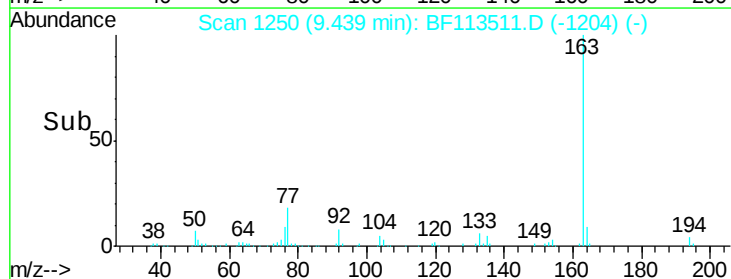
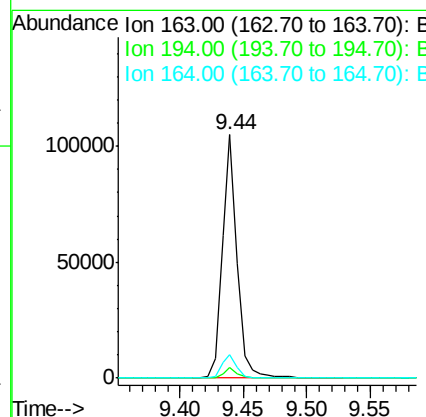
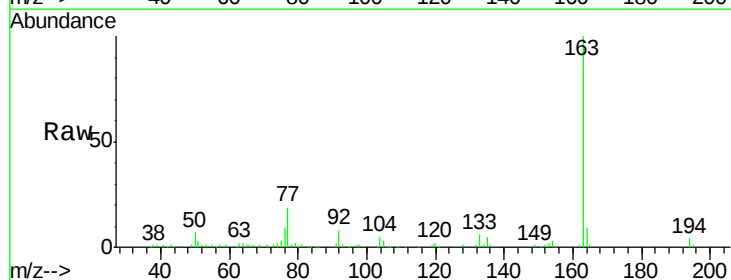
RT: 9.44 min Scan# 1250

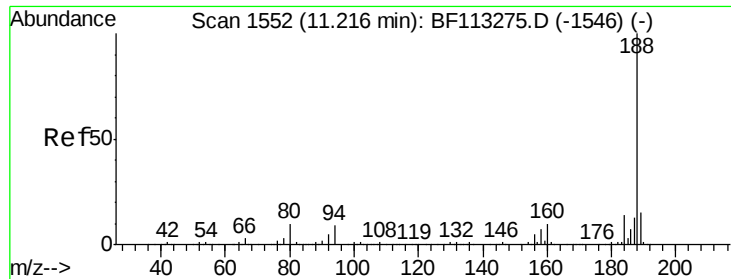
Delta R.T. -0.03 min

Lab File: BF113511.D

Acq: 2 Apr 2019 17:50

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 163   | Resp: | 86136 |
| Ion Ratio | Lower | Upper |       |
| 163       | 100   |       |       |
| 194       | 4.5   | 3.0   | 4.6   |
| 164       | 9.5   | 8.1   | 12.1  |





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.20 min Scan# 1549

Delta R.T. -0.02 min

Lab File: BF113511.D

Acq: 2 Apr 2019 17:50

Instrument :

BNA\_F

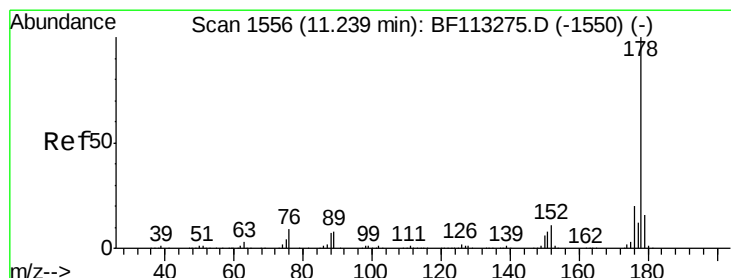
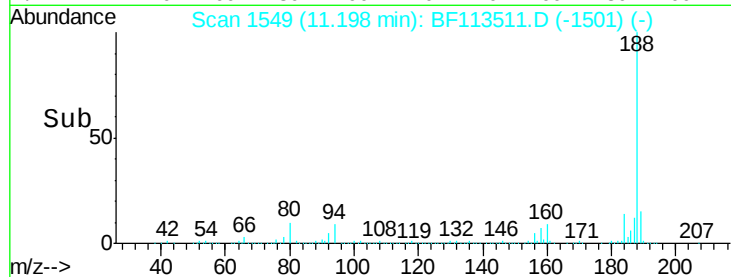
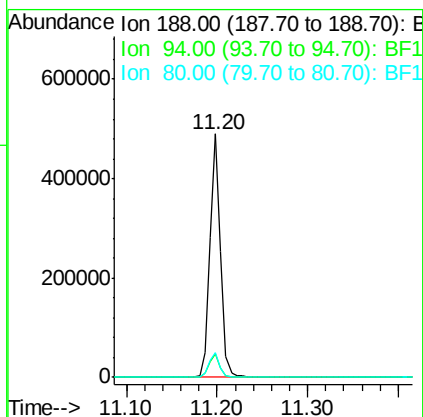
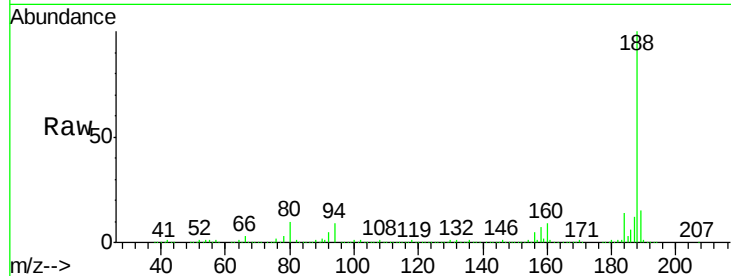
ClientSampled :

VN-SP-1

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 188   | Resp: | 406325 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 9.4   | 7.0   | 10.6   |
| 80        | 10.1  | 7.7   | 11.5   |

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#71

Phenanthrene

Concen: 7.884 ng

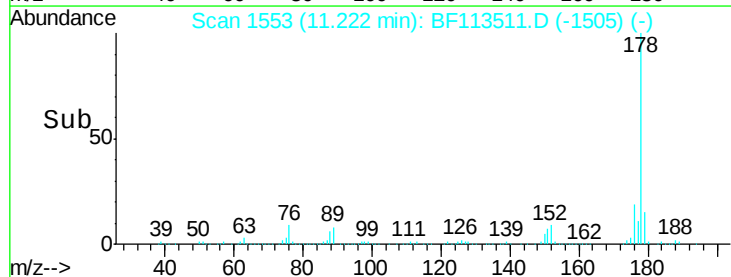
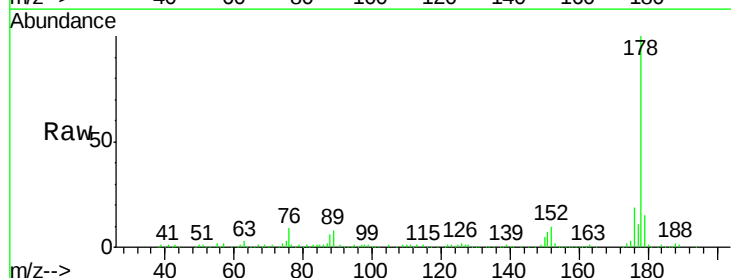
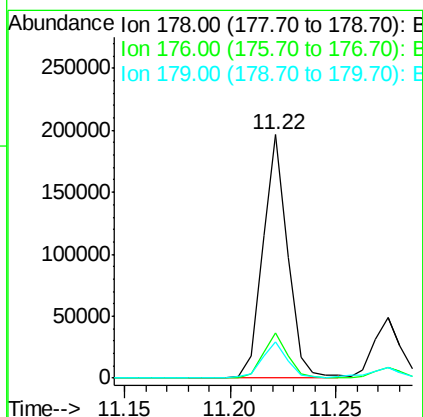
RT: 11.22 min Scan# 1553

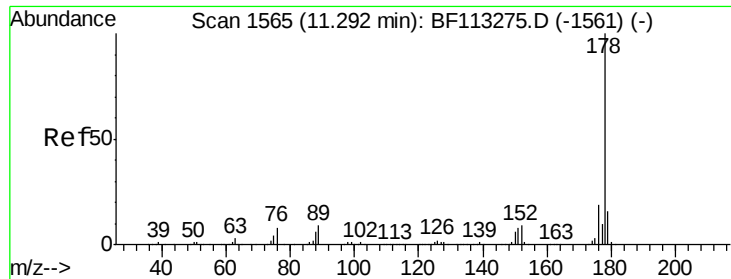
Delta R.T. -0.02 min

Lab File: BF113511.D

Acq: 2 Apr 2019 17:50

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 178   | Resp: | 159092 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 18.7  | 16.2  | 24.2   |
| 179       | 15.2  | 12.7  | 19.1   |





#72

Anthracene

Concen: 2.271 ng

RT: 11.27 min Scan# 1562

Delta R.T. -0.02 min

Lab File: BF113511.D

Acq: 2 Apr 2019 17:50

Instrument :

BNA\_F

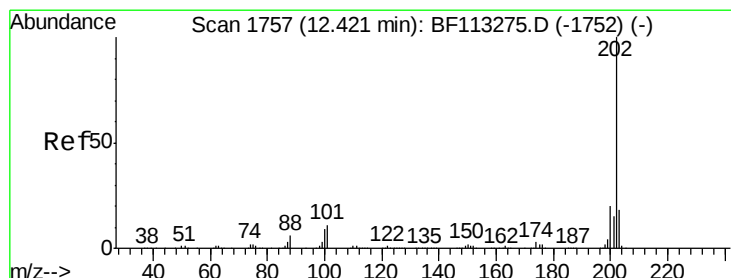
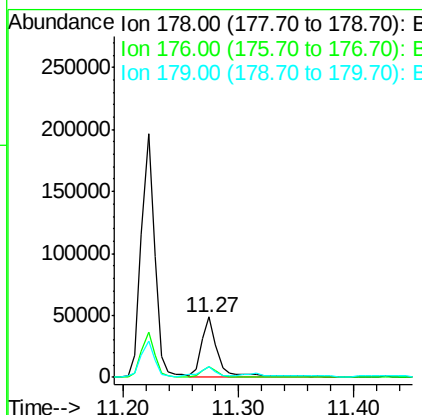
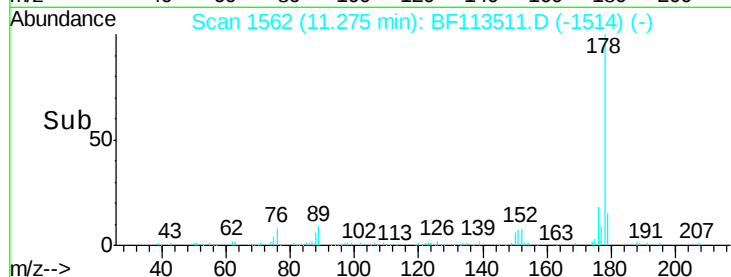
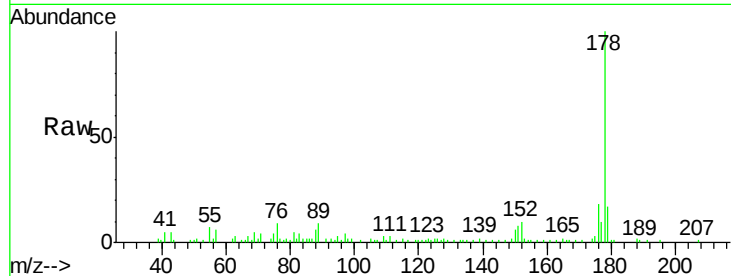
ClientSampled :

VN-SP-1

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 178   | Resp: | 46545 |
| Ion      | Ratio | Lower | Upper |
| 178      | 100   |       |       |
| 176      | 18.0  | 15.4  | 23.2  |
| 179      | 16.7  | 12.8  | 19.2  |

Manual Integrations  
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Sohil  
4/3/2019 12:42:28 PM



#75

Fluoranthene

Concen: 18.880 ng

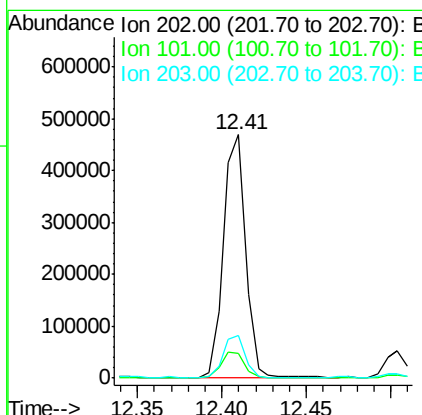
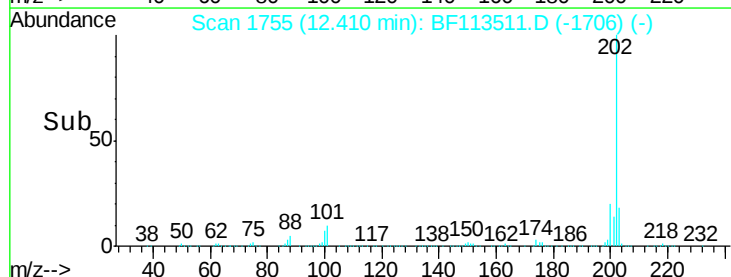
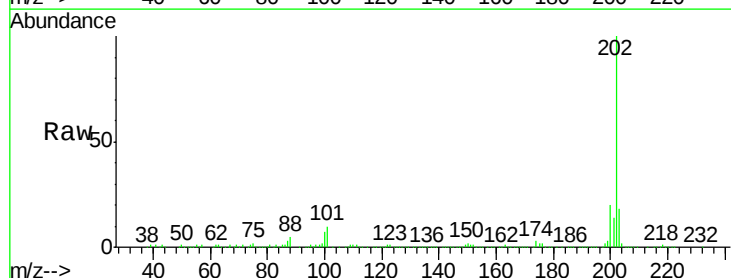
RT: 12.41 min Scan# 1755

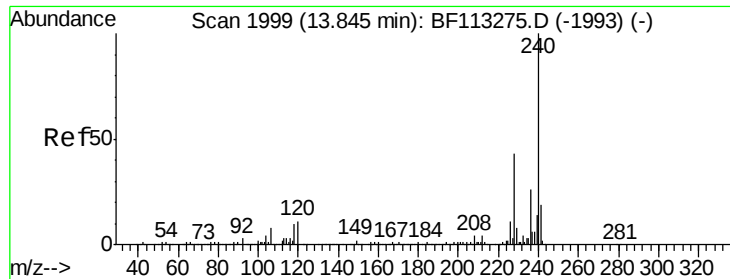
Delta R.T. -0.01 min

Lab File: BF113511.D

Acq: 2 Apr 2019 17:50

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 202   | Resp: | 430665 |
| Ion      | Ratio | Lower | Upper  |
| 202      | 100   |       |        |
| 101      | 10.4  | 0.0   | 31.4   |
| 203      | 17.7  | 0.0   | 38.0   |





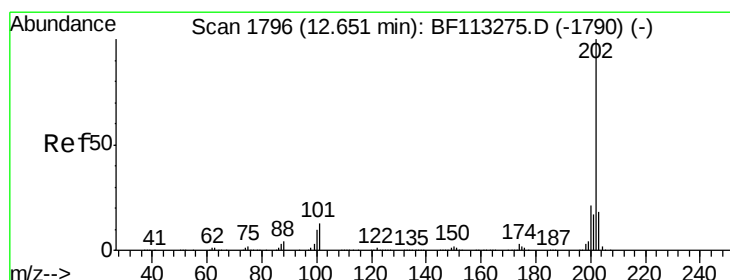
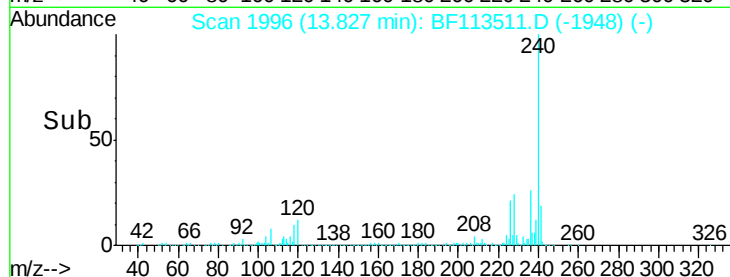
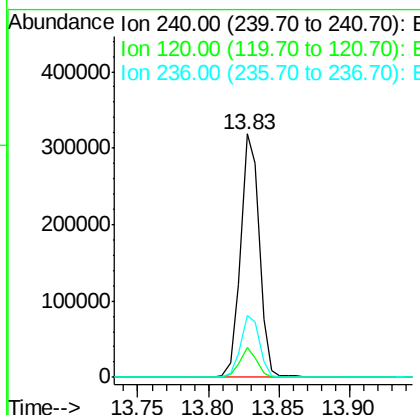
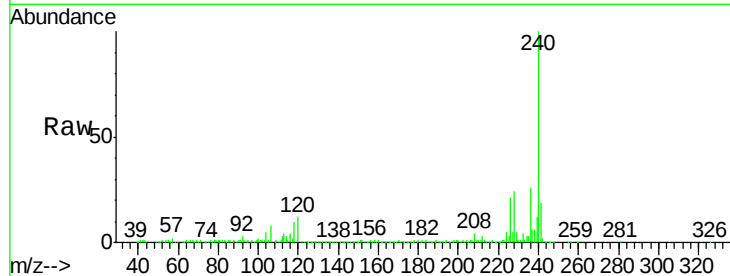
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 13.83 min Scan# 1996  
Delta R.T. -0.02 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

Instrument :  
BNA\_F  
ClientSampleId :  
VN-SP-1

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 240     | 100   | 295368 |       |       |
| 120     | 12.1  | 8.8    | 13.2  |       |
| 236     | 25.6  | 20.9   | 31.3  |       |

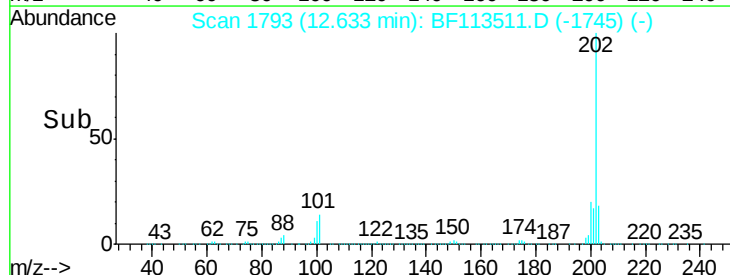
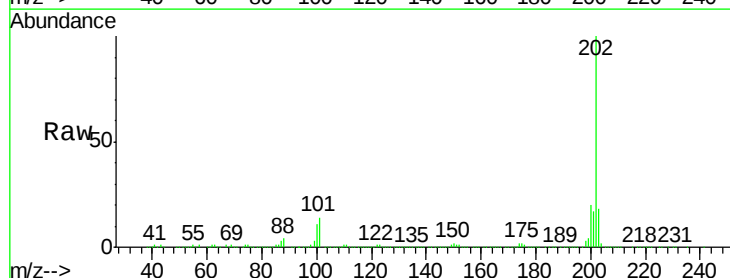
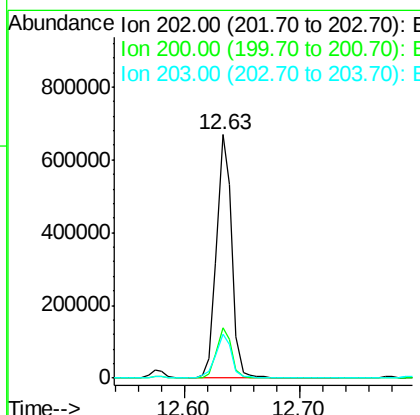
Manual Integrations  
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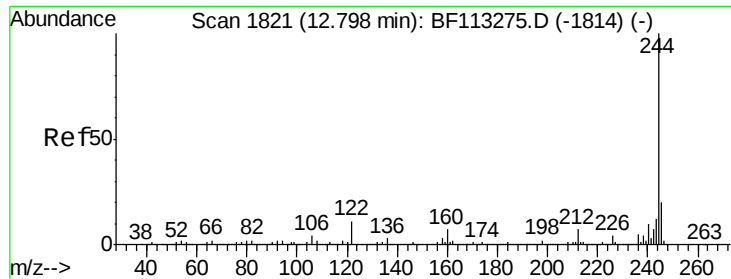
Sohil  
4/3/2019 12:42:28 PM



#78  
Pyrene  
Concen: 29.639 ng  
RT: 12.63 min Scan# 1793  
Delta R.T. -0.02 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 606650 |       |       |
| 200     | 20.4  | 16.8   | 25.2  |       |
| 203     | 17.9  | 14.4   | 21.6  |       |





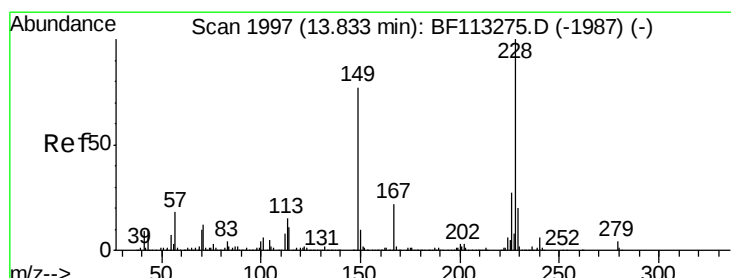
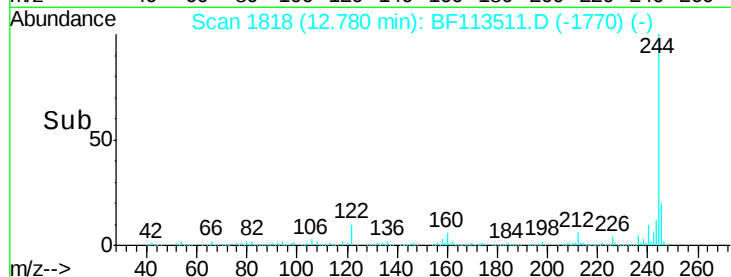
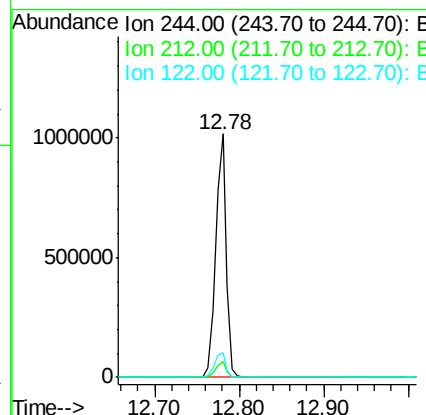
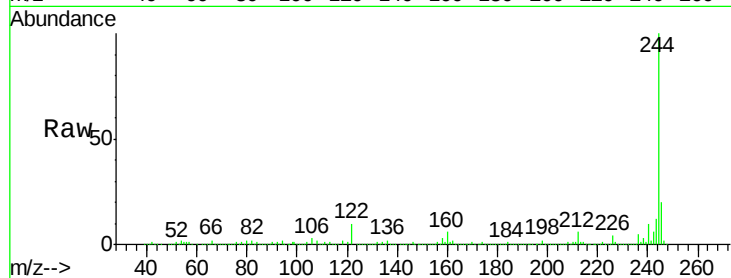
#79  
 Terphenyl-d14  
 Concen: 67.545 ng  
 RT: 12.78 min Scan# 1818  
 Delta R.T. -0.02 min  
 Lab File: BF113511.D  
 Acq: 2 Apr 2019 17:50

Instrument :  
 BNA\_F  
 ClientSampled :  
 VN-SP-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.3   | 5.5   | 8.3   |
| 122     | 10.3  | 8.6   | 13.0  |

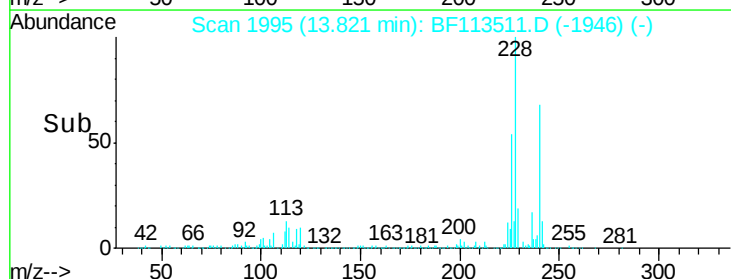
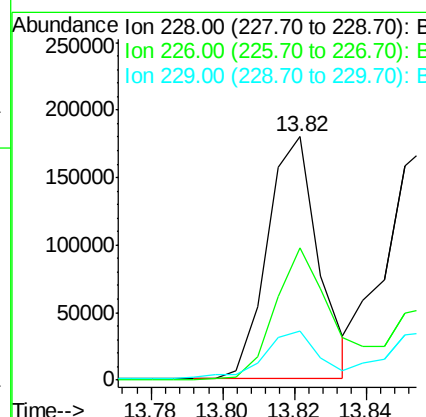
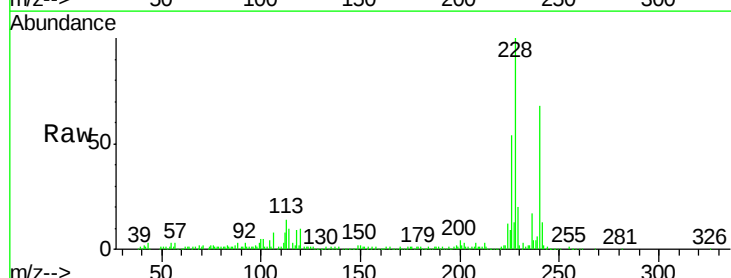
Manual Integrations  
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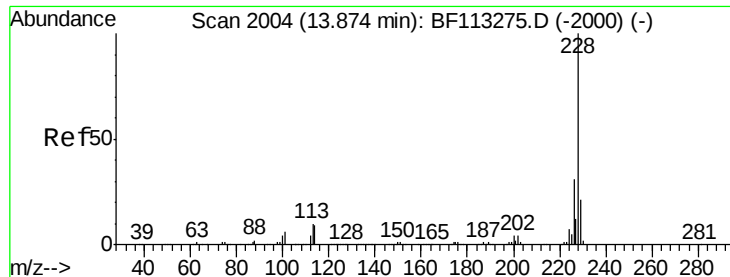
Sohil  
 4/3/2019 12:42:28 PM



#81  
 Benzo(a)anthracene  
 Concen: 10.522 ng m  
 RT: 13.82 min Scan# 1995  
 Delta R.T. -0.01 min  
 Lab File: BF113511.D  
 Acq: 2 Apr 2019 17:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 54.3  | 21.8  | 32.8# |
| 229     | 20.0  | 16.2  | 24.4  |





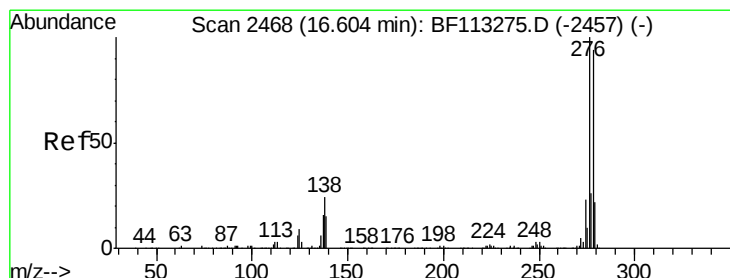
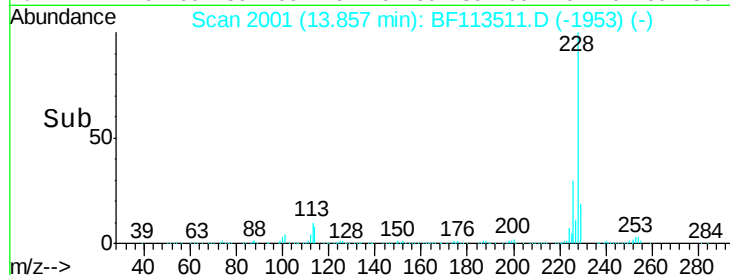
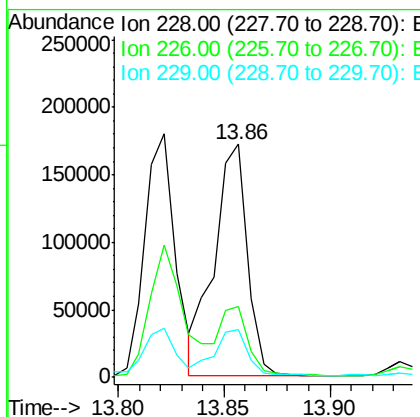
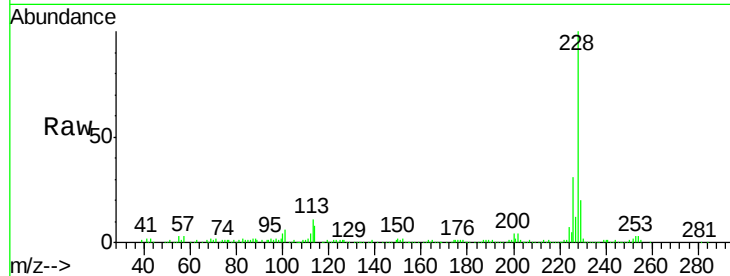
#83  
Chrysene  
Concen: 10.965 ng  
RT: 13.86 min Scan# 2001  
Delta R.T. -0.02 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

Instrument :  
BNA\_F  
ClientSampled :  
VN-SP-1

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 228     | 100   | 188313 |       |       |
| 226     | 30.5  | 24.3   | 36.5  |       |
| 229     | 20.4  | 16.3   | 24.5  |       |

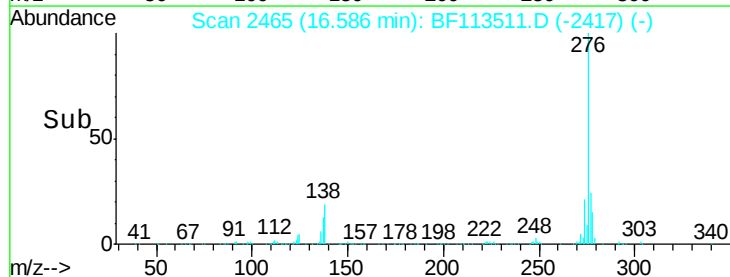
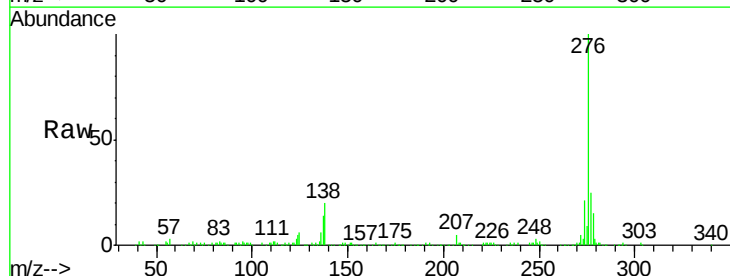
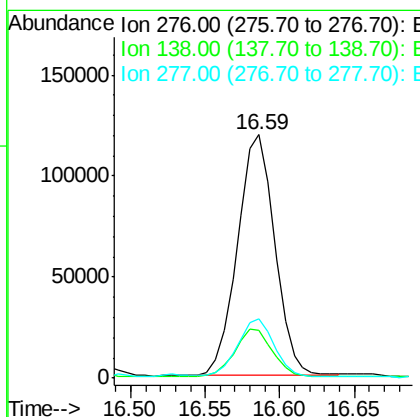
Manual Integrations  
APPROVED

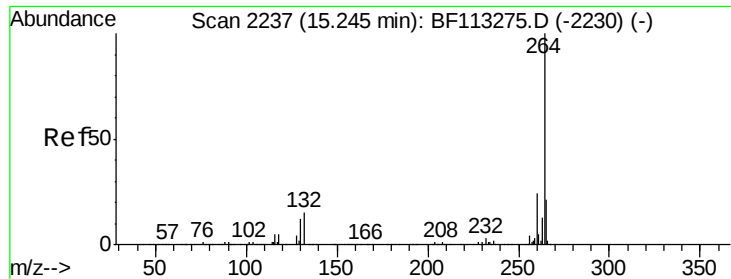
Sohil  
4/3/2019 12:42:28 PM



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 14.077 ng  
RT: 16.59 min Scan# 2465  
Delta R.T. -0.02 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 276     | 100   | 207478 |       |       |
| 138     | 19.8  | 18.1   | 27.1  |       |
| 277     | 23.6  | 20.2   | 30.4  |       |





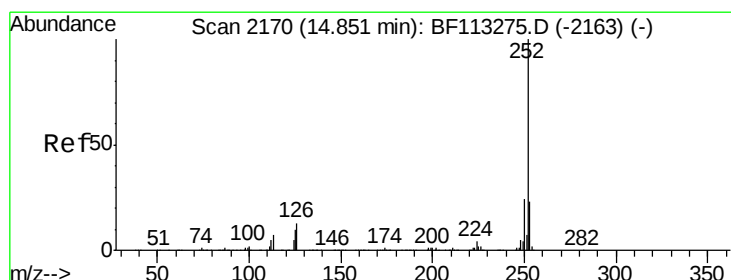
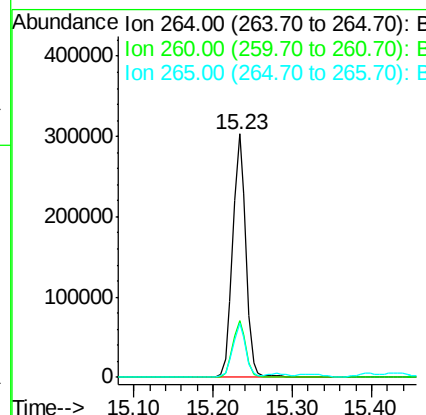
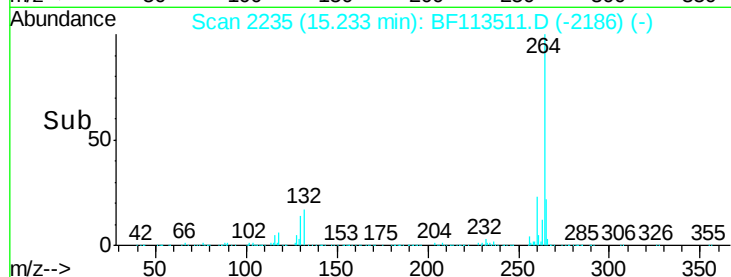
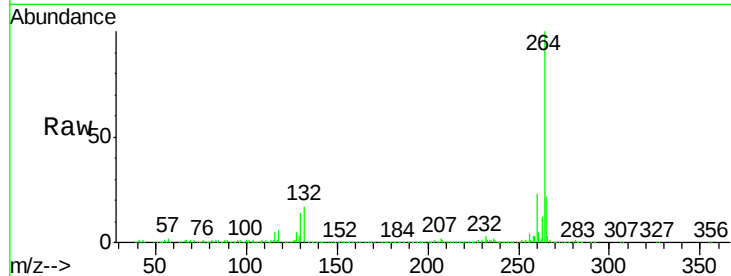
#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.23 min Scan# 2235  
Delta R.T. -0.01 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

Instrument :  
BNA\_F  
ClientSampleId :  
VN-SP-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.3  | 19.1  | 28.7  |
| 265     | 22.1  | 17.1  | 25.7  |

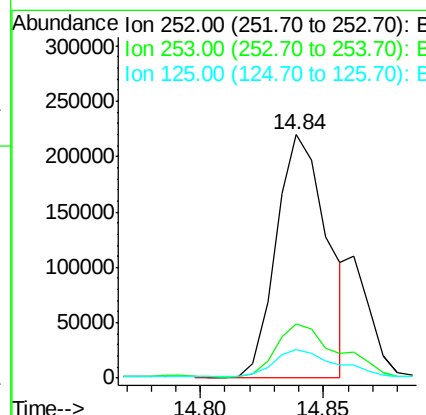
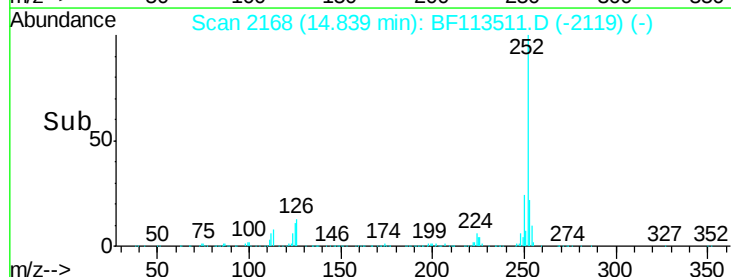
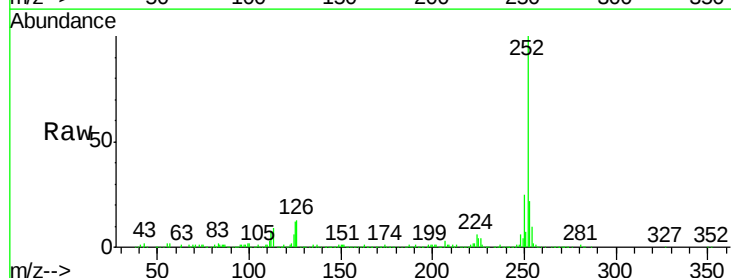
Manual Integrations  
APPROVED

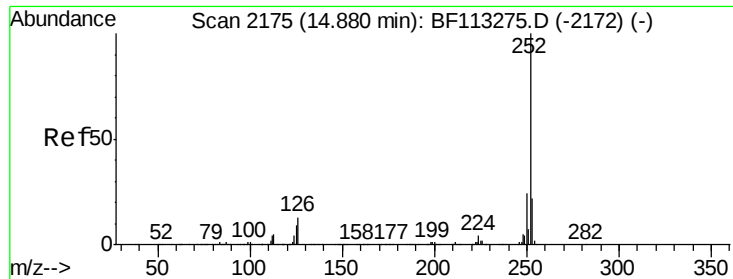
Sohil  
4/3/2019 12:42:28 PM



#88  
Benzo(b)fluoranthene  
Concen: 14.603 ng m  
RT: 14.84 min Scan# 2168  
Delta R.T. -0.01 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.1  | 18.0  | 27.0  |
| 125     | 11.7  | 7.6   | 11.4  |





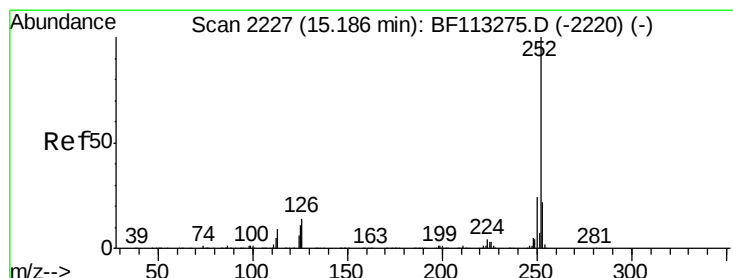
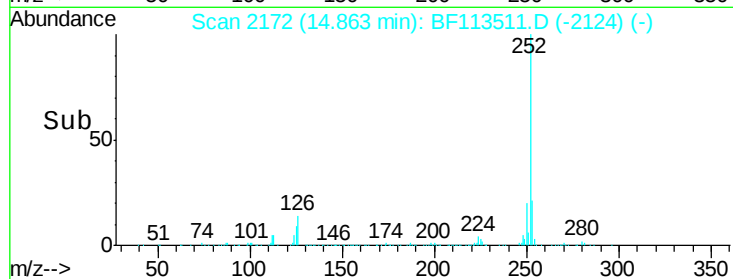
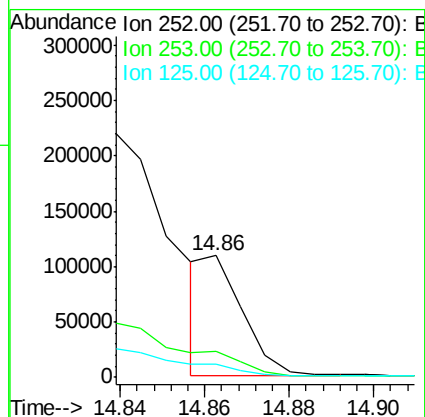
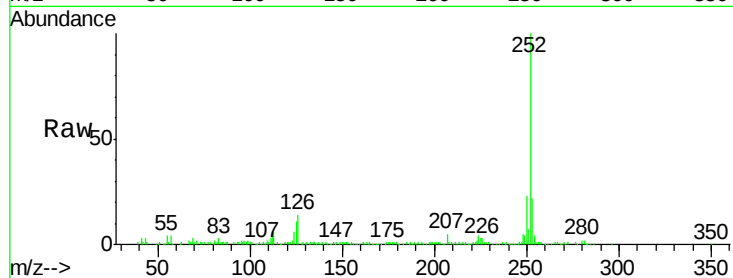
#89  
Benzo(k)fluoranthene  
Concen: 3.631 ng m  
RT: 14.86 min Scan# 2172  
Delta R.T. -0.02 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

Instrument :  
BNA\_F  
ClientSampled :  
VN-SP-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.8  | 17.7  | 26.5  |
| 125     | 10.8  | 7.3   | 10.9  |

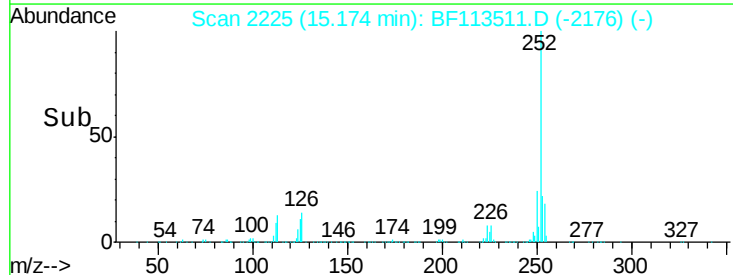
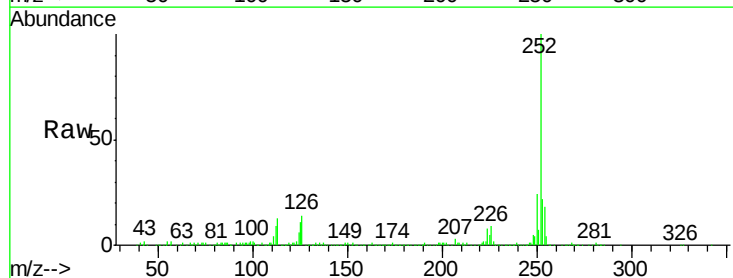
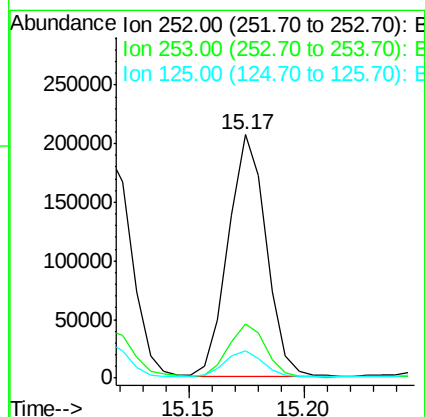
Manual Integrations  
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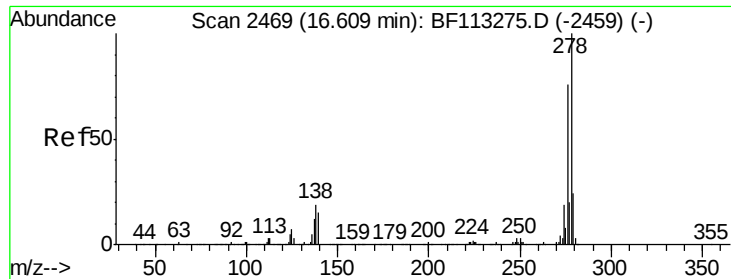
Sohil  
4/3/2019 12:42:28 PM



#90  
Benzo(a)pyrene  
Concen: 12.246 ng  
RT: 15.17 min Scan# 2225  
Delta R.T. -0.01 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.2  | 17.9  | 26.9  |
| 125     | 11.4  | 8.8   | 13.2  |





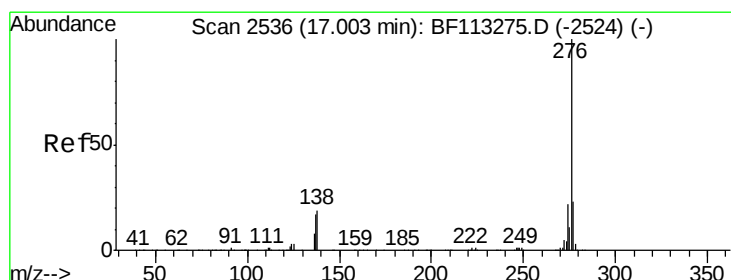
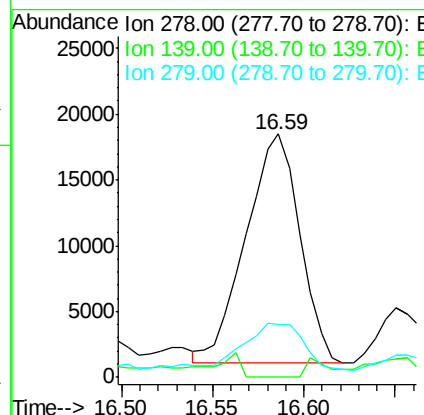
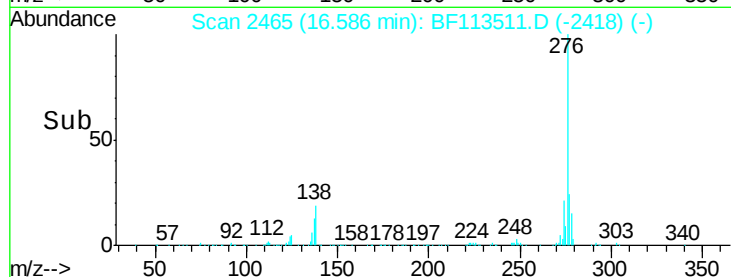
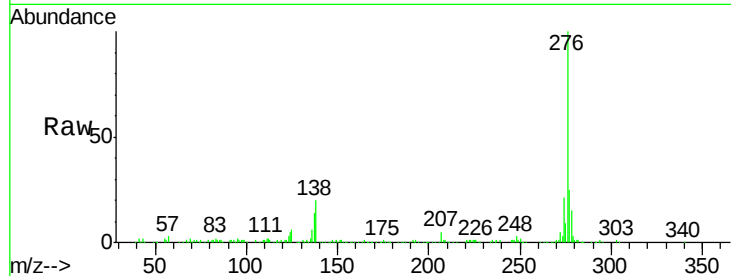
#91  
Dibenzo(a,h)anthracene  
Concen: 2.149 ng m  
RT: 16.59 min Scan# 2465  
Delta R.T. -0.02 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

Instrument :  
BNA\_F  
ClientSampleId :  
VN-SP-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 12.0  | 18.0# |
| 279     | 21.8  | 19.0  | 28.6  |

Manual Integrations  
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Sohil  
4/3/2019 12:42:28 PM



#92  
Benzo(g,h,i)perylene  
Concen: 16.105 ng  
RT: 16.99 min Scan# 2534  
Delta R.T. -0.01 min  
Lab File: BF113511.D  
Acq: 2 Apr 2019 17:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 23.2  | 18.8  | 28.2  |
| 138     | 19.8  | 15.6  | 23.4  |

