

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF031920\  
 Data File : BF119458.D  
 Acq On : 20 Mar 2020 00:48  
 Operator : CG/JU  
 Sample : L1978-02  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-5A

Manual Integrations  
 APPROVED

mohammad  
 3/20/2020 11:47:32 AM

Quant Time: Mar 20 05:25:48 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF031820.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Mar 18 15:11:18 2020  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.85  | 152  | 361157   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.13  | 136  | 1372051  | 20.00  | ng    | -0.01    |
| 39) Acenaphthene-d10        | 9.89  | 164  | 706289   | 20.00  | ng    | -0.01    |
| 64) Phenanthrene-d10        | 11.38 | 188  | 1166574  | 20.00  | ng    | -0.01    |
| 76) Chrysene-d12            | 14.03 | 240  | 621148   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12            | 15.50 | 264  | 746809   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.46  | 112  | 1972106  | 86.93  | ng    | 0.00     |
| 7) Phenol-d6                | 6.47  | 99   | 2489550  | 85.90  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.41  | 82   | 1530213  | 60.61  | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol    | 10.68 | 330  | 491433   | 67.44  | ng    | -0.01    |
| 45) 2-Fluorobiphenyl        | 9.22  | 172  | 2682024  | 56.26  | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.97 | 244  | 2217598  | 69.95  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       | Qvalue   |
| 49) Acenaphthylene          | 9.75  | 152  | 430669   | 6.086  | ng    | 98       |
| 50) Dimethylphthalate       | 9.60  | 163  | 227863   | 4.542  | ng    | 100      |
| 58) Fluorene                | 10.44 | 166  | 161744   | 3.458  | ng    | 98       |
| 71) Phenanthrene            | 11.41 | 178  | 2549320  | 42.145 | ng    | 99       |
| 72) Anthracene              | 11.46 | 178  | 804767   | 13.090 | ng    | 97       |
| 75) Fluoranthene            | 12.60 | 202  | 4167627  | 63.662 | ng    | 96       |
| 78) Pyrene                  | 12.83 | 202  | 3910614  | 76.713 | ng    | 98       |
| 81) Benzo(a)anthracene      | 14.02 | 228  | 2218300  | 54.919 | ng    | 94       |
| 83) Chrysene                | 14.06 | 228  | 1947047  | 46.707 | ng    | 98       |
| 86) Indeno(1,2,3-cd)pyrene  | 16.97 | 276  | 1145846  | 29.186 | ng    | 95       |
| 88) Benzo(b)fluoranthene    | 15.07 | 252  | 2702530m | 54.173 | ng    |          |
| 89) Benzo(k)fluoranthene    | 15.10 | 252  | 751605m  | 15.822 | ng    |          |
| 90) Benzo(a)pyrene          | 15.44 | 252  | 1899033  | 41.888 | ng    | 98       |
| 91) Dibenzo(a,h)anthracene  | 16.98 | 278  | 318980   | 8.044  | ng    | 98       |
| 92) Benzo(a,h,i)perylene    | 17.41 | 276  | 941109   | 23.624 | ng    | 98       |

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

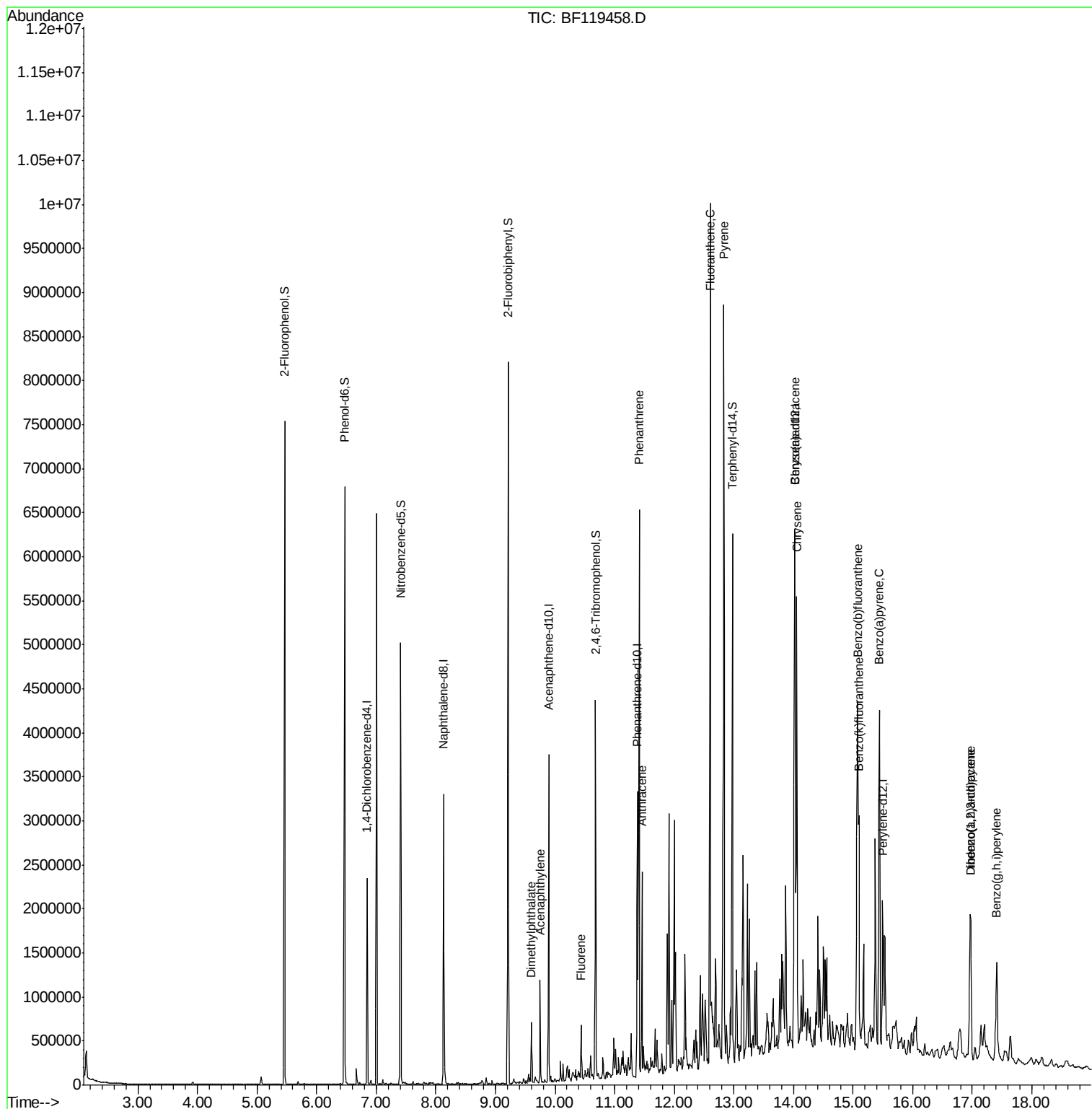
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF031920\  
Data File : BF119458.D  
Acq On : 20 Mar 2020 00:48  
Operator : CG/JU  
Sample : L1978-02  
Misc :  
ALS Vial : 18 Sample Multiplier: 1

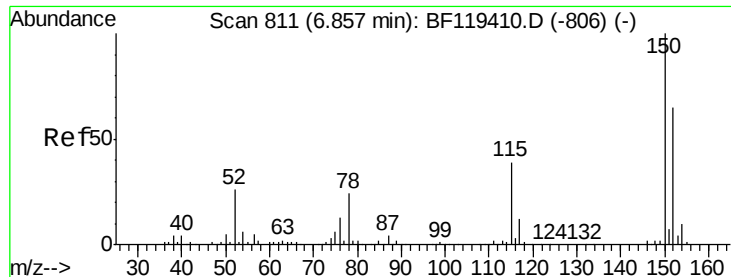
Instrument :  
BNA\_F  
ClientSampleId :  
TP-5A

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Quant Time: Mar 20 05:25:48 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF031820.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Mar 18 15:11:18 2020  
Response via : Initial Calibration





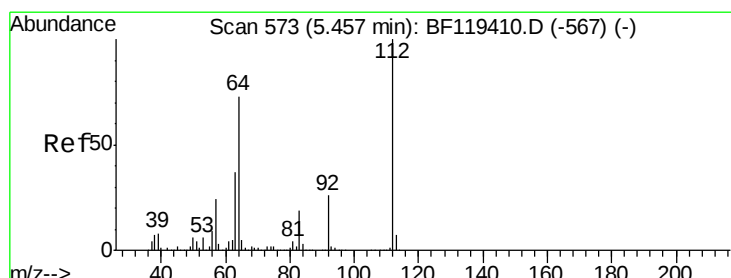
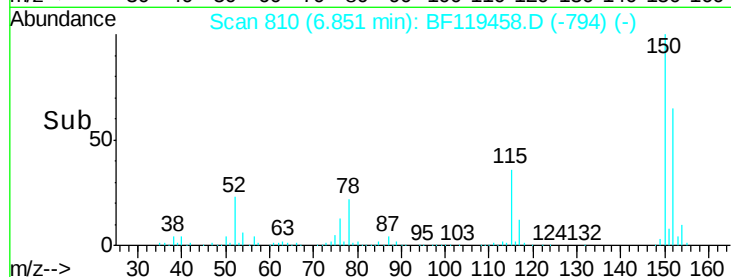
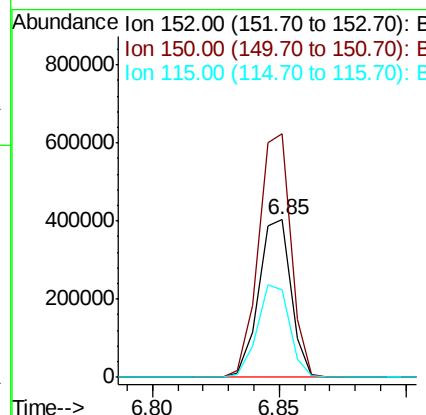
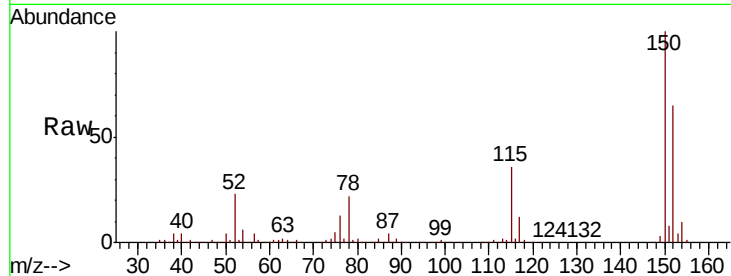
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.85 min Scan# 810  
 Delta R.T. -0.01 min  
 Lab File: BF119458.D  
 Acq: 20 Mar 2020 00:48

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-5A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 154.7 | 123.9 | 185.9 |
| 115     | 55.8  | 47.8  | 71.6  |

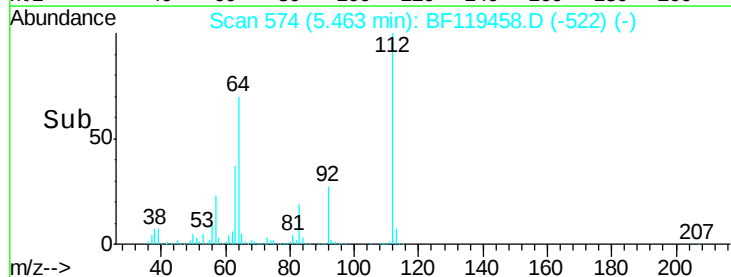
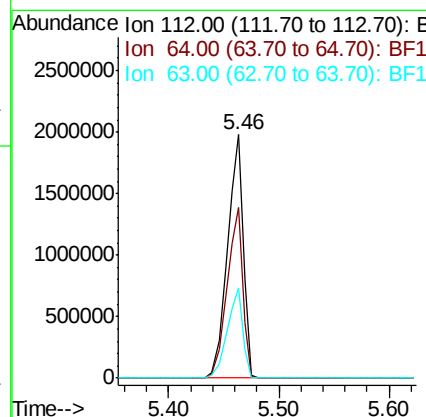
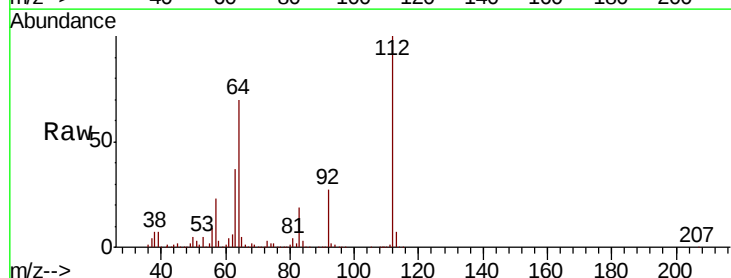
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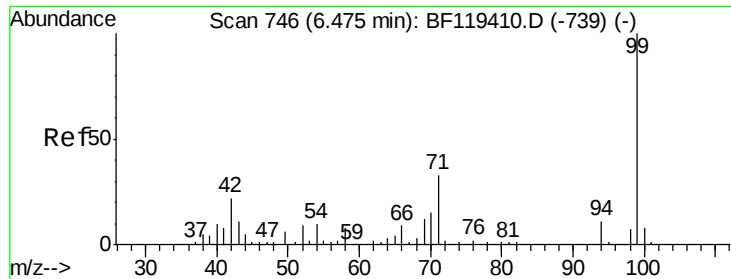
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#5  
 2-Fluorophenol  
 Concen: 86.926 ng  
 RT: 5.46 min Scan# 574  
 Delta R.T. 0.01 min  
 Lab File: BF119458.D  
 Acq: 20 Mar 2020 00:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 70.2  | 58.1  | 87.1  |
| 63      | 36.7  | 29.7  | 44.5  |





#7

Phenol-d6

Concen: 85.902 ng

RT: 6.47 min Scan# 745

Delta R.T. -0.01 min

Lab File: BF119458.D

Acq: 20 Mar 2020 00:48

Instrument :

BNA\_F

ClientSampleId :

TP-5A

Tot Ion: 99 Resp: 2489550

Ion Ratio Lower Upper

99 100

42 21.6 17.8 26.6

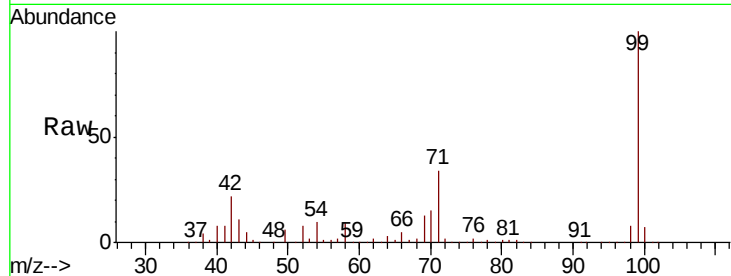
71 34.0 26.0 39.0

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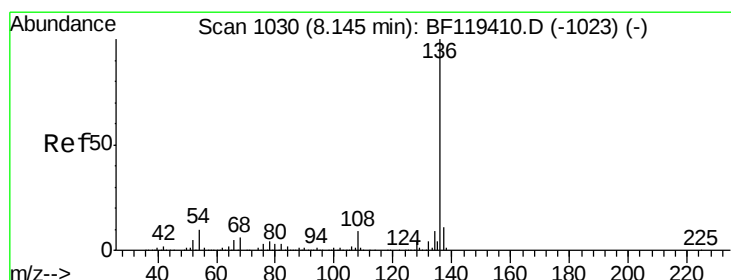
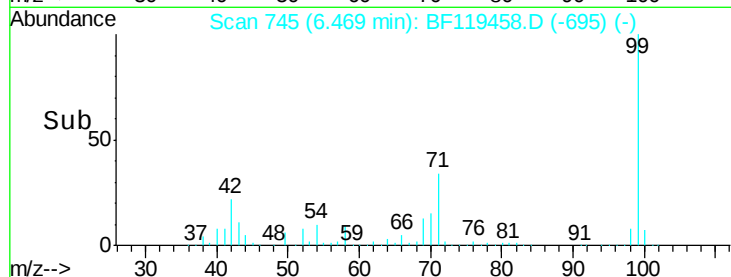
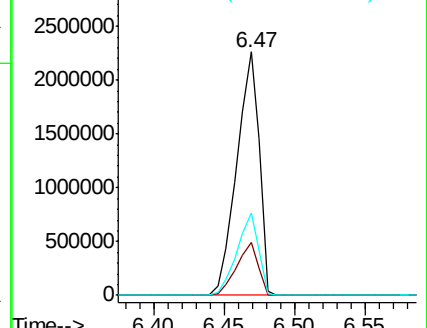
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Abundance Ion 99.00 (98.70 to 99.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 71.00 (70.70 to 71.70): BF1



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.13 min Scan# 1028

Delta R.T. -0.01 min

Lab File: BF119458.D

Acq: 20 Mar 2020 00:48

Tgt Ion: 136 Resp: 1372051

Ion Ratio Lower Upper

136 100

137 11.2 8.4 12.6

54 10.9 8.3 12.5

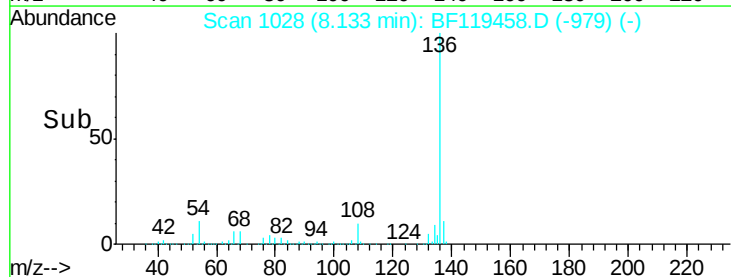
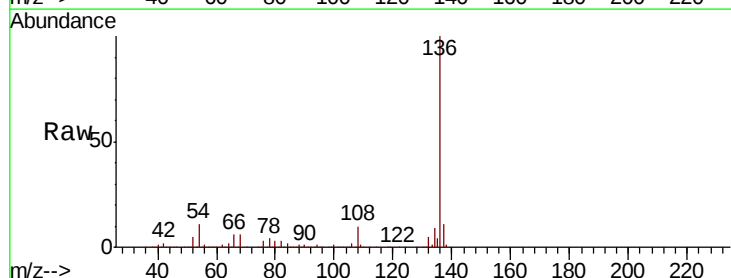
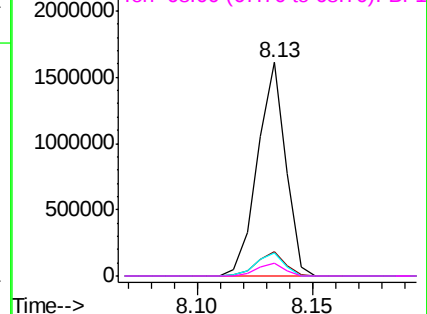
68 6.1 4.9 7.3

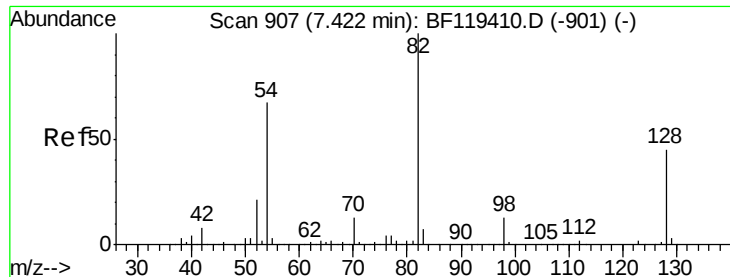
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF1

Ion 68.00 (67.70 to 68.70): BF1





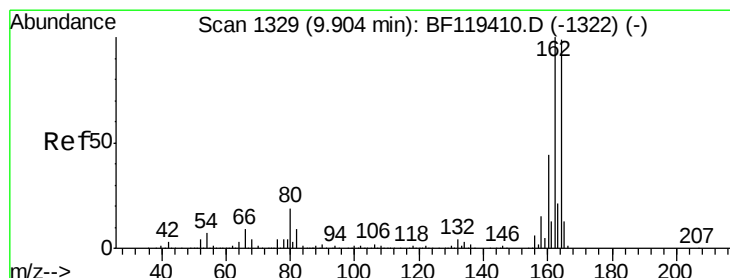
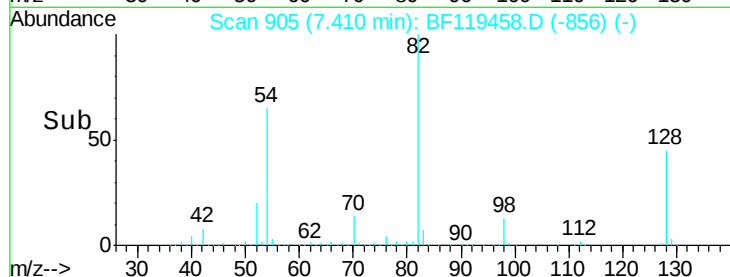
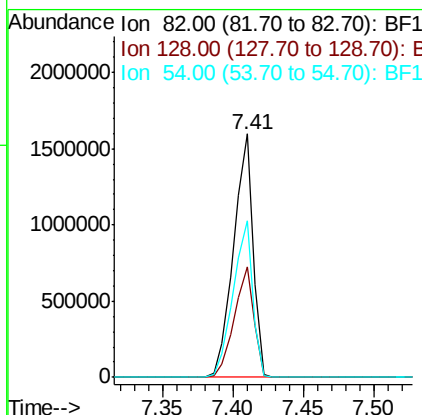
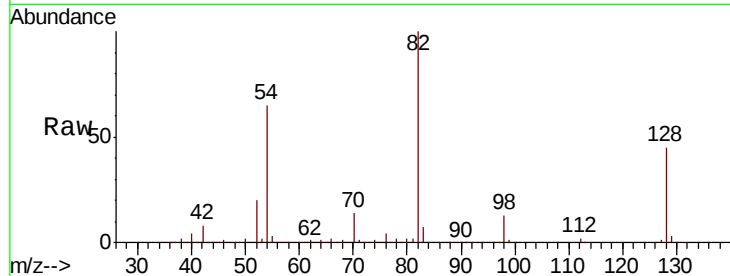
#23  
Nitrobenzene-d5  
Concen: 60.613 ng  
RT: 7.41 min Scan# 905  
Delta R.T. -0.01 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

Instrument :  
BNA\_F  
ClientSampled :  
TP-5A

Tot Ion: 82 Resp: 1530213  
Ion Ratio Lower Upper  
82 100  
128 45.3 35.8 53.8  
54 64.5 53.4 80.0

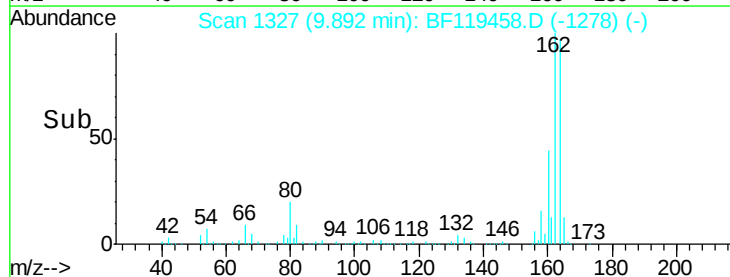
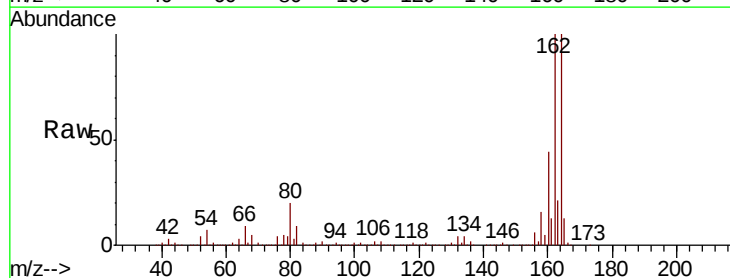
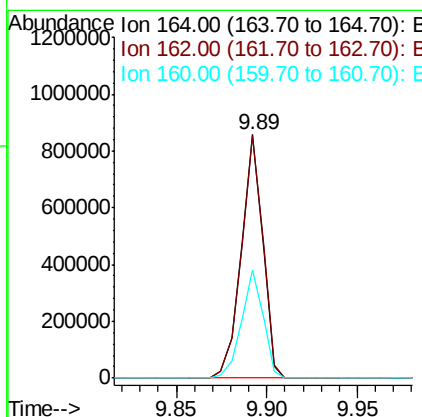
Manual Integrations  
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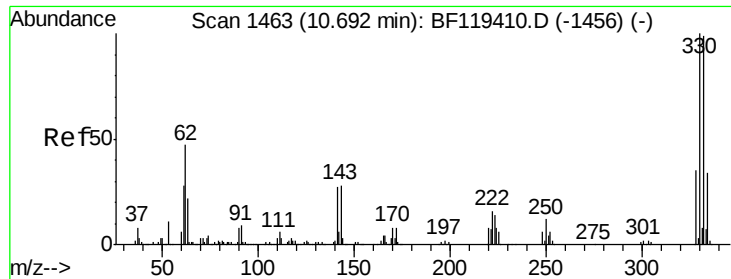
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#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.89 min Scan# 1327  
Delta R.T. -0.01 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

Tgt Ion: 164 Resp: 706289  
Ion Ratio Lower Upper  
164 100  
162 99.8 80.7 121.1  
160 44.3 35.5 53.3





#42

2,4,6-Tribromophenol

Concen: 67.444 ng

RT: 10.68 min Scan# 1461

Delta R.T. -0.01 min

Lab File: BF119458.D

Acq: 20 Mar 2020 00:48

Instrument :

BNA\_F

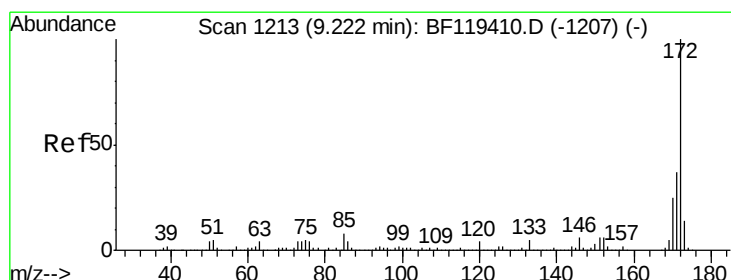
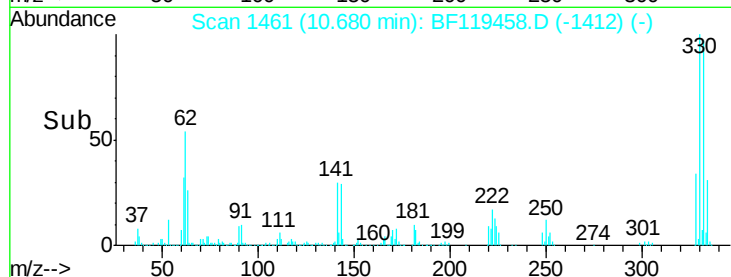
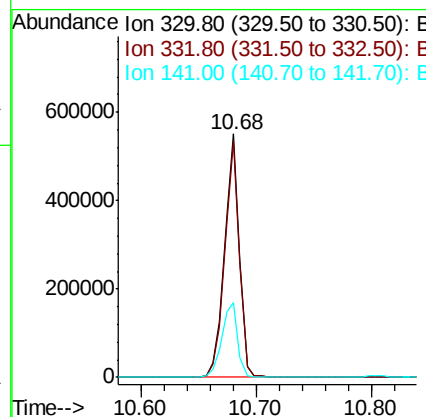
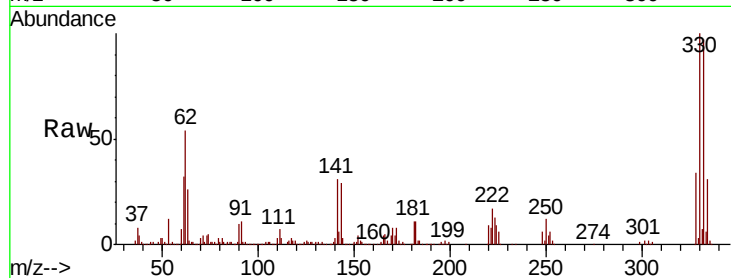
ClientSampleId :

TP-5A

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 330   | Resp: | 491433 |
| Ion Ratio | Lower | Upper |        |
| 330       | 100   |       |        |
| 332       | 95.8  | 77.6  | 116.4  |
| 141       | 32.4  | 26.6  | 40.0   |

Manual Integrations  
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#45

2-Fluorobiphenyl

Concen: 56.257 ng

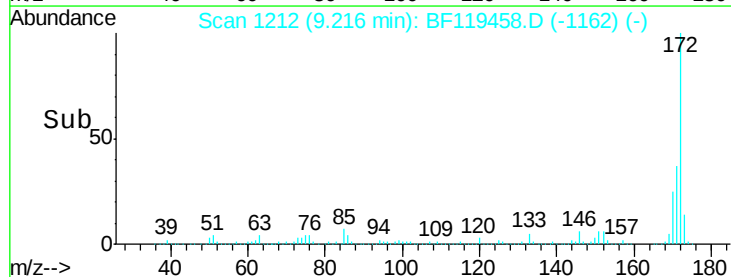
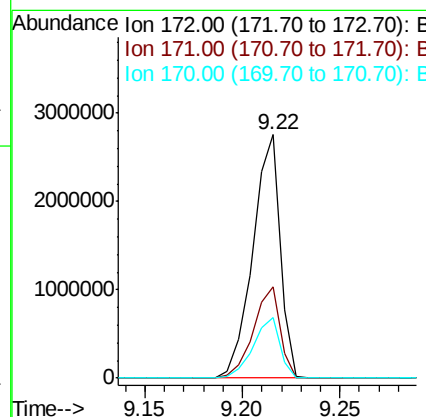
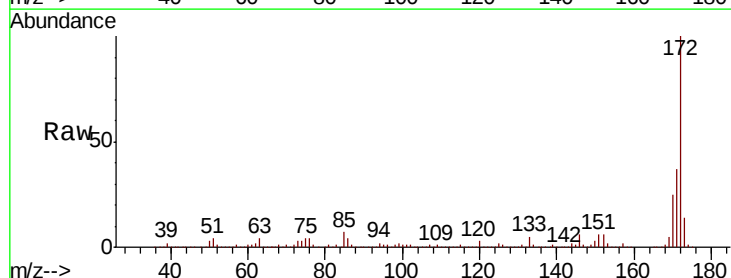
RT: 9.22 min Scan# 1212

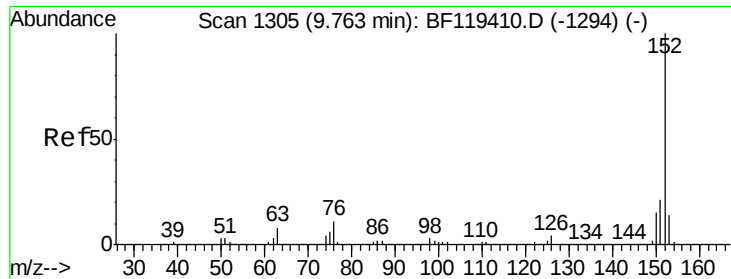
Delta R.T. -0.01 min

Lab File: BF119458.D

Acq: 20 Mar 2020 00:48

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 172   | Resp: | 2682024 |
| Ion Ratio | Lower | Upper |         |
| 172       | 100   |       |         |
| 171       | 37.4  | 29.9  | 44.9    |
| 170       | 24.9  | 20.1  | 30.1    |





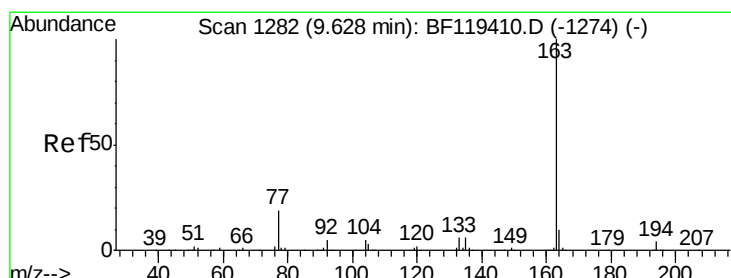
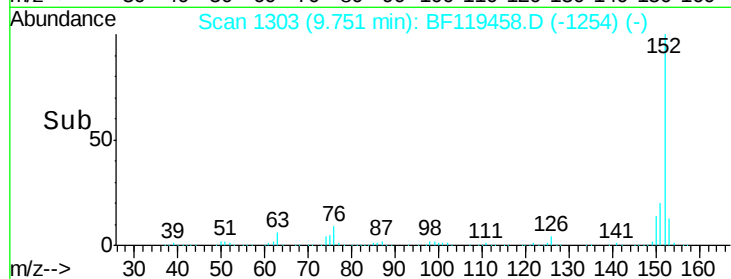
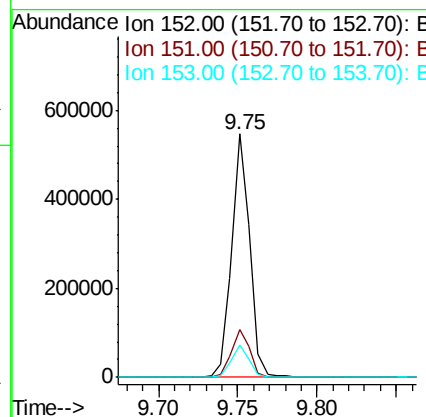
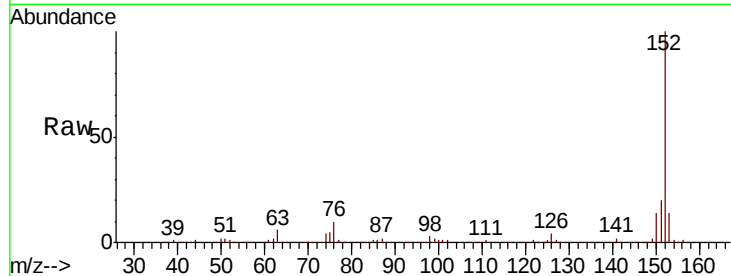
#49  
Acenaphthylene  
Concen: 6.086 ng  
RT: 9.75 min Scan# 1303  
Delta R.T. -0.01 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

Instrument :  
BNA\_F  
ClientSampleId :  
TP-5A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 19.8  | 16.8  | 25.2  |
| 153     | 13.5  | 11.2  | 16.8  |

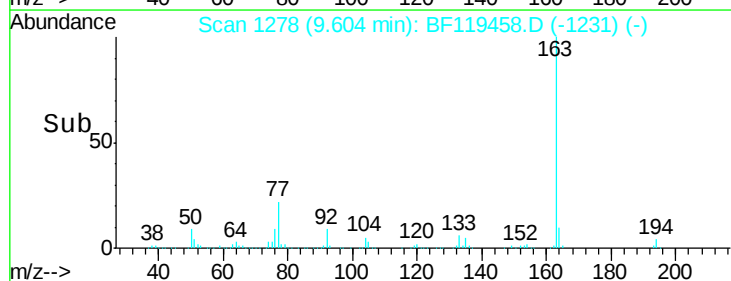
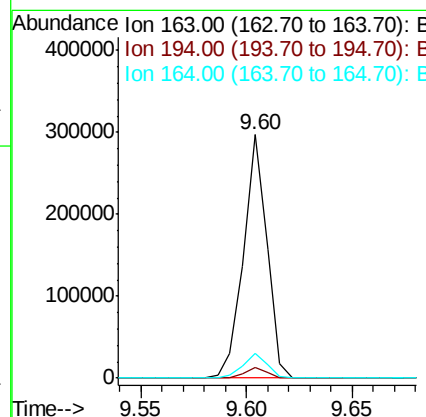
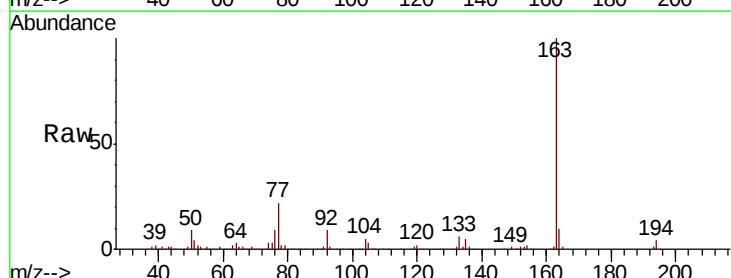
Manual Integrations  
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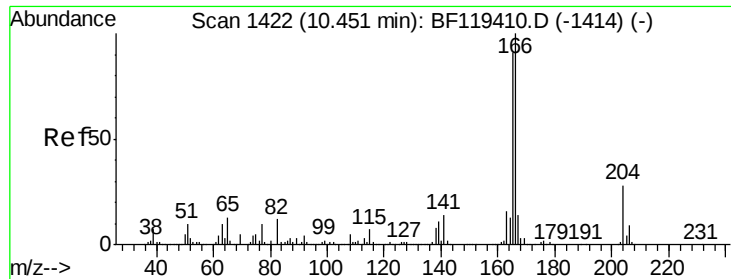
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3/20/2020 11:47:32 AM



#50  
Dimethylphthalate  
Concen: 4.542 ng  
RT: 9.60 min Scan# 1278  
Delta R.T. -0.02 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.2   | 3.2   | 4.8   |
| 164     | 10.1  | 8.1   | 12.1  |





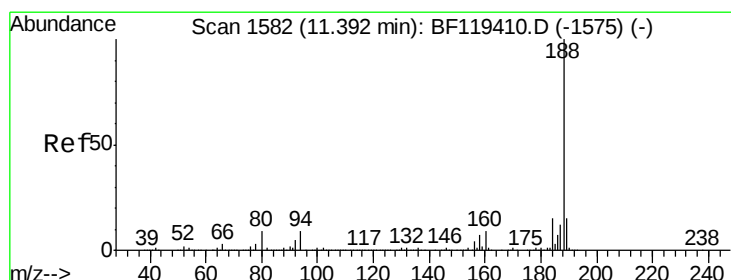
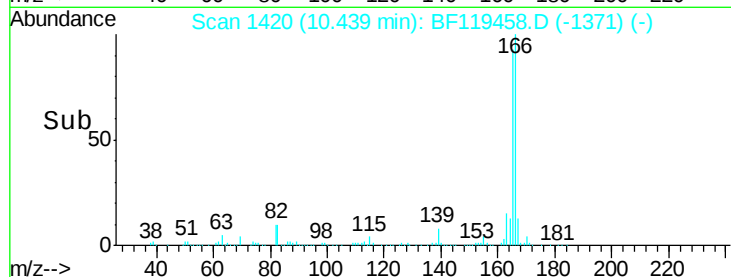
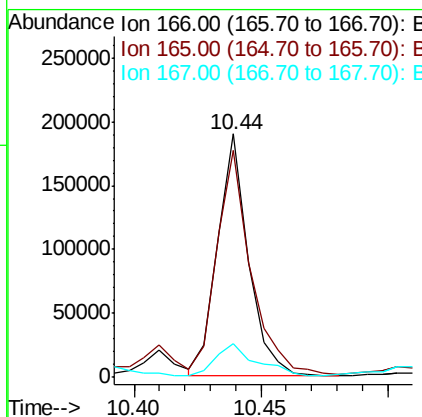
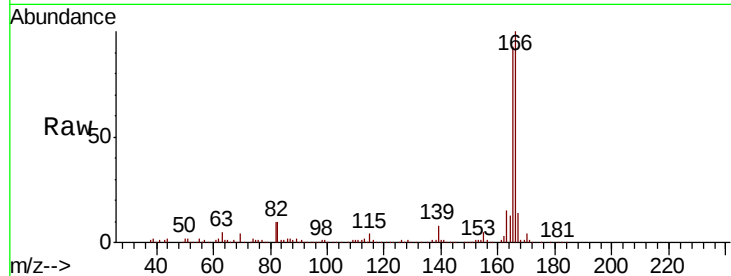
#58  
Fluorene  
Concen: 3.458 ng  
RT: 10.44 min Scan# 1420  
Delta R.T. -0.01 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

Instrument :  
BNA\_F  
ClientSampled :  
TP-5A

| Tot Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 166     | 100  |       |       |       |
| 165     | 93.1 | 73.1  | 109.7 |       |
| 167     | 13.9 | 11.0  | 16.6  |       |

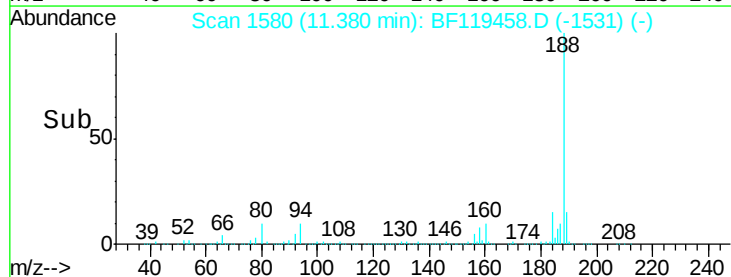
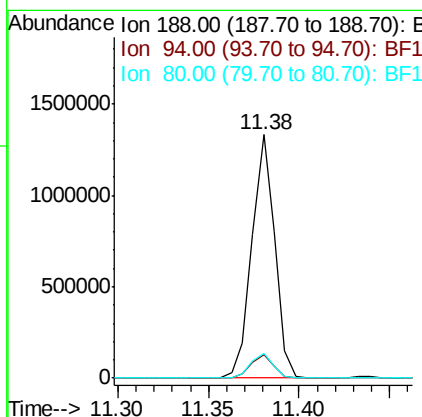
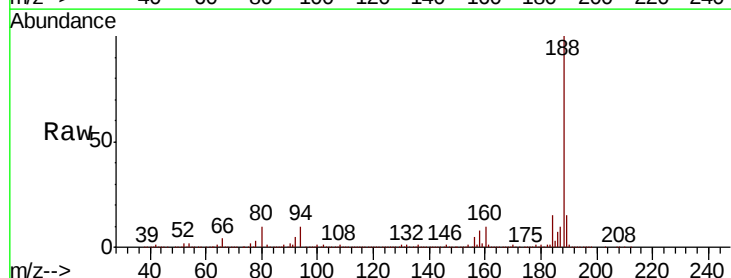
Manual Integrations  
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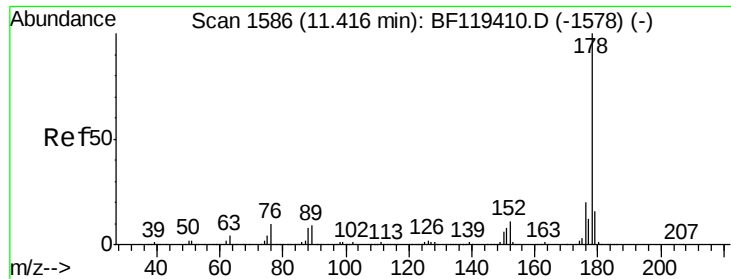
mohammad  
3/20/2020 11:47:32 AM



#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.38 min Scan# 1580  
Delta R.T. -0.01 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

| Tgt Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 188     | 100  |       |       |       |
| 94      | 9.8  | 7.1   | 10.7  |       |
| 80      | 10.2 | 7.5   | 11.3  |       |





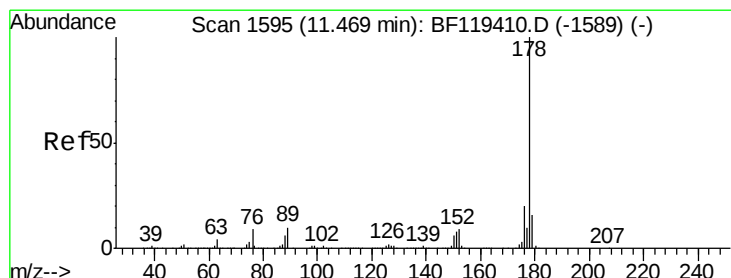
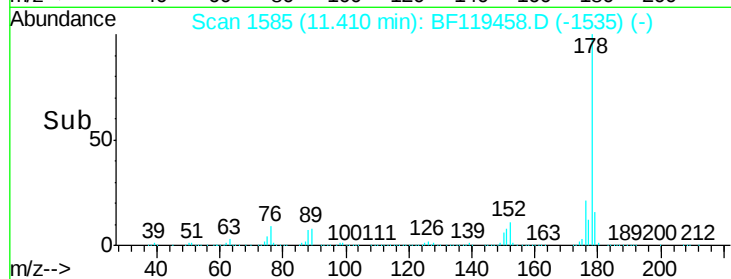
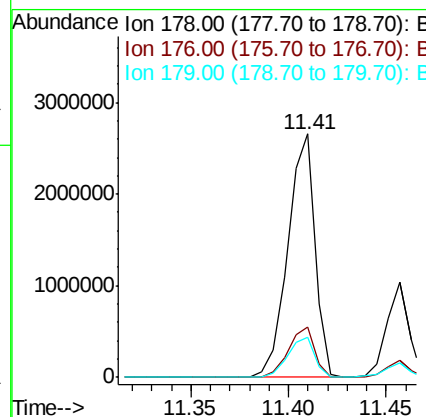
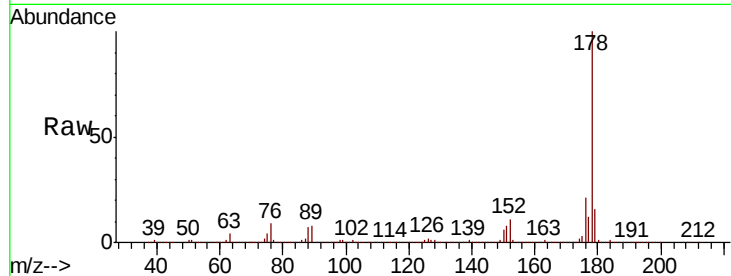
#71  
Phenanthrene  
Concen: 42.145 ng  
RT: 11.41 min Scan# 1585  
Delta R.T. -0.01 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

Instrument :  
BNA\_F  
ClientSampleId :  
TP-5A

Tot Ion:178 Resp: 2549320  
Ion Ratio Lower Upper  
178 100  
176 20.7 16.2 24.4  
179 16.4 12.9 19.3

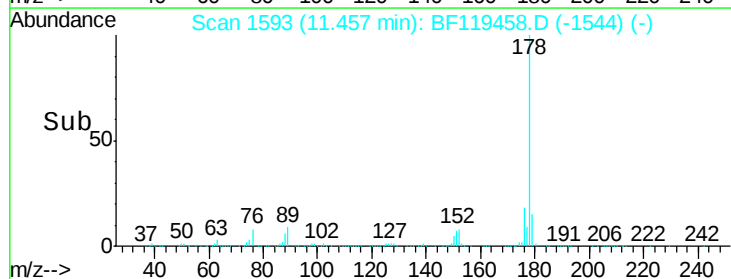
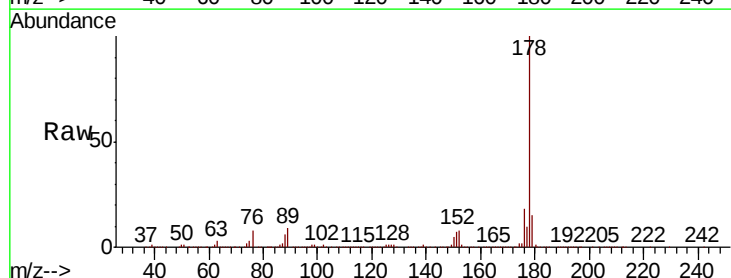
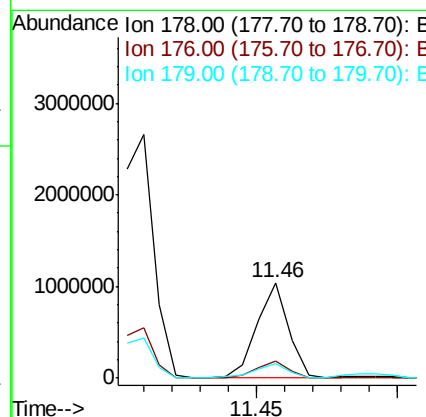
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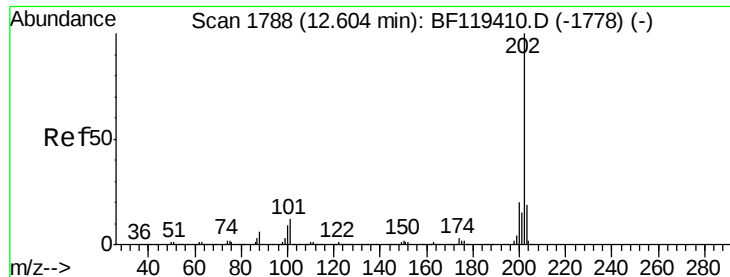
mohammad  
3/20/2020 11:47:32 AM



#72  
Anthracene  
Concen: 13.090 ng  
RT: 11.46 min Scan# 1593  
Delta R.T. -0.01 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

Tgt Ion:178 Resp: 804767  
Ion Ratio Lower Upper  
178 100  
176 18.2 15.6 23.4  
179 15.4 13.1 19.7





#75

Fluoranthene

Concen: 63.662 ng

RT: 12.60 min Scan# 1788

Delta R.T. -0.00 min

Lab File: BF119458.D

Acq: 20 Mar 2020 00:48

Instrument :

BNA\_F

ClientSampled :

TP-5A

Tot Ion:202 Resp: 4167627

Ion Ratio Lower Upper

202 100

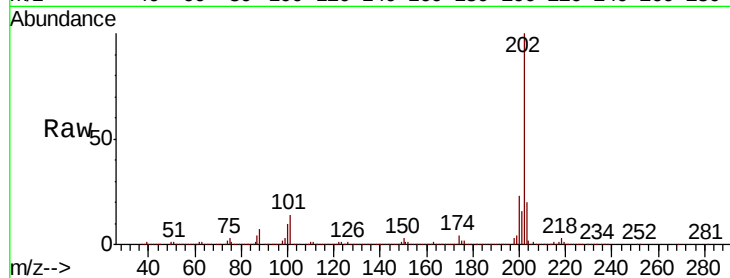
101 14.1 0.0 32.4

203 19.9 0.0 38.5

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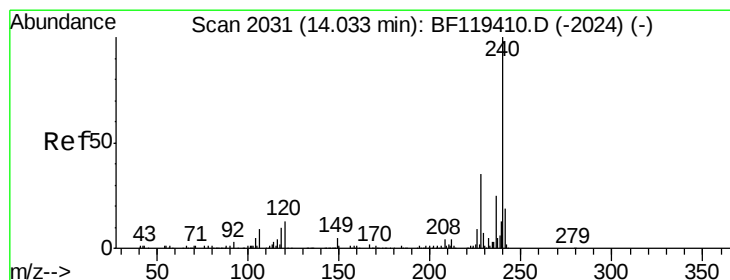
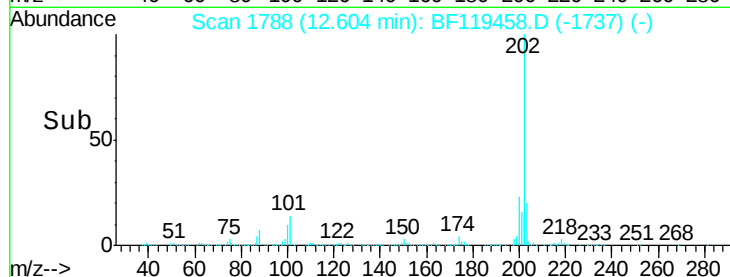
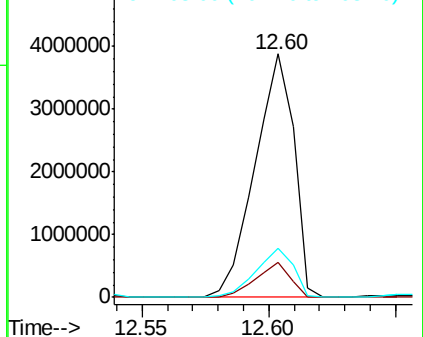


Abundance

Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



#76

Chrysene-d12

Concen: 20.000 ng

RT: 14.03 min Scan# 2030

Delta R.T. -0.01 min

Lab File: BF119458.D

Acq: 20 Mar 2020 00:48

Tgt Ion:240 Resp: 621148

Ion Ratio Lower Upper

240 100

120 12.6 10.2 15.4

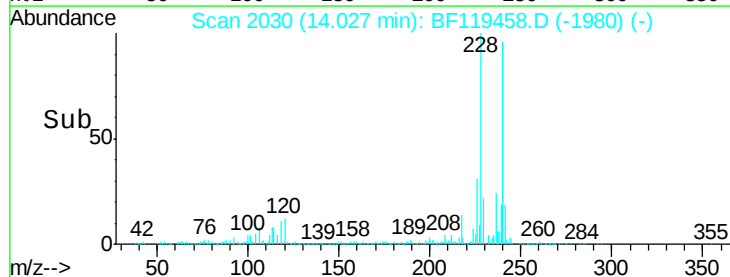
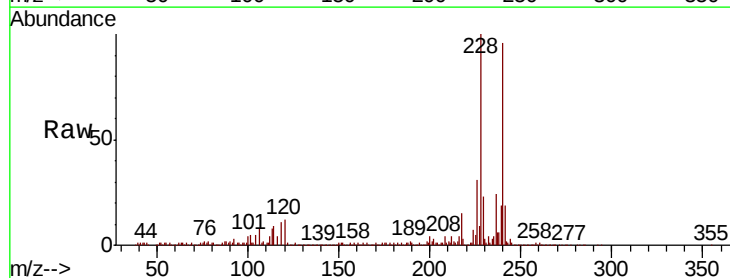
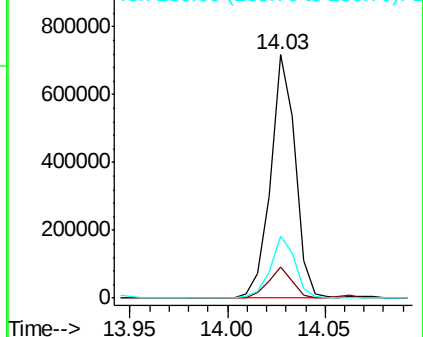
236 25.5 20.4 30.6

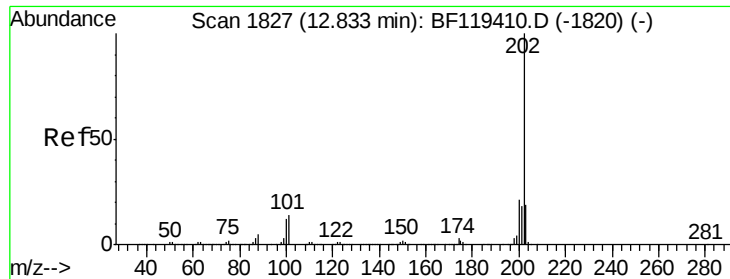
Abundance

Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#78

Pvrene

Concen: 76.713 ng

RT: 12.83 min Scan# 1827

Delta R.T. -0.00 min

Lab File: BF119458.D

Acq: 20 Mar 2020 00:48

Instrument :

BNA\_F

ClientSampled :

TP-5A

Tot Ion:202 Resp: 3910614

Ion Ratio Lower Upper

202 100

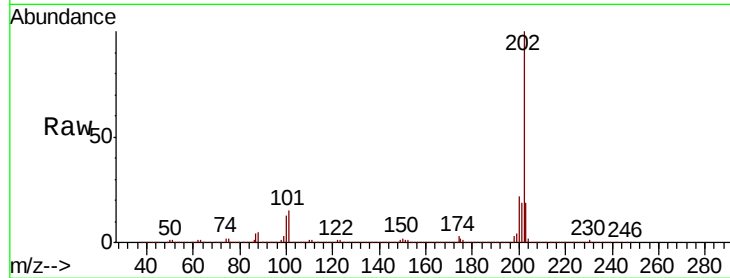
200 22.2 16.8 25.2

203 19.4 14.8 22.2

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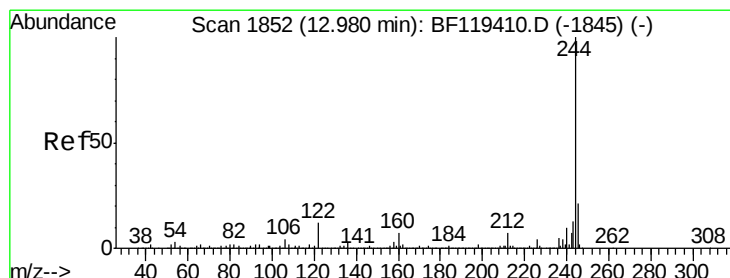
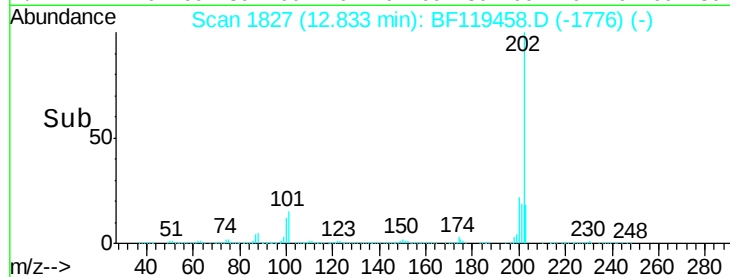
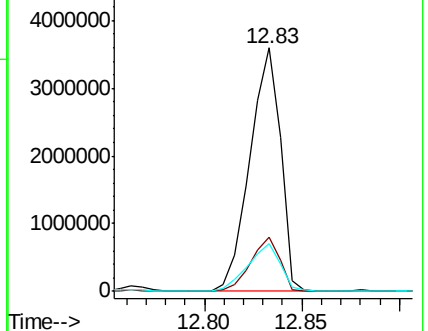
3/20/2020 11:47:32 AM



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



#79

Terphenyl-d14

Concen: 69.947 ng

RT: 12.97 min Scan# 1851

Delta R.T. -0.01 min

Lab File: BF119458.D

Acq: 20 Mar 2020 00:48

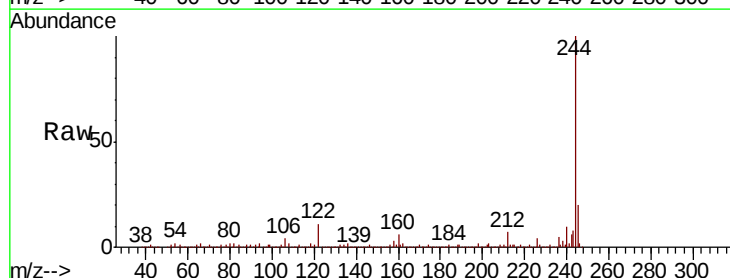
Tgt Ion:244 Resp: 2217598

Ion Ratio Lower Upper

244 100

212 6.5 5.7 8.5

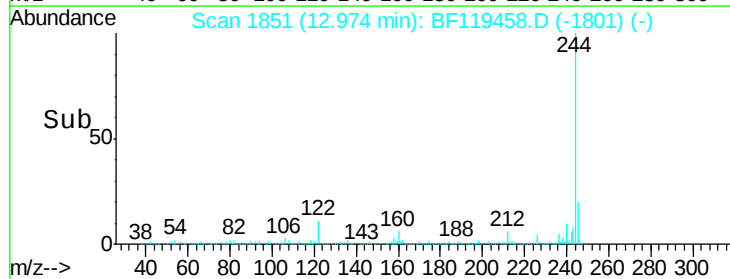
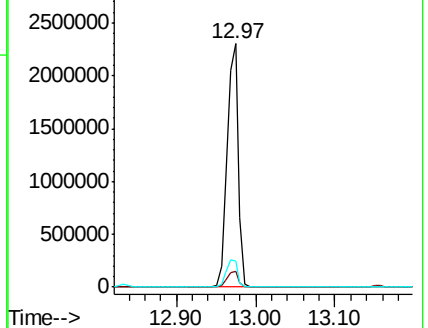
122 10.7 9.8 14.8

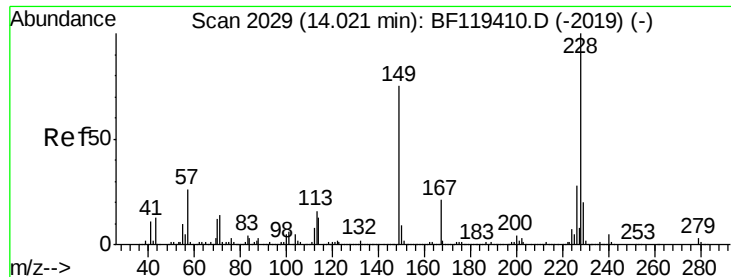


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





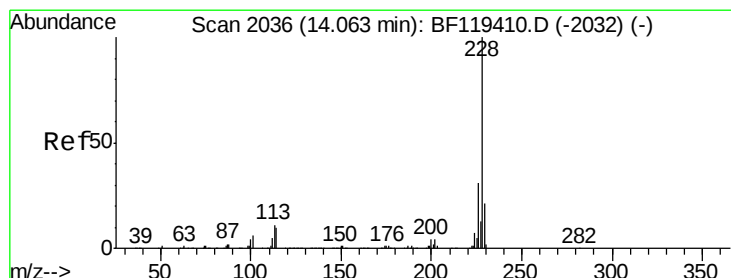
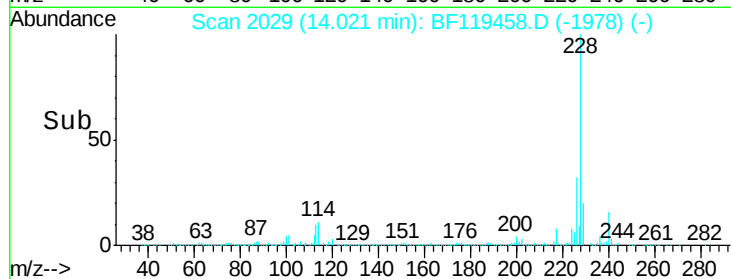
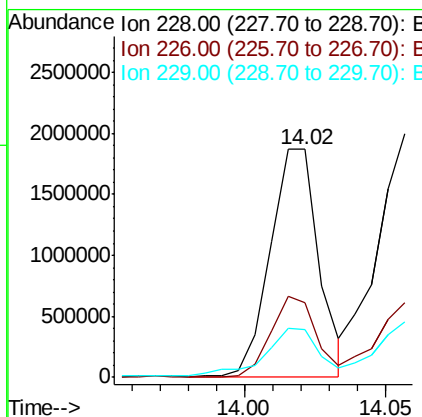
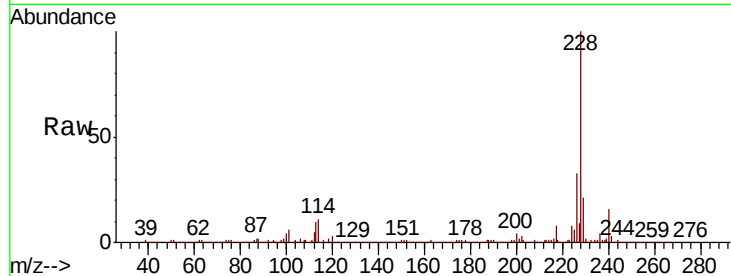
#81  
Benzo(a)anthracene  
Concen: 54.919 ng  
RT: 14.02 min Scan# 2029  
Delta R.T. -0.00 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

Instrument :  
BNA\_F  
ClientSampled :  
TP-5A

Tot Ion:228 Resp: 2218300  
Ion Ratio Lower Upper  
228 100  
226 32.7 22.3 33.5  
229 20.9 16.3 24.5

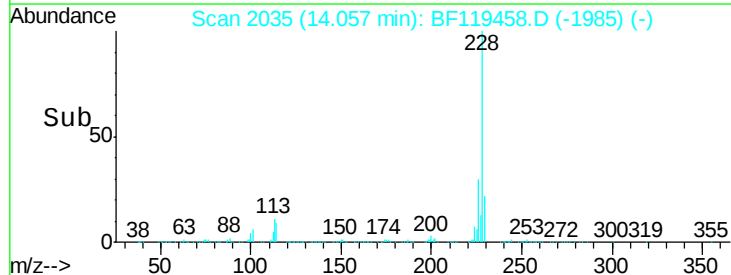
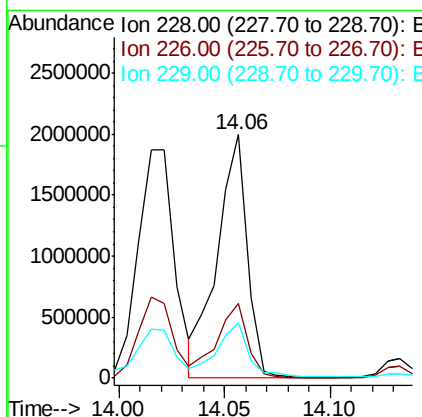
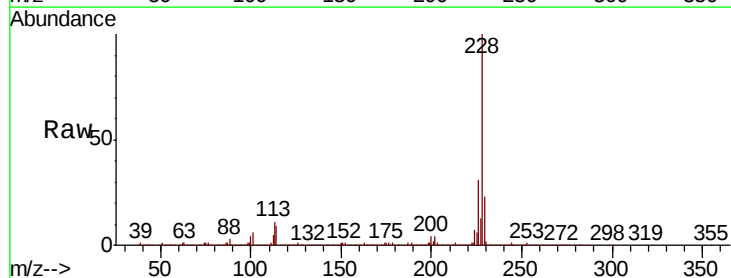
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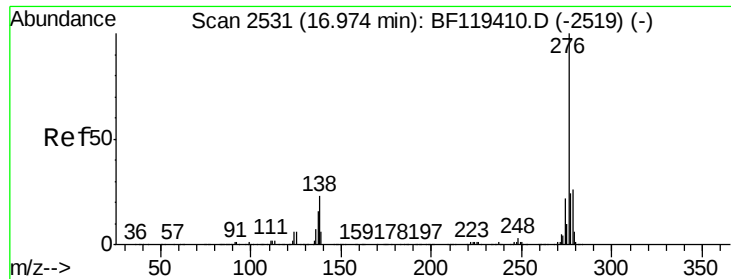
mohammad  
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#83  
Chrysene  
Concen: 46.707 ng  
RT: 14.06 min Scan# 2035  
Delta R.T. -0.01 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

Tgt Ion:228 Resp: 1947047  
Ion Ratio Lower Upper  
228 100  
226 30.8 24.8 37.2  
229 22.6 16.6 25.0





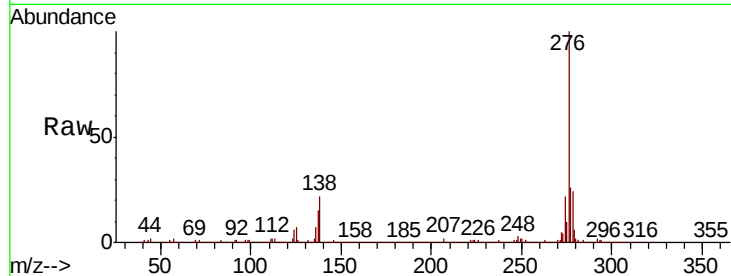
#86  
Indeno(1,2,3-cd)pyrene  
Concen: 29.186 ng  
RT: 16.97 min Scan# 2530  
Delta R.T. -0.01 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

Instrument :  
BNA\_F  
ClientSampleId :  
TP-5A

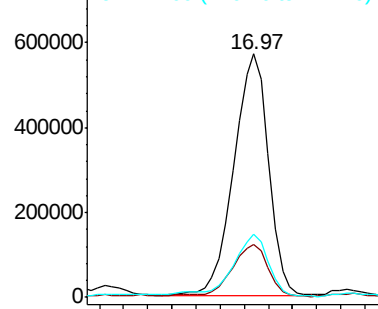
Tot Ion:276 Resp: 1145846  
Ion Ratio Lower Upper  
276 100  
138 22.4 21.3 31.9  
277 26.1 20.2 30.2

Manual Integrations  
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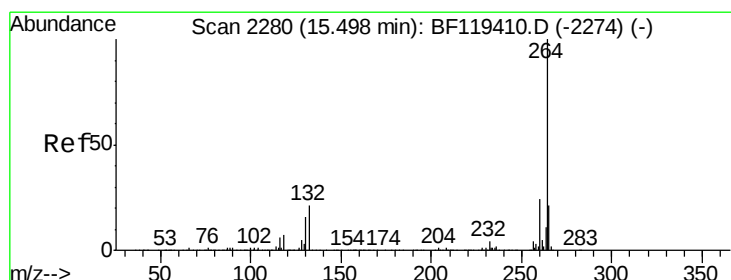
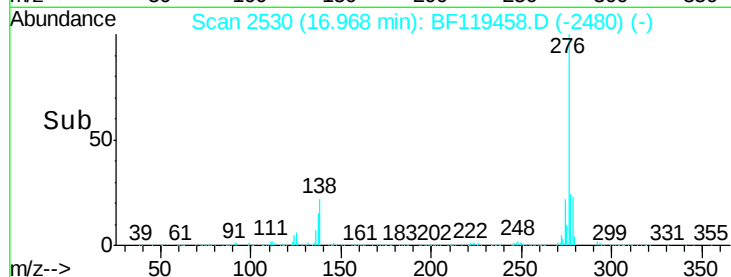
mohammad  
3/20/2020 11:47:32 AM



Abundance Ion 276.00 (275.70 to 276.70): E  
Ion 138.00 (137.70 to 138.70): E  
Ion 277.00 (276.70 to 277.70): E

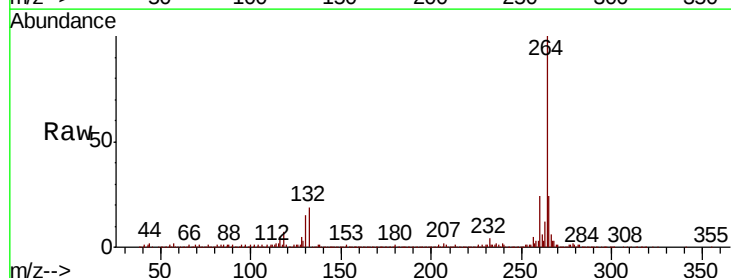


Time-->

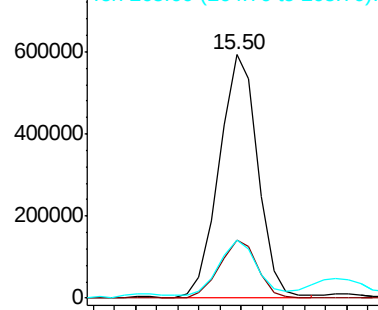


#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.50 min Scan# 2280  
Delta R.T. -0.00 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

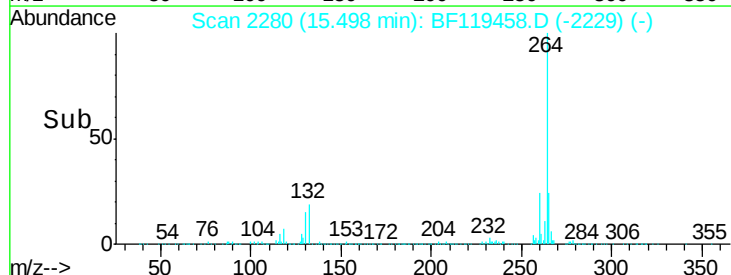
Tgt Ion:264 Resp: 746809  
Ion Ratio Lower Upper  
264 100  
260 24.1 19.2 28.8  
265 24.0 16.9 25.3

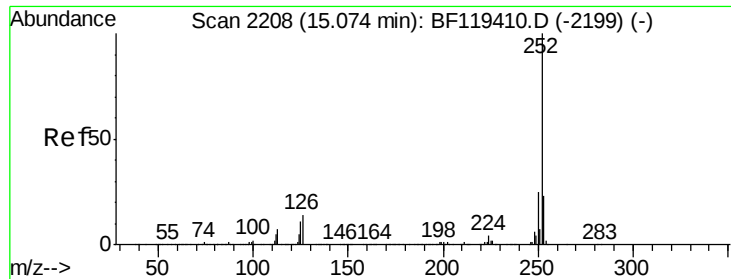


Abundance Ion 264.00 (263.70 to 264.70): E  
Ion 260.00 (259.70 to 260.70): E  
Ion 265.00 (264.70 to 265.70): E



Time-->





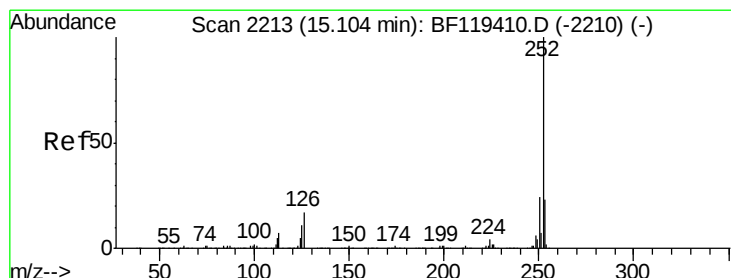
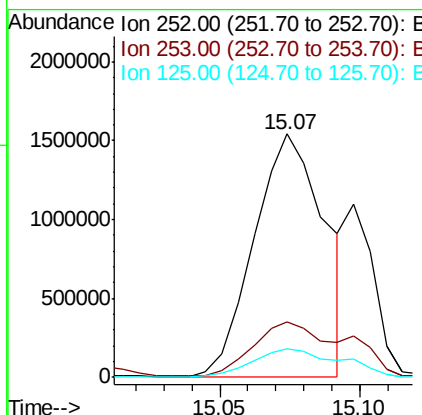
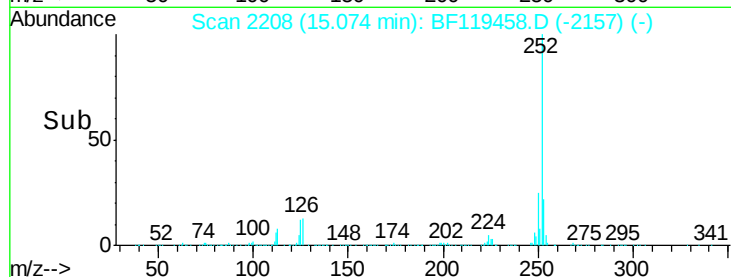
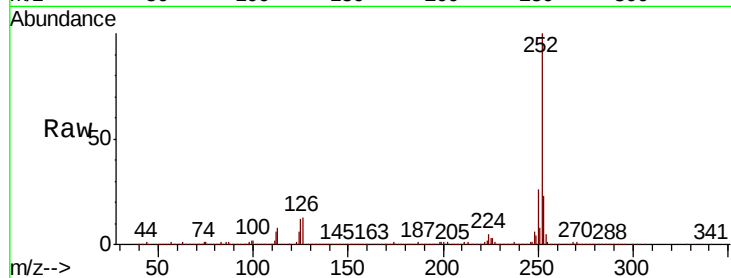
#88  
Benzo(b)fluoranthene  
Concen: 54.173 ng m  
RT: 15.07 min Scan# 2208  
Delta R.T. -0.00 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

Instrument :  
BNA\_F  
ClientSampleId :  
TP-5A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.7  | 18.2  | 27.4  |
| 125     | 11.7  | 8.8   | 13.2  |

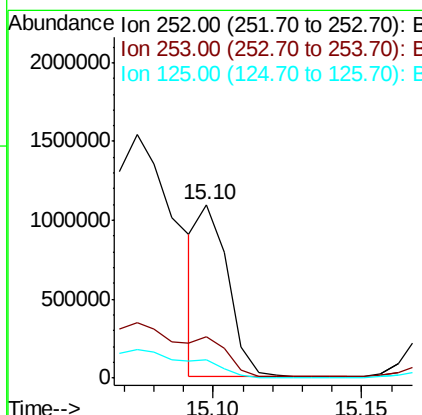
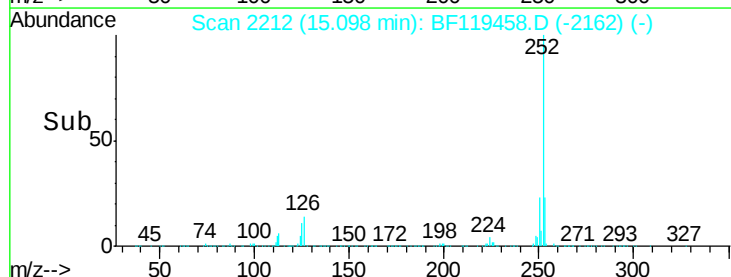
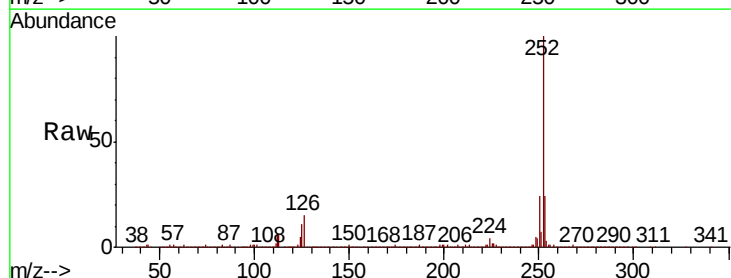
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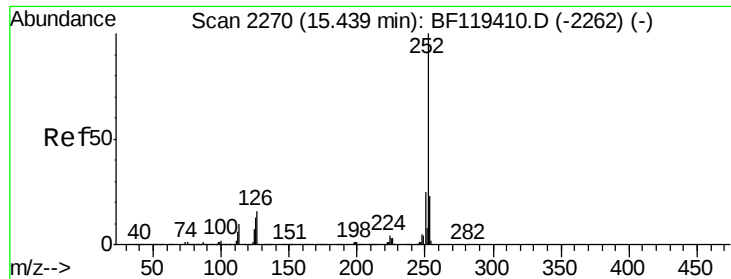
mohammad  
3/20/2020 11:47:32 AM



#89  
Benzo(k)fluoranthene  
Concen: 15.822 ng m  
RT: 15.10 min Scan# 2212  
Delta R.T. -0.01 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.9  | 18.2  | 27.4  |
| 125     | 10.8  | 9.0   | 13.4  |





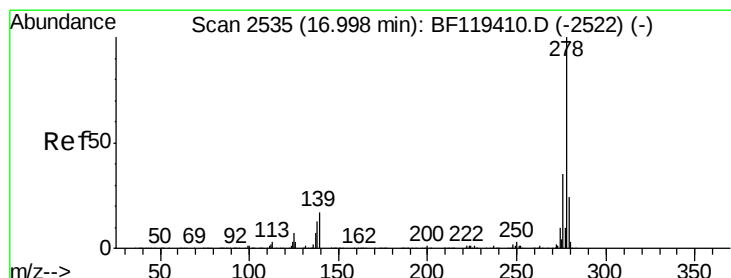
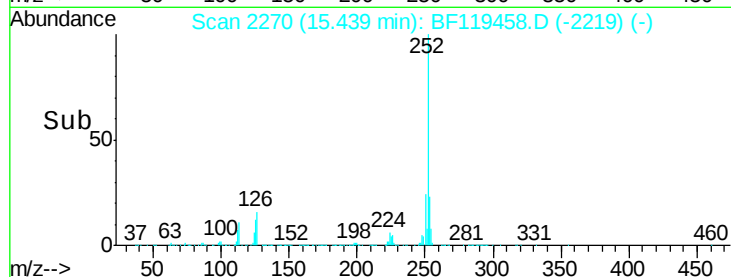
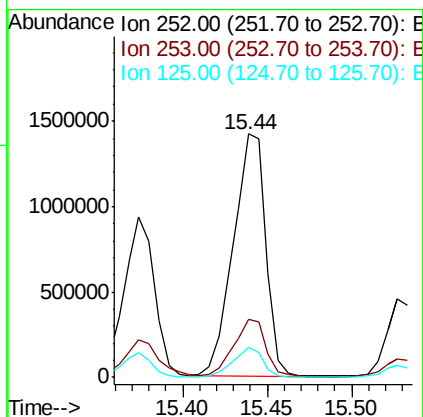
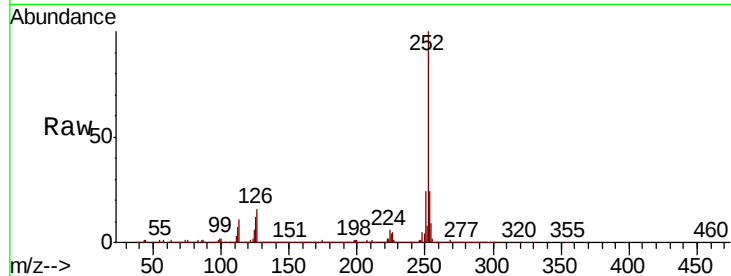
#90  
Benzo(a)pyrene  
Concen: 41.888 ng  
RT: 15.44 min Scan# 2270  
Delta R.T. -0.00 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

Instrument :  
BNA\_F  
ClientSampled :  
TP-5A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.8  | 18.2  | 27.4  |
| 125     | 12.5  | 10.2  | 15.2  |

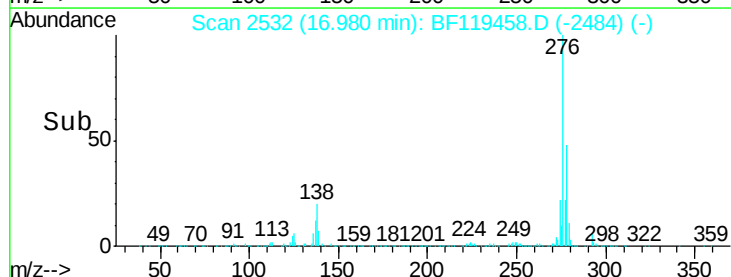
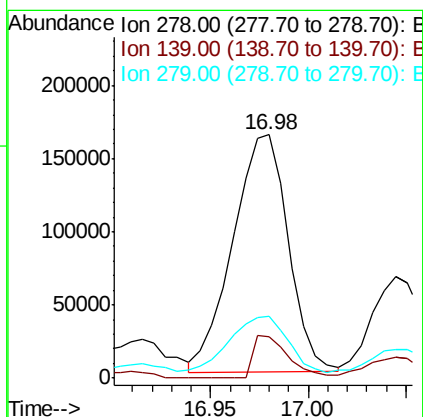
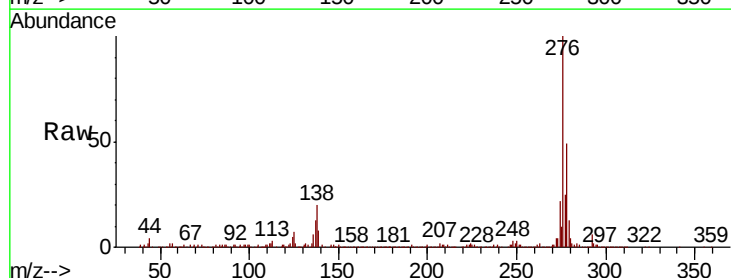
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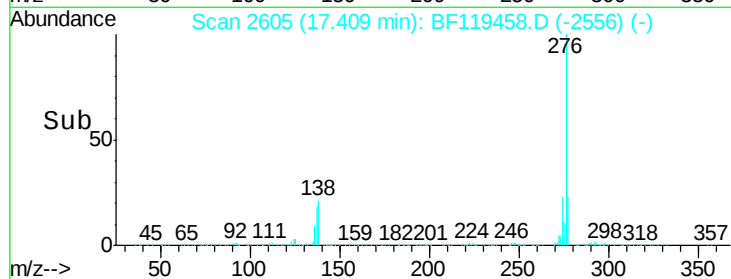
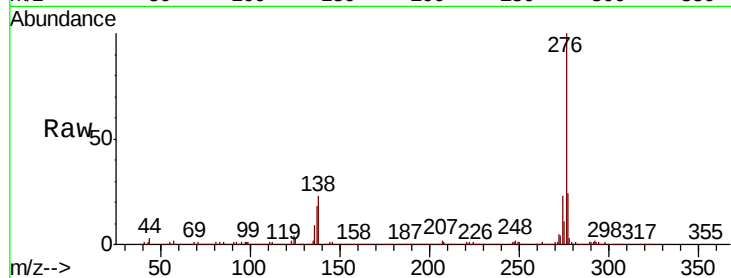
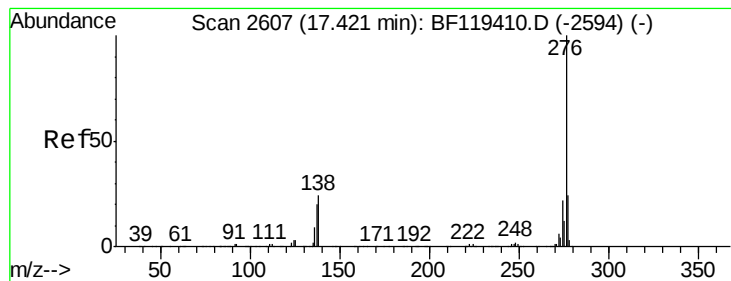
mohammad  
3/20/2020 11:47:32 AM



#91  
Dibenzo(a,h)anthracene  
Concen: 8.044 ng  
RT: 16.98 min Scan# 2532  
Delta R.T. -0.02 min  
Lab File: BF119458.D  
Acq: 20 Mar 2020 00:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 16.9  | 13.7  | 20.5  |
| 279     | 25.5  | 19.2  | 28.8  |





#92

Benzo(a,h,i)perylene

Concen: 23.624 ng

RT: 17.41 min Scan# 2605

Delta R.T. -0.01 min

Lab File: BF119458.D

Acq: 20 Mar 2020 00:48

Instrument :

BNA\_F

ClientSampleId :

TP-5A

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 941109 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 277       | 24.2  | 18.8  | 28.2   |
| 138       | 22.5  | 19.1  | 28.7   |

Manual Integrations  
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