

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF012522\  
 Data File : BF126671.D  
 Acq On : 25 Jan 2022 18:43  
 Operator : CG/JU  
 Sample : N1245-04  
 Misc :  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-2(2.5-3)

Quant Time: Jan 26 00:22:31 2022  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF011822.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jan 19 07:04:14 2022  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Christian Giraldo 01/26/2022  
 Supervised By : Jagrut Upadhyay 01/26/2022

| Compound                    | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|--------|------|----------|--------|-------|----------|
| -----                       |        |      |          |        |       |          |
| Internal Standards          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 6.963  | 152  | 118930   | 20.000 | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.245  | 136  | 449162   | 20.000 | ng    | 0.00     |
| 39) Acenaphthene-d10        | 10.004 | 164  | 244289   | 20.000 | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.498 | 188  | 387777   | 20.000 | ng    | 0.00     |
| 76) Chrysene-d12            | 14.145 | 240  | 235274   | 20.000 | ng    | # 0.00   |
| 86) Perylene-d12            | 15.680 | 264  | 245925   | 20.000 | ng    | 0.00     |
|                             |        |      |          |        |       |          |
| System Monitoring Compounds |        |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.581  | 112  | 846334   | 93.643 | ng    | 0.00     |
| 7) Phenol-d6                | 6.575  | 99   | 1154667  | 91.953 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.522  | 82   | 847178   | 73.825 | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol    | 10.792 | 330  | 212821   | 93.091 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.322  | 172  | 1052819  | 66.003 | ng    | 0.00     |
| 79) Terphenyl-d14           | 13.086 | 244  | 861666   | 61.428 | ng    | 0.00     |
|                             |        |      |          |        |       |          |
| Target Compounds            |        |      |          |        |       | Qvalue   |
| 52) Acenaphthene            | 10.033 | 154  | 72612    | 5.236  | ng    | 95       |
| 55) Dibenzofuran            | 10.210 | 168  | 109974   | 5.277  | ng    | 98       |
| 58) Fluorene                | 10.551 | 166  | 90681    | 5.764  | ng    | 97       |
| 71) Phenanthrene            | 11.522 | 178  | 1016740  | 45.894 | ng    | 100      |
| 72) Anthracene              | 11.575 | 178  | 260829   | 11.734 | ng    | 99       |
| 73) Carbazole               | 11.722 | 167  | 125388   | 6.008  | ng    | 99       |
| 75) Fluoranthene            | 12.716 | 202  | 734051   | 33.545 | ng    | 97       |
| 78) Pyrene                  | 12.945 | 202  | 575360   | 30.240 | ng    | 99       |
| 81) Benzo(a)anthracene      | 14.133 | 228  | 302961   | 18.945 | ng    | 97       |
| 83) Chrysene                | 14.174 | 228  | 262269   | 17.045 | ng    | 96       |
| 87) Indeno(1,2,3-cd)pyrene  | 17.233 | 276  | 103526   | 6.813  | ng    | # 85     |
| 88) Benzo(b)fluoranthene    | 15.221 | 252  | 285178m  | 17.487 | ng    |          |
| 89) Benzo(k)fluoranthene    | 15.251 | 252  | 85245m   | 5.324  | ng    |          |
| 90) Benzo(a)pyrene          | 15.610 | 252  | 202158m  | 15.235 | ng    |          |
| 91) Dibenzo(a,h)anthracene  | 17.245 | 278  | 33349    | 2.649  | ng    | # 88     |
| 92) Benzo(g,h,i)perylene    | 17.709 | 276  | 87014    | 7.050  | ng    | # 84     |

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

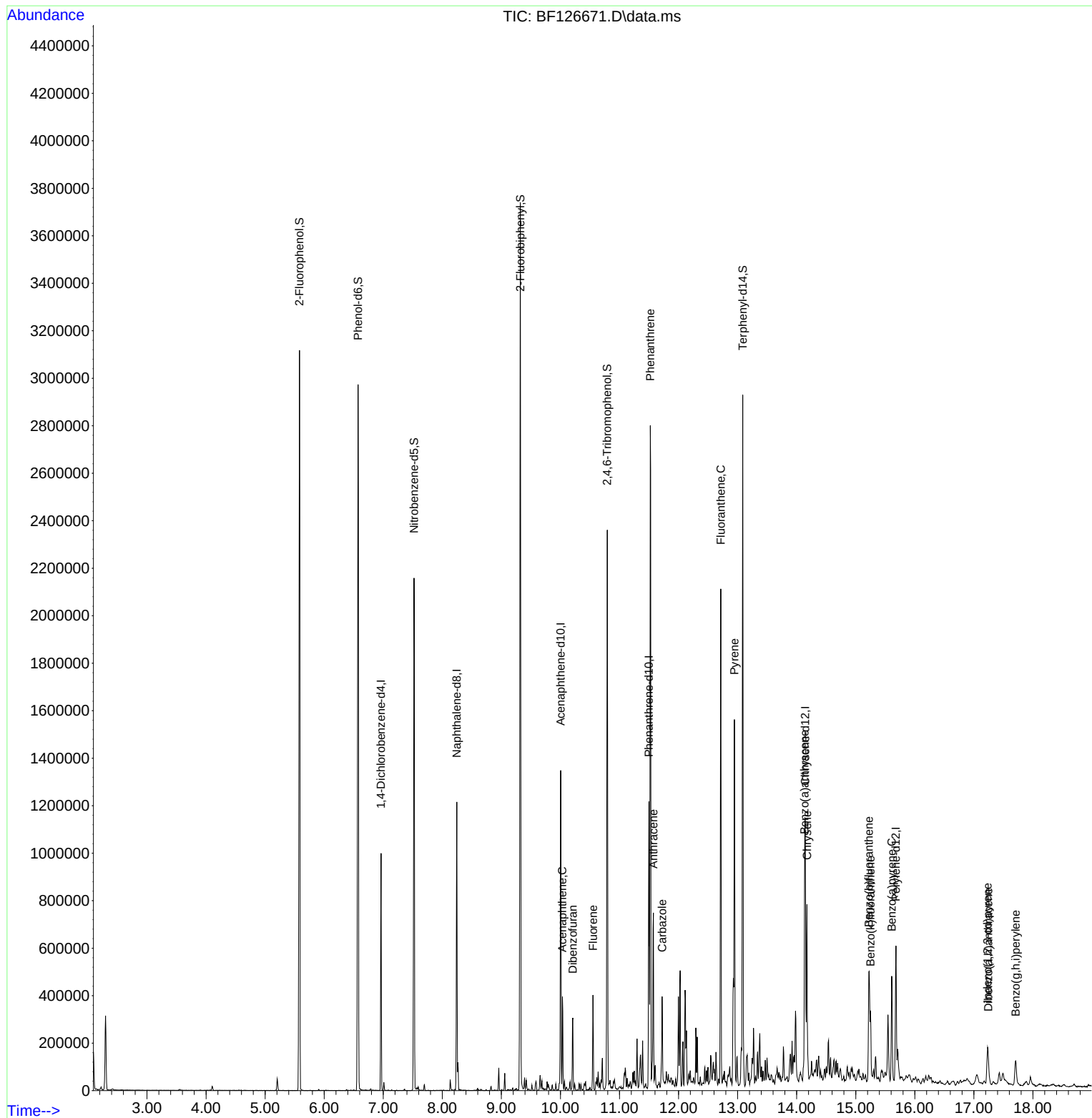
Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF012522\  
Data File : BF126671.D  
Acq On : 25 Jan 2022 18:43  
Operator : CG/JU  
Sample : N1245-04  
Misc :  
ALS Vial : 19 Sample Multiplier: 1

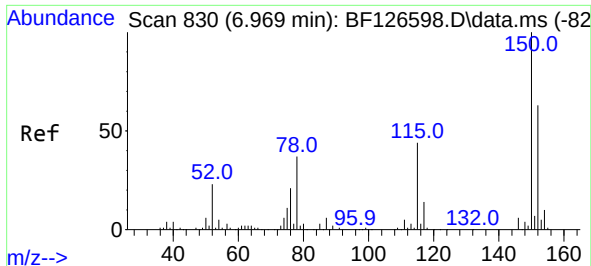
Instrument :  
BNA\_F  
ClientSampleId :  
SB-2(2.5-3)

Quant Time: Jan 26 00:22:31 2022  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF011822.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Jan 19 07:04:14 2022  
Response via : Initial Calibration

Manual Integrations  
APPROVED

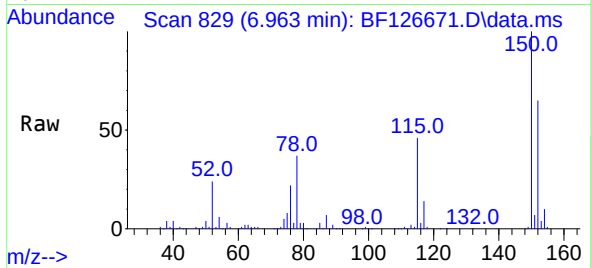
Reviewed By :Christian Giraldo 01/26/2022  
Supervised By :Jagrut Upadhyay 01/26/2022





#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.963 min Scan# 81  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

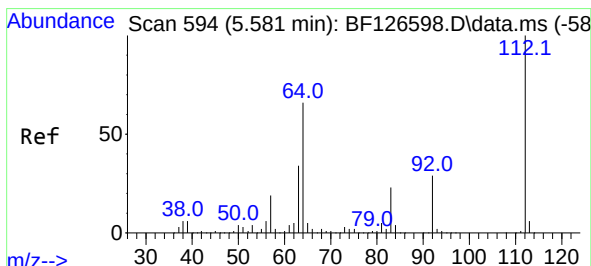
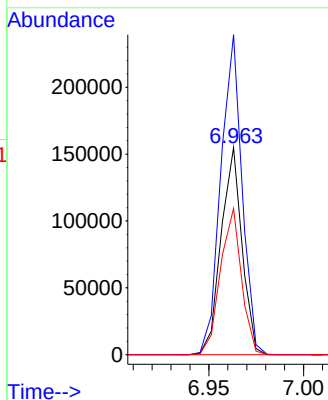
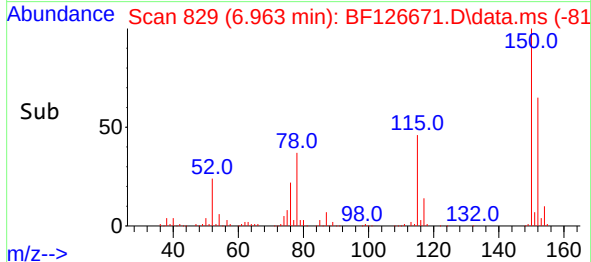
Instrument :  
BNA\_F  
ClientSampleId :  
SB-2(2.5-3)



Tgt Ion:152 Resp: 118930  
Ion Ratio Lower Upper  
152 100  
150 154.5 128.1 192.1  
115 70.6 56.7 85.1

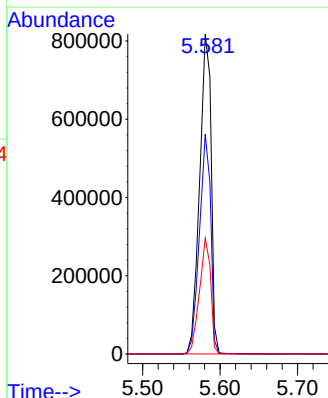
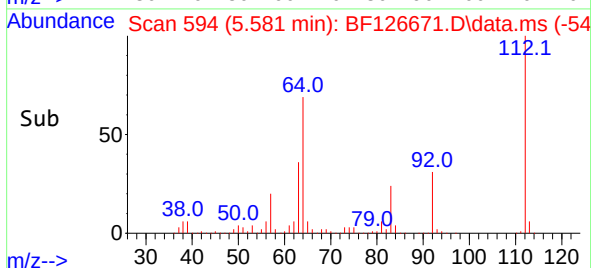
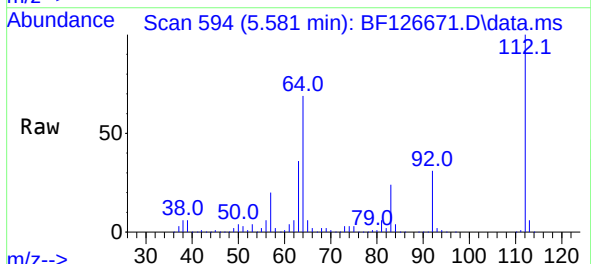
Manual Integrations  
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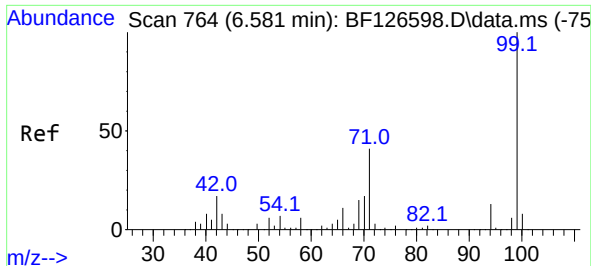
Reviewed By :Christian Giraldo 01/26/2022  
Supervised By :Jagrut Upadhyay 01/26/2022



#5  
2-Fluorophenol  
Concen: 93.643 ng  
RT: 5.581 min Scan# 594  
Delta R.T. -0.000 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

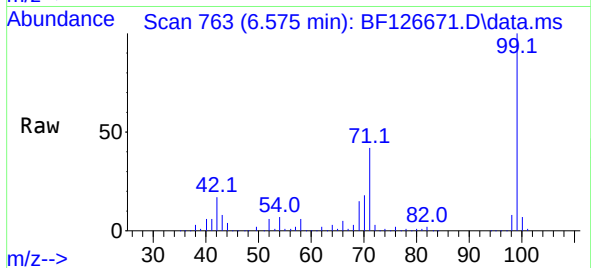
Tgt Ion:112 Resp: 846334  
Ion Ratio Lower Upper  
112 100  
64 68.7 49.5 74.3  
63 36.2 23.9 35.9





#7  
Phenol-d6  
Concen: 91.953 ng  
RT: 6.575 min Scan# 71  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

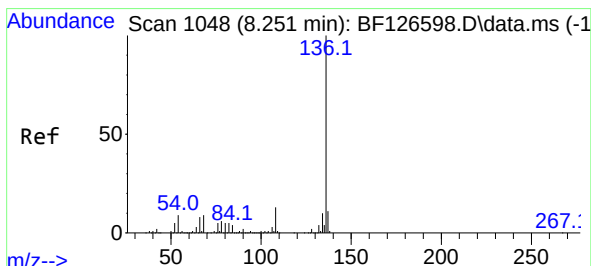
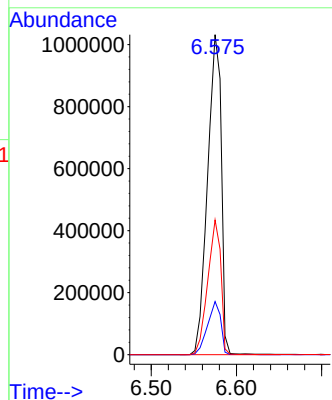
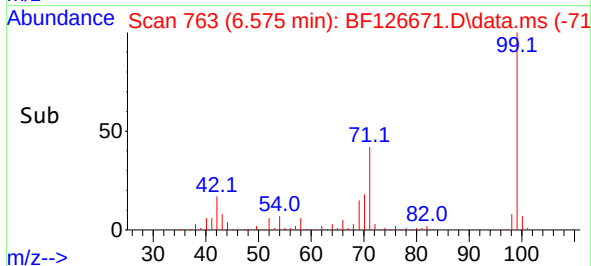
Instrument :  
BNA\_F  
ClientSampleId :  
SB-2(2.5-3)



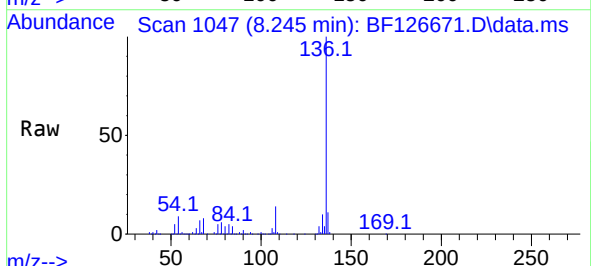
Tgt Ion: 99 Resp: 115466  
Ion Ratio Lower Upper  
99 100  
42 16.6 14.2 21.4  
71 42.1 24.3 36.5

Manual Integrations  
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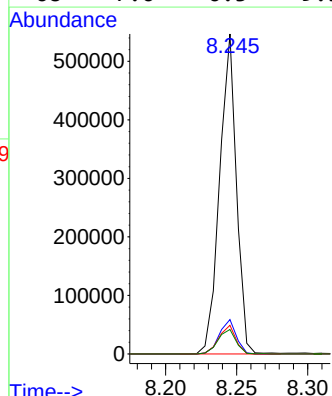
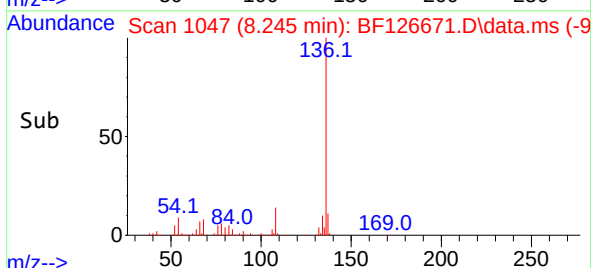
Reviewed By :Christian Giraldo 01/26/2022  
Supervised By :Jagrut Upadhyay 01/26/2022

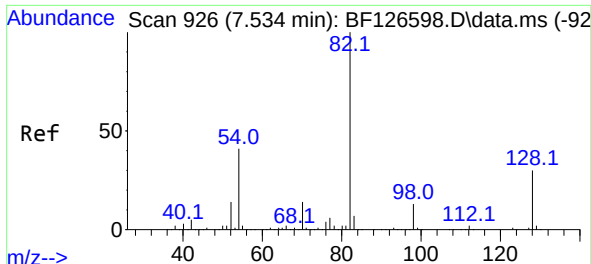


#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.245 min Scan# 1047  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43



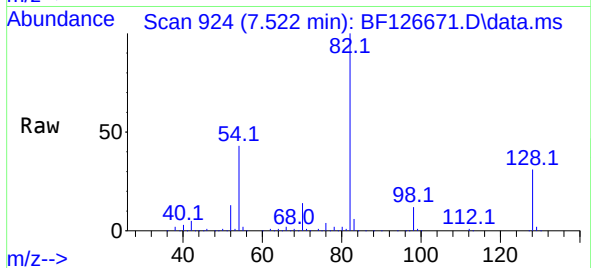
Tgt Ion:136 Resp: 449162  
Ion Ratio Lower Upper  
136 100  
137 10.8 8.6 13.0  
54 8.9 7.8 11.6  
68 7.6 6.3 9.5





#23  
Nitrobenzene-d5  
Concen: 73.825 ng  
RT: 7.522 min Scan# 91  
Delta R.T. -0.012 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

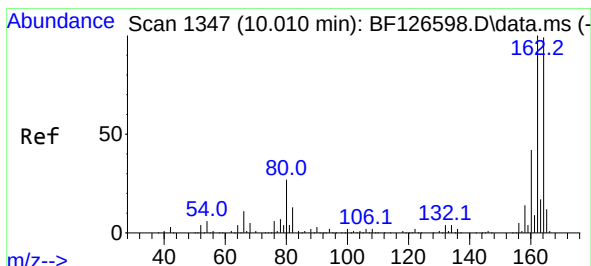
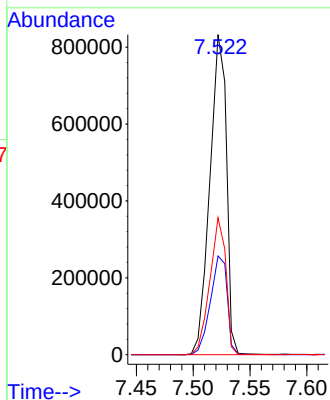
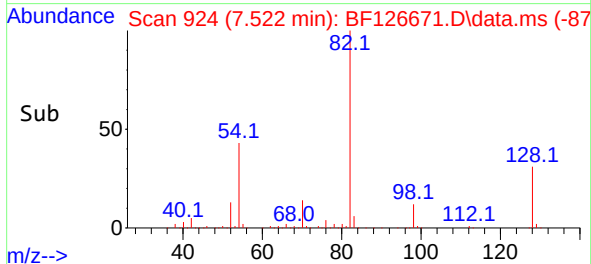
Instrument :  
BNA\_F  
ClientSampleId :  
SB-2(2.5-3)



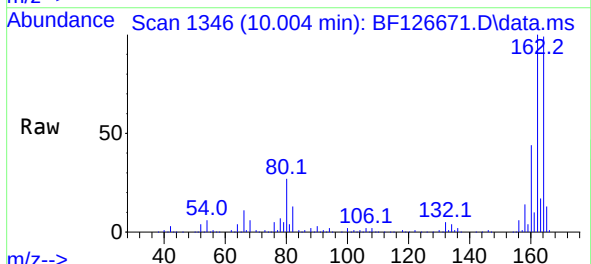
Tgt Ion: 82 Resp: 847178  
Ion Ratio Lower Upper  
82 100  
128 30.9 32.7 49.1  
54 42.8 41.7 62.5

Manual Integrations  
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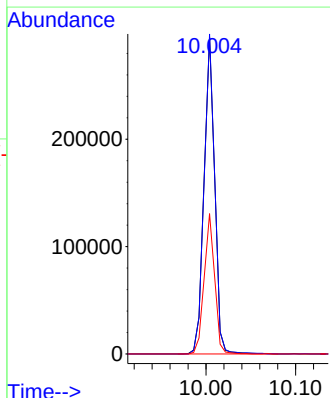
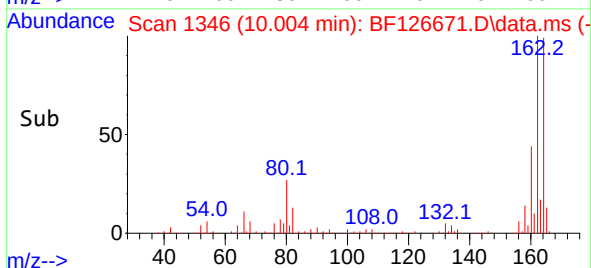
Reviewed By :Christian Giraldo 01/26/2022  
Supervised By :Jagrut Upadhyay 01/26/2022

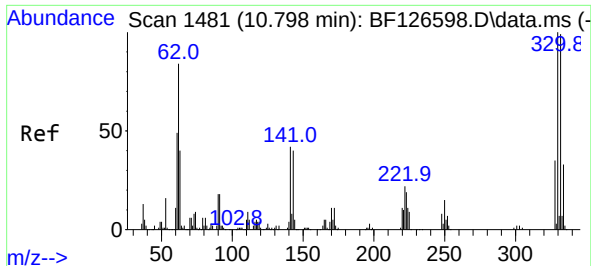


#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 10.004 min Scan# 1346  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43



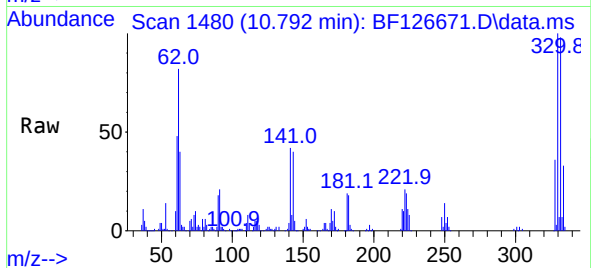
Tgt Ion:164 Resp: 244289  
Ion Ratio Lower Upper  
164 100  
162 100.9 81.4 122.0  
160 44.3 36.6 54.8





#42  
2,4,6-Tribromophenol  
Concen: 93.091 ng  
RT: 10.792 min Scan# 1481  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

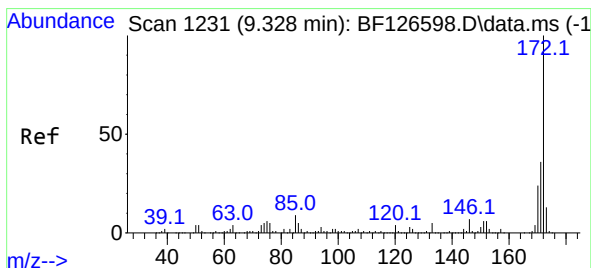
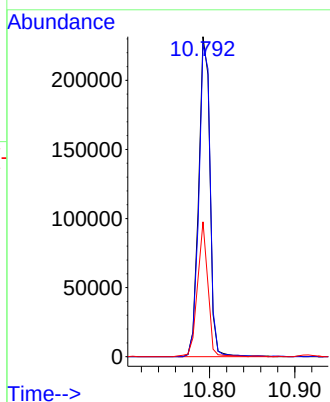
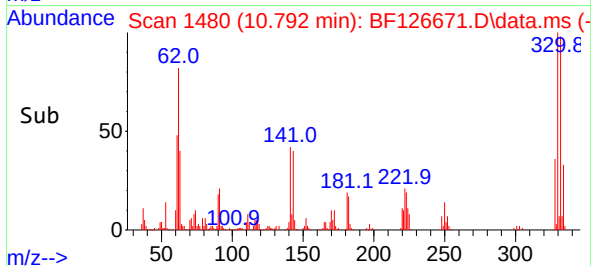
Instrument :  
BNA\_F  
ClientSampleId :  
SB-2(2.5-3)



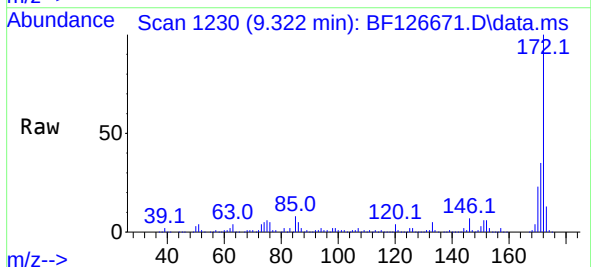
Tgt Ion: 330 Resp: 21282  
Ion Ratio Lower Upper  
330 100  
332 98.4 76.0 114.0  
141 38.8 30.1 45.1

Manual Integrations  
APPROVED

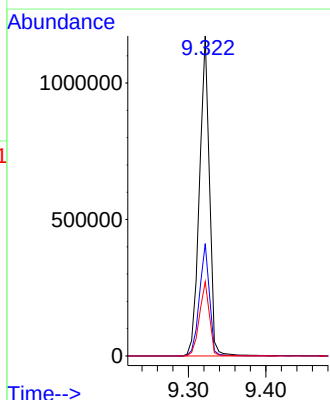
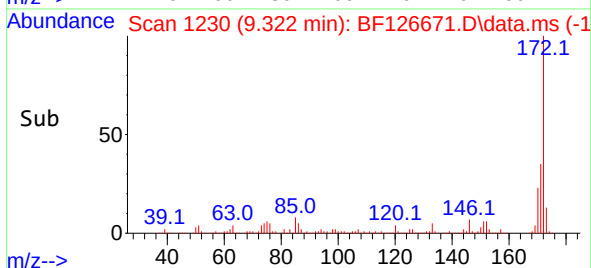
Reviewed By : Christian Giraldo 01/26/2022  
Supervised By : Jagrut Upadhyay 01/26/2022

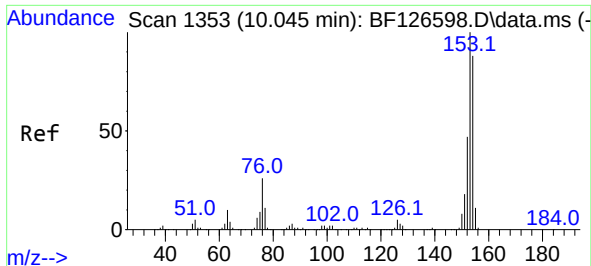


#45  
2-Fluorobiphenyl  
Concen: 66.003 ng  
RT: 9.322 min Scan# 1230  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43



Tgt Ion: 172 Resp: 1052819  
Ion Ratio Lower Upper  
172 100  
171 35.1 28.3 42.5  
170 23.2 19.0 28.6





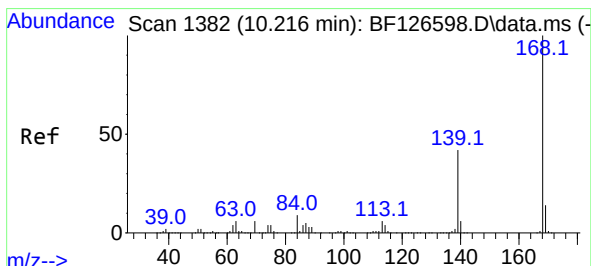
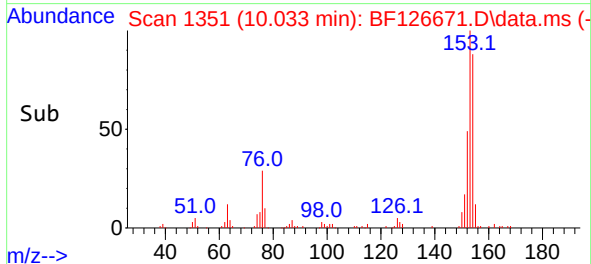
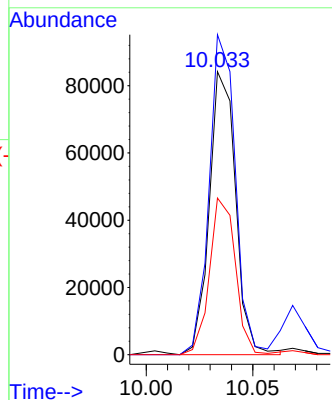
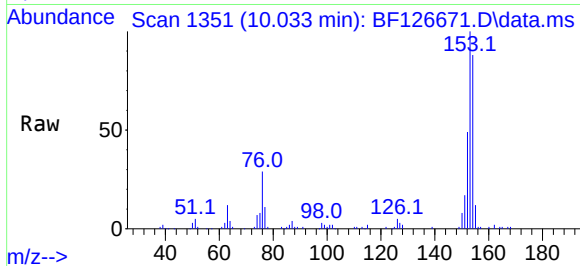
#52  
Acenaphthene  
Concen: 5.236 ng  
RT: 10.033 min Scan# 11  
Delta R.T. -0.012 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

Instrument :  
BNA\_F  
ClientSampleId :  
SB-2(2.5-3)

Tgt Ion:154 Resp: 72612  
Ion Ratio Lower Upper  
154 100  
153 113.0 87.8 131.6  
152 55.3 39.4 59.2

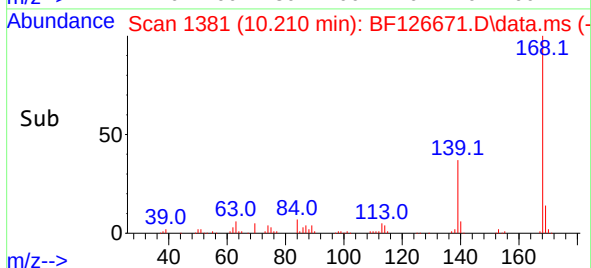
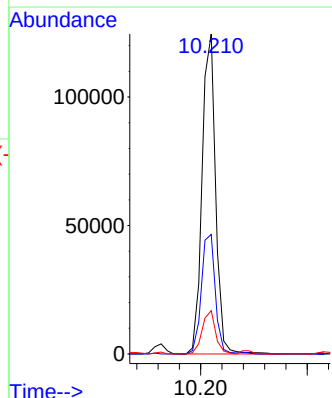
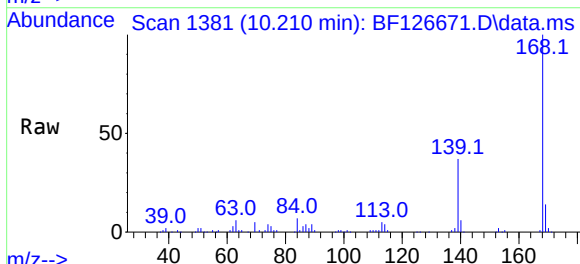
Manual Integrations  
APPROVED

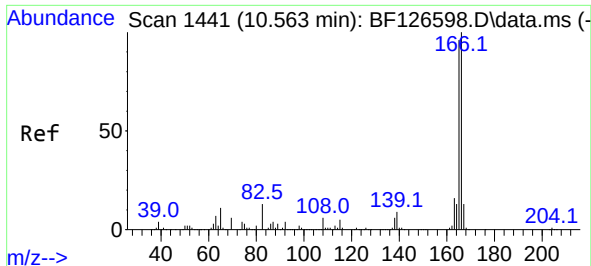
Reviewed By :Christian Giraldo 01/26/2022  
Supervised By :Jagrut Upadhyay 01/26/2022



#55  
Dibenzofuran  
Concen: 5.277 ng  
RT: 10.210 min Scan# 1381  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

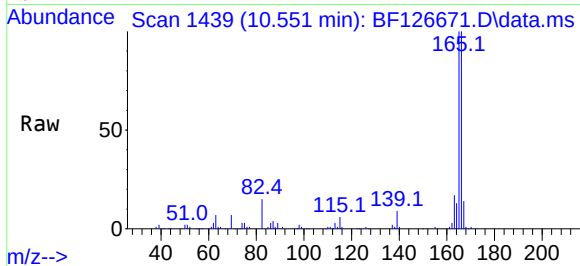
Tgt Ion:168 Resp: 109974  
Ion Ratio Lower Upper  
168 100  
139 37.3 30.6 46.0  
169 13.6 10.0 15.0





#58  
Fluorene  
Concen: 5.764 ng  
RT: 10.551 min Scan# 1441  
Delta R.T. -0.012 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

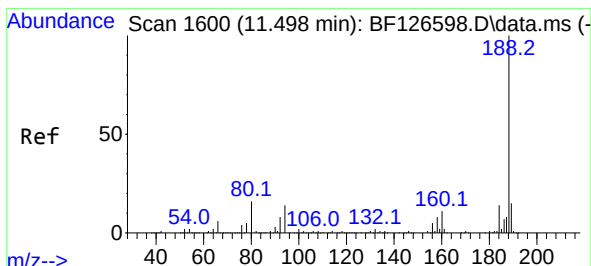
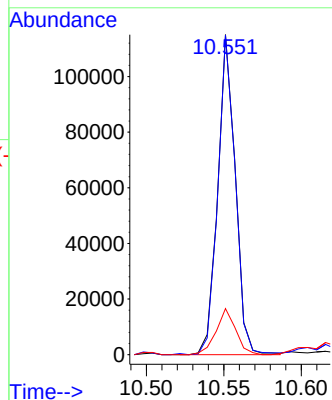
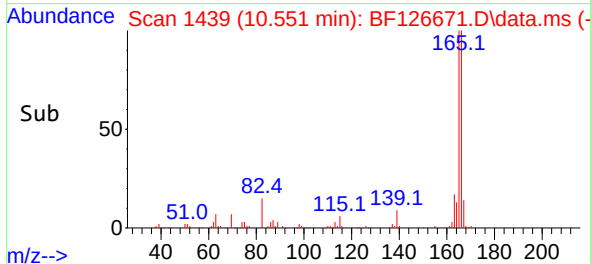
Instrument :  
BNA\_F  
ClientSampleId :  
SB-2(2.5-3)



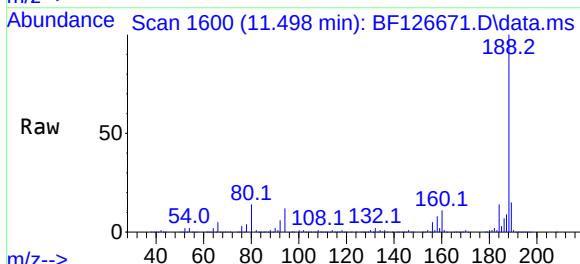
Tgt Ion:166 Resp: 90681  
Ion Ratio Lower Upper  
166 100  
165 99.9 77.7 116.5  
167 14.4 10.7 16.1

Manual Integrations  
APPROVED

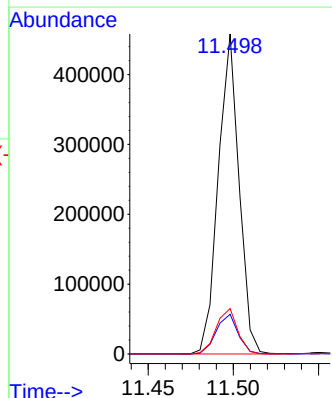
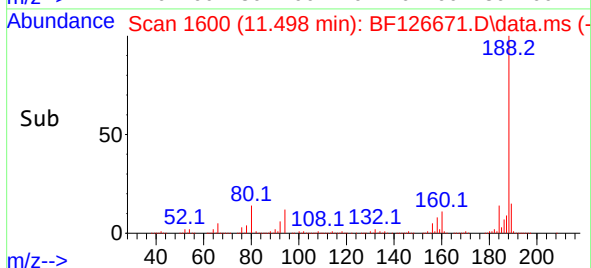
Reviewed By :Christian Giraldo 01/26/2022  
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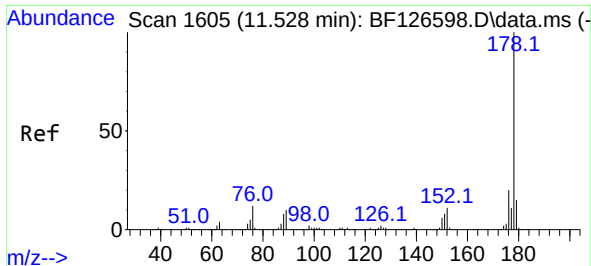
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.498 min Scan# 1600  
Delta R.T. 0.000 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43



Tgt Ion:188 Resp: 387777  
Ion Ratio Lower Upper  
188 100  
94 12.4 10.1 15.1  
80 14.2 11.8 17.6

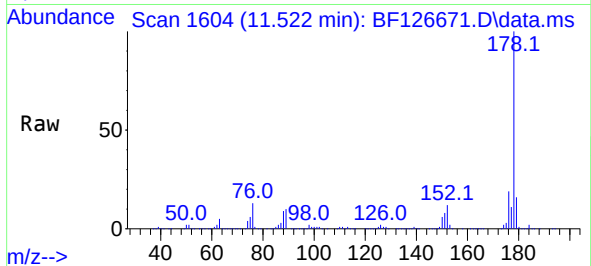






#71  
Phenanthrene  
Concen: 45.894 ng  
RT: 11.522 min Scan# 1604  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

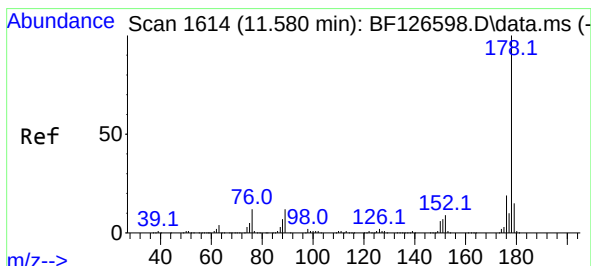
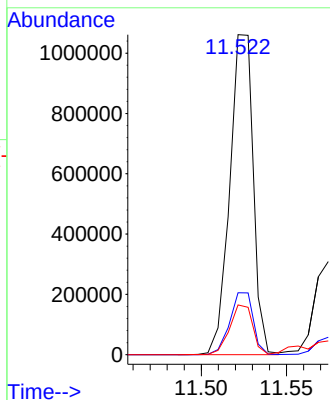
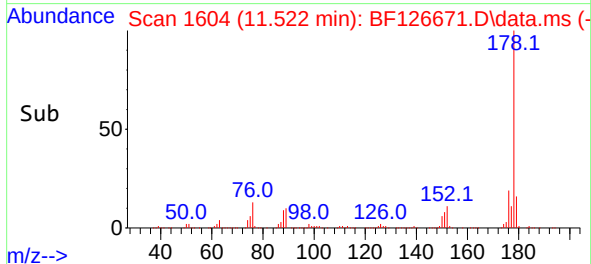
Instrument :  
BNA\_F  
ClientSampleId :  
SB-2(2.5-3)



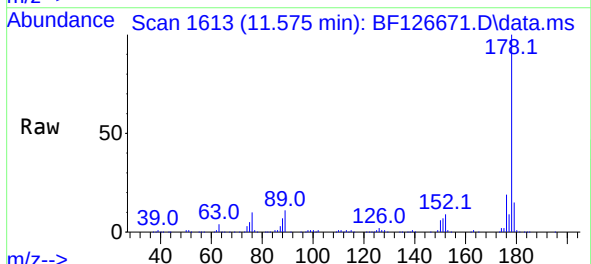
Tgt Ion:178 Resp: 1016740  
Ion Ratio Lower Upper  
178 100  
176 19.3 15.7 23.5  
179 15.5 12.3 18.5

Manual Integrations  
APPROVED

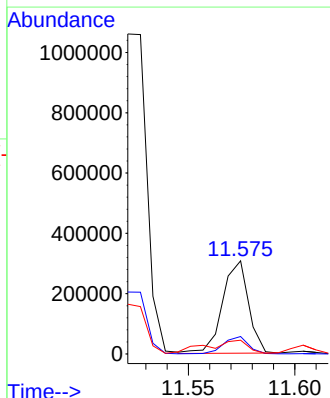
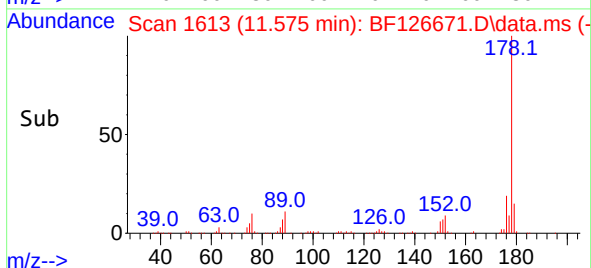
Reviewed By :Christian Giraldo 01/26/2022  
Supervised By :Jagrut Upadhyay 01/26/2022

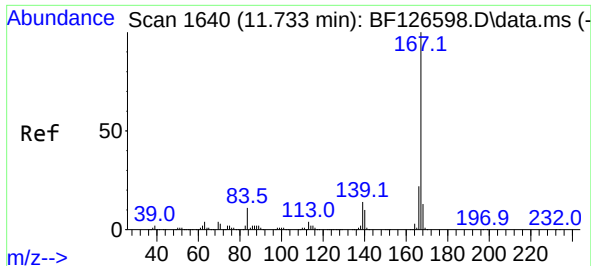


#72  
Anthracene  
Concen: 11.734 ng  
RT: 11.575 min Scan# 1613  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43



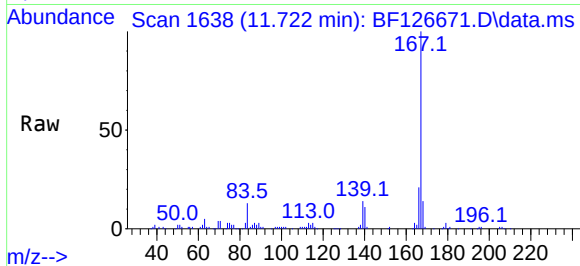
Tgt Ion:178 Resp: 260829  
Ion Ratio Lower Upper  
178 100  
176 18.8 15.0 22.6  
179 14.8 12.5 18.7





#73  
Carbazole  
Concen: 6.008 ng  
RT: 11.722 min Scan# 1638  
Delta R.T. -0.012 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

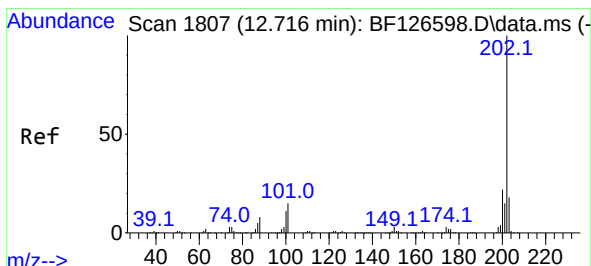
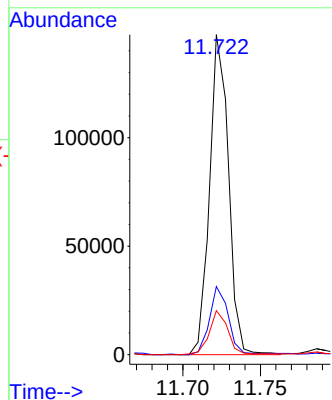
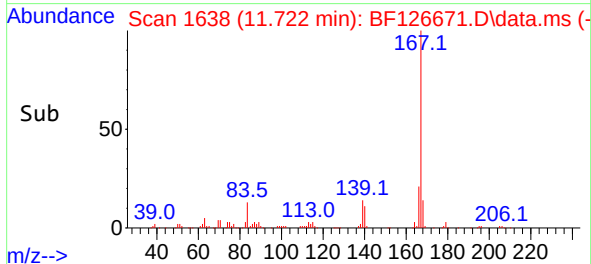
Instrument :  
BNA\_F  
ClientSampleId :  
SB-2(2.5-3)



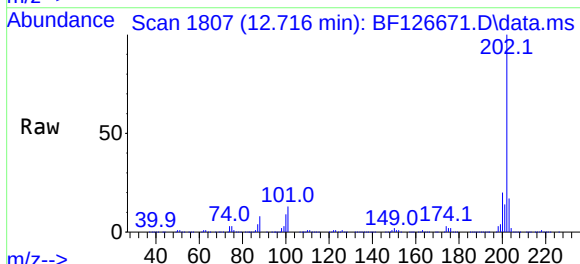
Tgt Ion:167 Resp: 125388  
Ion Ratio Lower Upper  
167 100  
166 21.3 16.9 25.3  
139 13.7 11.3 16.9

Manual Integrations  
APPROVED

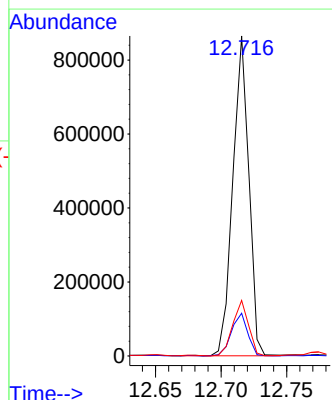
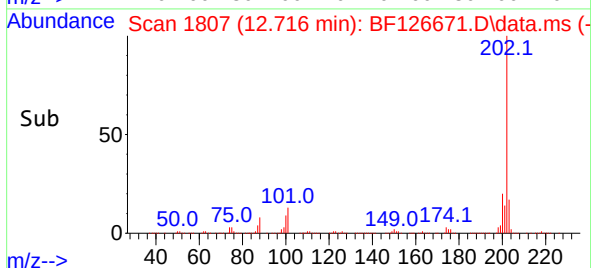
Reviewed By :Christian Giraldo 01/26/2022  
Supervised By :Jagrut Upadhyay 01/26/2022

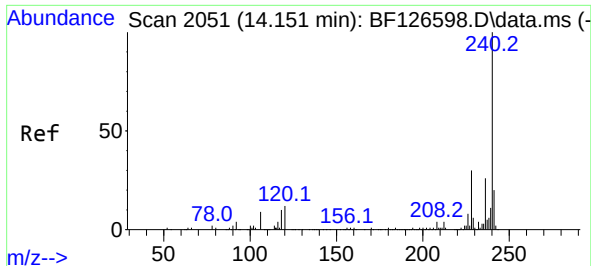


#75  
Fluoranthene  
Concen: 33.545 ng  
RT: 12.716 min Scan# 1807  
Delta R.T. -0.000 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43



Tgt Ion:202 Resp: 734051  
Ion Ratio Lower Upper  
202 100  
101 13.3 0.0 35.7  
203 17.3 0.0 37.1





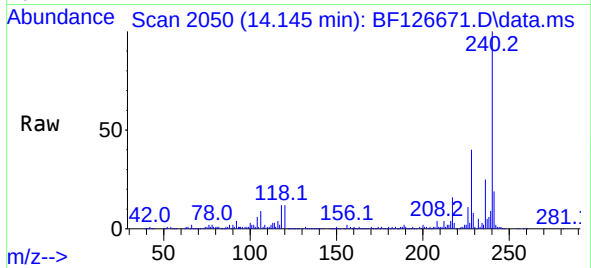
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.145 min Scan# 2050  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

Instrument :

BNA\_F

ClientSampleId :

SB-2(2.5-3)

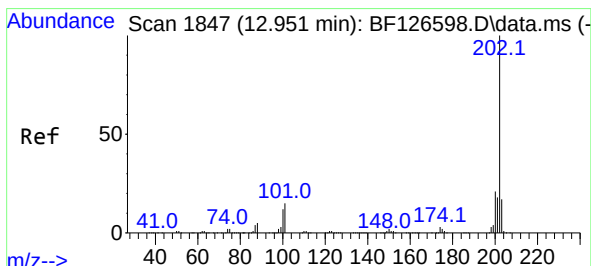
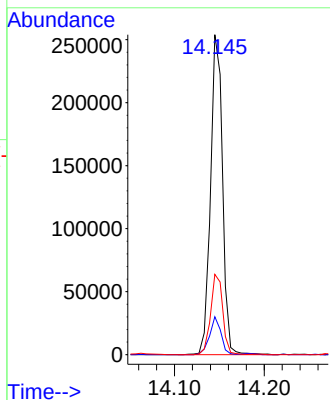
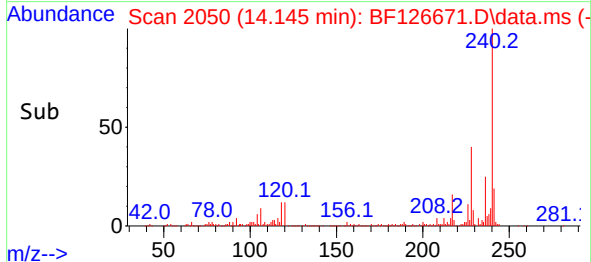


Tgt Ion:240 Resp: 235274  
Ion Ratio Lower Upper  
240 100  
120 11.9 14.4 21.6  
236 25.1 20.5 30.7

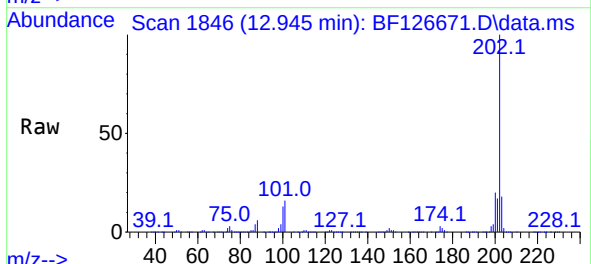
Manual Integrations

APPROVED

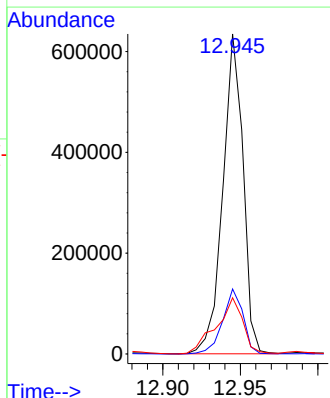
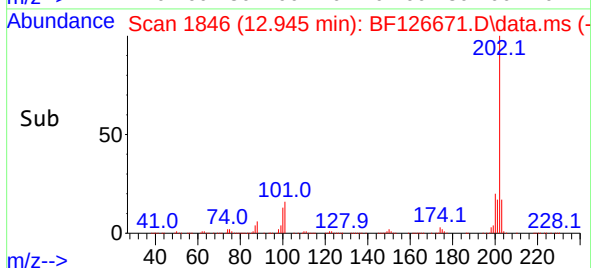
Reviewed By :Christian Giraldo 01/26/2022  
Supervised By :Jagrut Upadhyay 01/26/2022

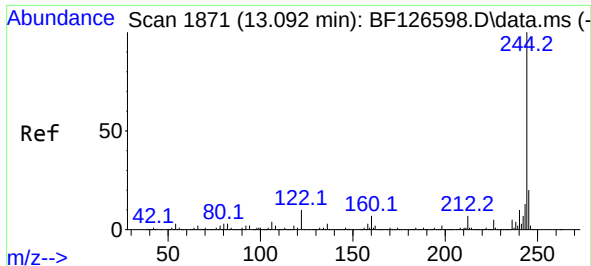


#78  
Pyrene  
Concen: 30.240 ng  
RT: 12.945 min Scan# 1846  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43



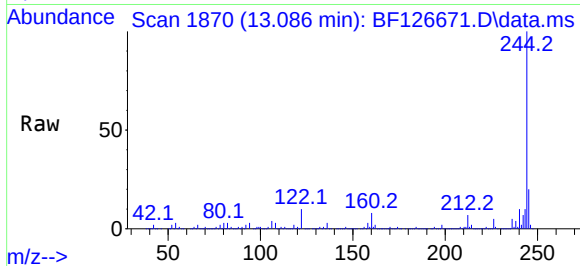
Tgt Ion:202 Resp: 575360  
Ion Ratio Lower Upper  
202 100  
200 20.3 16.6 24.8  
203 17.6 13.8 20.8





#79  
 Terphenyl-d14  
 Concen: 61.428 ng  
 RT: 13.086 min Scan# 1871  
 Delta R.T. -0.006 min  
 Lab File: BF126671.D  
 Acq: 25 Jan 2022 18:43

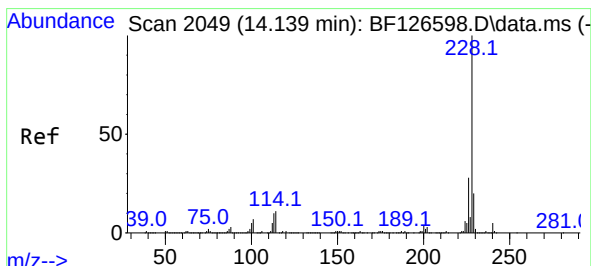
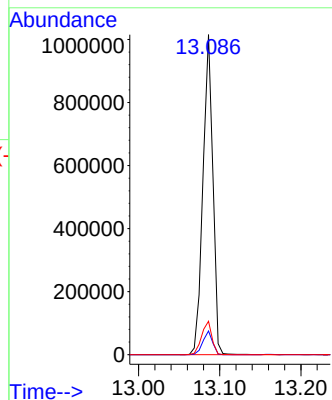
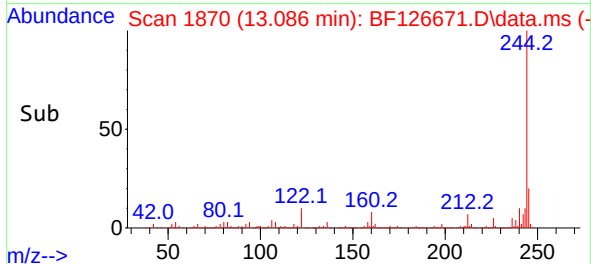
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-2(2.5-3)



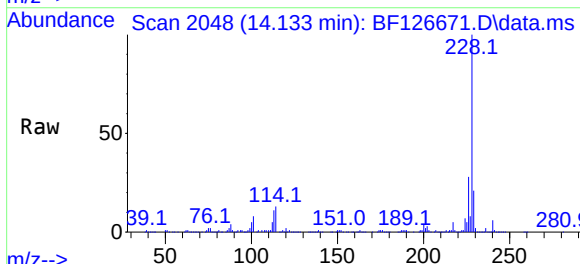
Tgt Ion:244 Resp: 861660  
 Ion Ratio Lower Upper  
 244 100  
 212 7.4 5.0 7.4  
 122 10.4 13.3 19.9

Manual Integrations  
 APPROVED

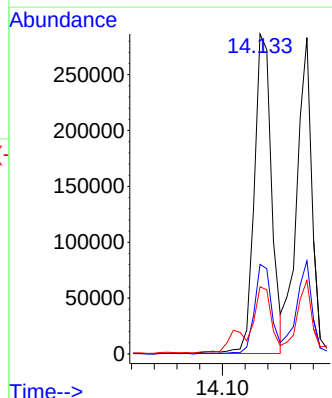
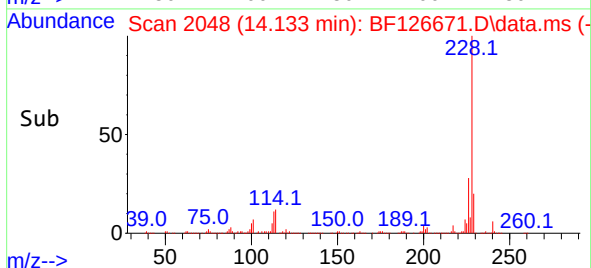
Reviewed By :Christian Giraldo 01/26/2022  
 Supervised By :Jagrut Upadhyay 01/26/2022

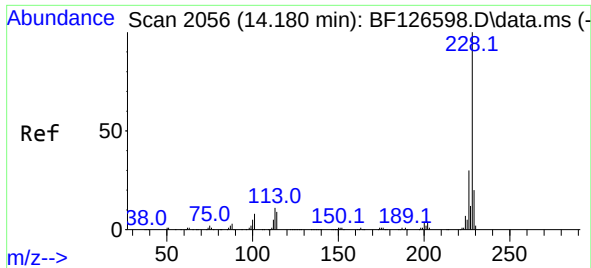


#81  
 Benzo(a)anthracene  
 Concen: 18.945 ng  
 RT: 14.133 min Scan# 2048  
 Delta R.T. -0.006 min  
 Lab File: BF126671.D  
 Acq: 25 Jan 2022 18:43



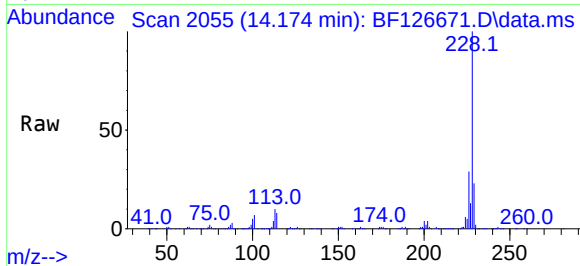
Tgt Ion:228 Resp: 302961  
 Ion Ratio Lower Upper  
 228 100  
 226 28.0 21.4 32.0  
 229 21.0 15.4 23.2





#83  
Chrysene  
Concen: 17.045 ng  
RT: 14.174 min Scan# 2055  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

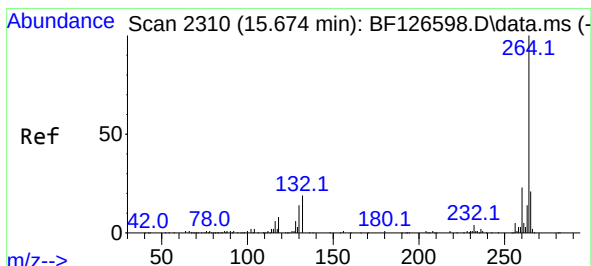
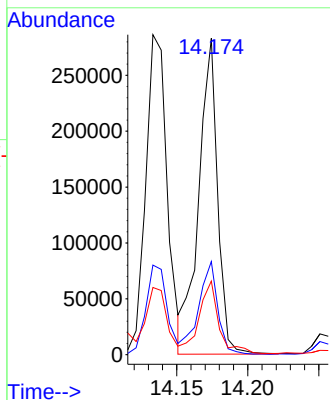
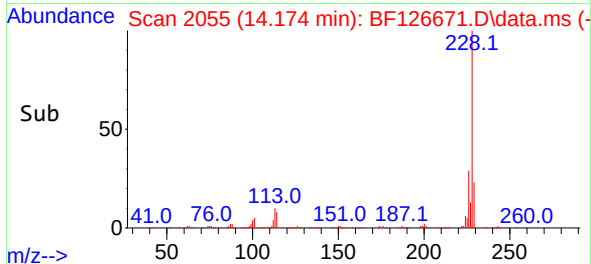
Instrument :  
BNA\_F  
ClientSampleId :  
SB-2(2.5-3)



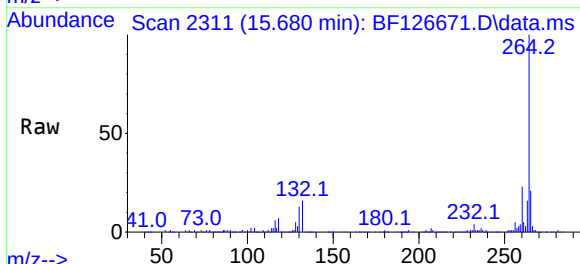
Tgt Ion:228 Resp: 262269  
Ion Ratio Lower Upper  
228 100  
226 29.4 23.7 35.5  
229 23.3 15.5 23.3

Manual Integrations  
APPROVED

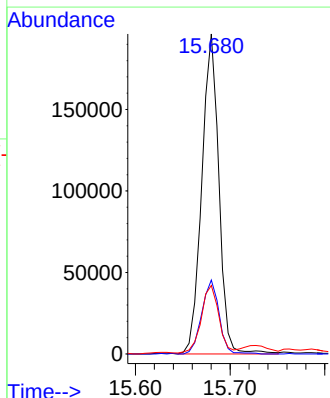
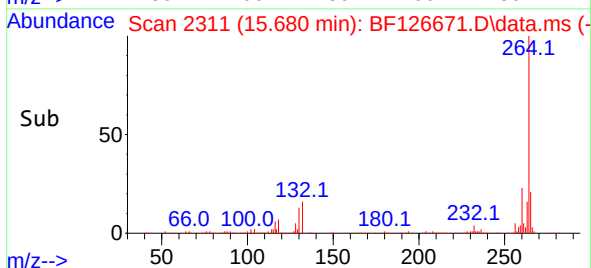
Reviewed By :Christian Giraldo 01/26/2022  
Supervised By :Jagrut Upadhyay 01/26/2022

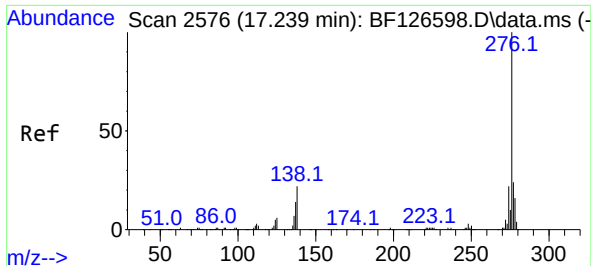


#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.680 min Scan# 2311  
Delta R.T. 0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43



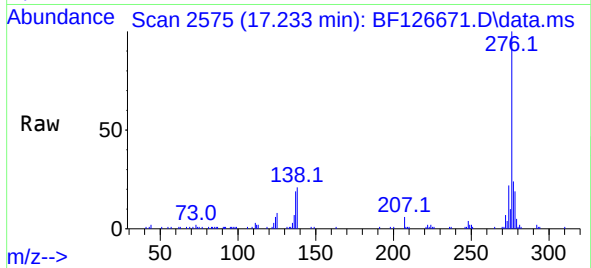
Tgt Ion:264 Resp: 245925  
Ion Ratio Lower Upper  
264 100  
260 23.1 19.2 28.8  
265 21.4 17.4 26.2





#87  
Indeno(1,2,3-cd)pyrene  
Concen: 6.813 ng  
RT: 17.233 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

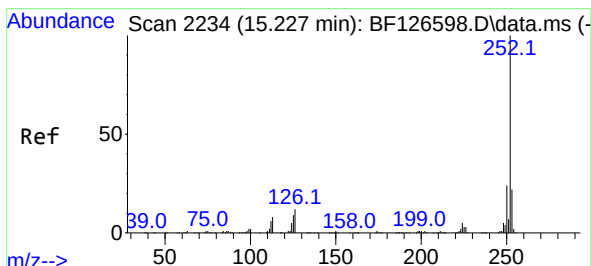
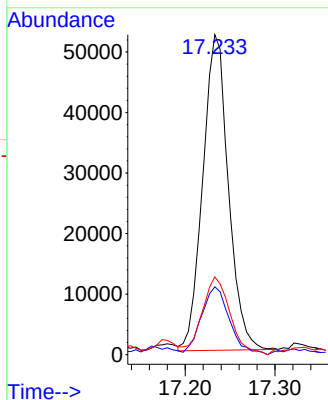
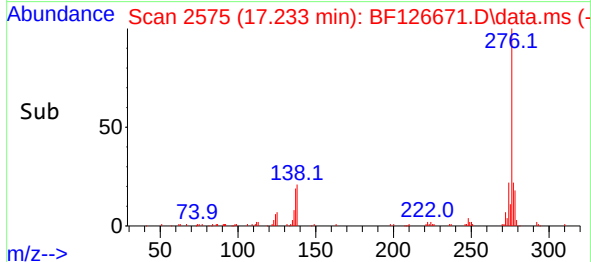
Instrument :  
BNA\_F  
ClientSampleId :  
SB-2(2.5-3)



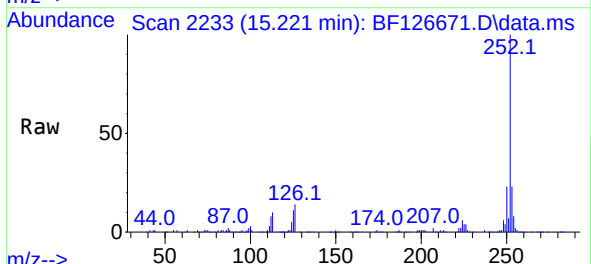
Tgt Ion:276 Resp: 103520  
Ion Ratio Lower Upper  
276 100  
138 23.5 29.2 43.8  
277 26.7 19.8 29.8

Manual Integrations  
APPROVED

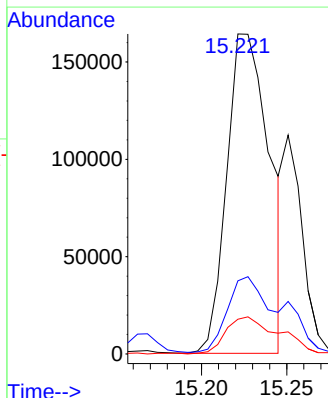
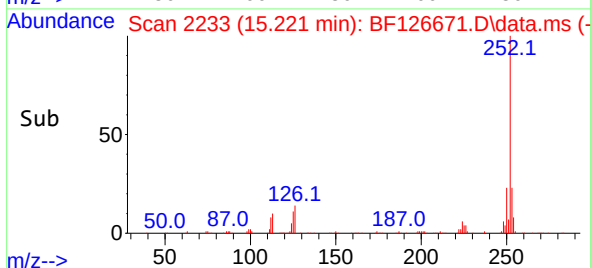
Reviewed By :Christian Giraldo 01/26/2022  
Supervised By :Jagrut Upadhyay 01/26/2022

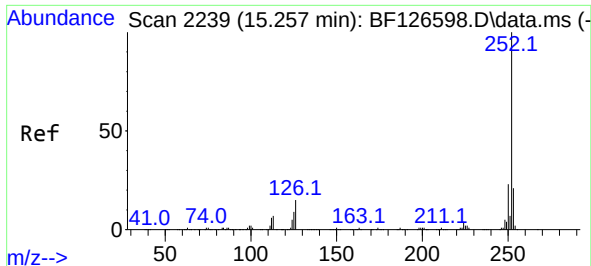


#88  
Benzo(b)fluoranthene  
Concen: 17.487 ng m  
RT: 15.221 min Scan# 2233  
Delta R.T. -0.006 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43



Tgt Ion:252 Resp: 285178  
Ion Ratio Lower Upper  
252 100  
253 22.8 17.8 26.8  
125 10.9 12.4 18.6





#89

Benzo(k)fluoranthene

Concen: 5.324 ng m

RT: 15.251 min Scan# 21

Delta R.T. -0.006 min

Lab File: BF126671.D

Acq: 25 Jan 2022 18:43

Instrument :

BNA\_F

ClientSampleId :

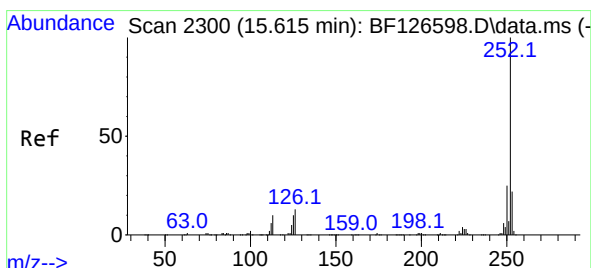
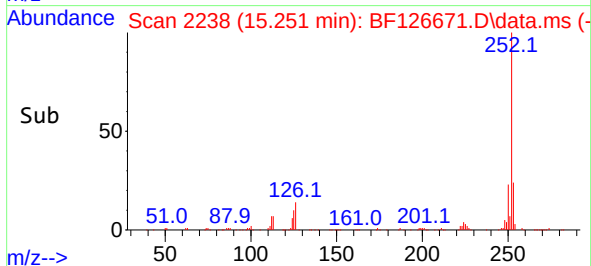
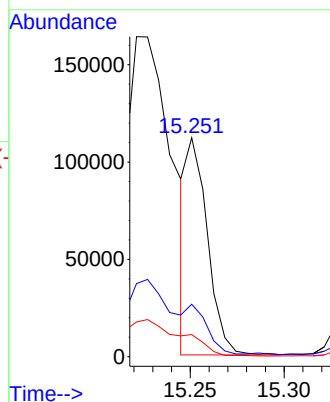
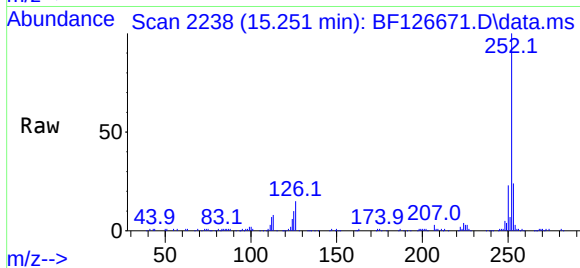
SB-2(2.5-3)

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 8524      |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 24.0  | 17.5 26.3 |
| 125         | 10.1  | 11.8 17.6 |

Manual Integrations

APPROVED

Reviewed By :Christian Giraldo 01/26/2022  
Supervised By :Jagrut Upadhyay 01/26/2022



#90

Benzo(a)pyrene

Concen: 15.235 ng m

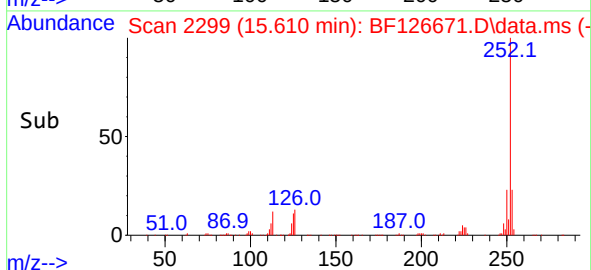
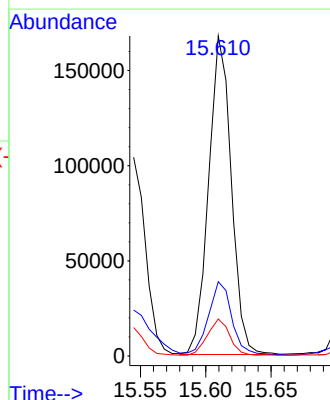
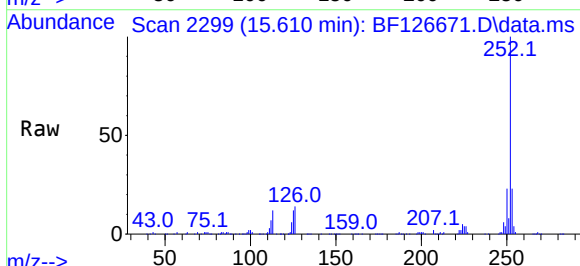
RT: 15.610 min Scan# 2299

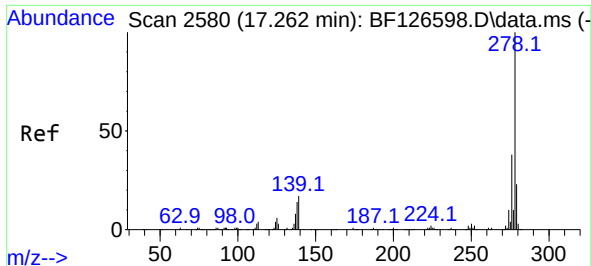
Delta R.T. -0.006 min

Lab File: BF126671.D

Acq: 25 Jan 2022 18:43

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 202158    |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 23.2  | 17.1 25.7 |
| 125         | 11.5  | 13.0 19.6 |





#91  
Dibenzo(a,h)anthracene  
Concen: 2.649 ng  
RT: 17.245 min Scan# 21  
Delta R.T. -0.018 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

Instrument :

BNA\_F

ClientSampleId :

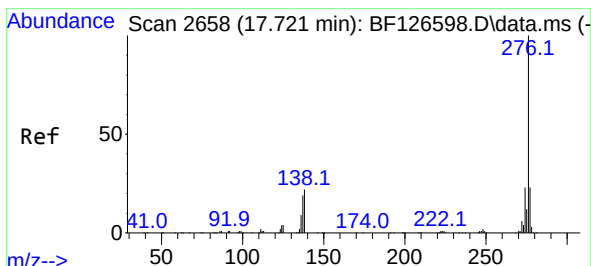
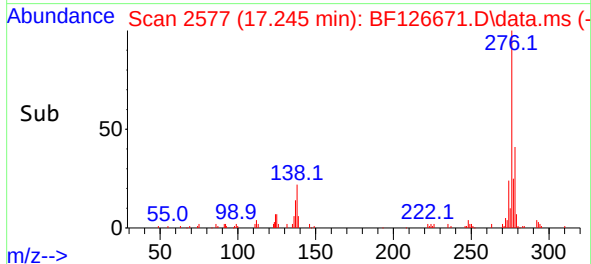
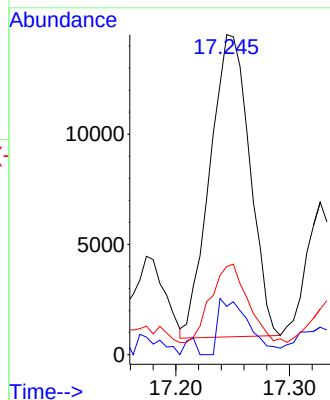
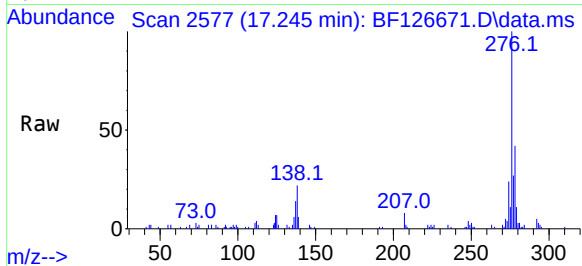
SB-2(2.5-3)

Tgt Ion:278 Resp: 33349  
Ion Ratio Lower Upper  
278 100  
139 15.1 18.0 27.0  
279 27.6 18.6 27.8

Manual Integrations

APPROVED

Reviewed By :Christian Giraldo 01/26/2022  
Supervised By :Jagrut Upadhyay 01/26/2022



#92  
Benzo(g,h,i)perylene  
Concen: 7.050 ng  
RT: 17.709 min Scan# 2656  
Delta R.T. -0.012 min  
Lab File: BF126671.D  
Acq: 25 Jan 2022 18:43

Tgt Ion:276 Resp: 87014  
Ion Ratio Lower Upper  
276 100  
277 25.9 18.5 27.7  
138 19.0 25.9 38.9#

