

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF071123\  
 Data File : BF134234.D  
 Acq On : 12 Jul 2023 02:49  
 Operator : CG\JU  
 Sample : 03375-01 2X  
 Misc :  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-5(0-2)

Manual Integrations  
 APPROVED

Reviewed By :Yogesh Patel 07/12/2023  
 Supervised By :mohammad ahmed 07/12/2023

Quant Time: Jul 12 03:56:15 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF062623.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 11 13:06:48 2023  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|--------|------|----------|--------|-------|----------|
| -----                         |        |      |          |        |       |          |
| Internal Standards            |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 6.846  | 152  | 95241    | 20.000 | ng    | 0.00     |
| 21) Naphthalene-d8            | 8.122  | 136  | 319506   | 20.000 | ng    | 0.00     |
| 39) Acenaphthene-d10          | 9.886  | 164  | 126880   | 20.000 | ng    | 0.00     |
| 64) Phenanthrene-d10          | 11.381 | 188  | 244039   | 20.000 | ng    | 0.00     |
| 76) Chrysene-d12              | 14.045 | 240  | 145469   | 20.000 | ng    | 0.00     |
| 86) Perylene-d12              | 15.557 | 264  | 119925   | 20.000 | ng    | 0.01     |
|                               |        |      |          |        |       |          |
| System Monitoring Compounds   |        |      |          |        |       |          |
| 5) 2-Fluorophenol             | 5.475  | 112  | 255177   | 44.818 | ng    | 0.00     |
| 7) Phenol-d6                  | 6.481  | 99   | 280909   | 40.118 | ng    | 0.00     |
| 23) Nitrobenzene-d5           | 7.404  | 82   | 174043   | 29.364 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol      | 10.681 | 330  | 62169    | 39.080 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl          | 9.198  | 172  | 276290   | 31.660 | ng    | 0.00     |
| 79) Terphenyl-d14             | 12.975 | 244  | 265807   | 29.408 | ng    | 0.00     |
|                               |        |      |          |        |       |          |
| Target Compounds              |        |      |          |        |       | Qvalue   |
| 49) Acenaphthylene            | 9.745  | 152  | 104767   | 8.236  | ng    | 99       |
| 71) Phenanthrene              | 11.404 | 178  | 224781   | 18.297 | ng    | 98       |
| 72) Anthracene                | 11.457 | 178  | 58625    | 4.588  | ng    | 98       |
| 73) Carbazole                 | 11.616 | 167  | 38199    | 3.266  | ng    | 97       |
| 75) Fluoranthene              | 12.604 | 202  | 404271   | 30.438 | ng    | 98       |
| 78) Pyrene                    | 12.833 | 202  | 325473   | 24.042 | ng    | 99       |
| 80) Butylbenzylphthalate      | 13.463 | 149  | 356149   | 70.145 | ng    | 97       |
| 81) Benzo(a)anthracene        | 14.033 | 228  | 133266   | 13.210 | ng    | 94       |
| 83) Chrysene                  | 14.074 | 228  | 148013   | 15.148 | ng    | 98       |
| 84) Bis(2-ethylhexyl)phtha... | 14.022 | 149  | 76774    | 13.159 | ng    | 96       |
| 87) Indeno(1,2,3-cd)pyrene    | 17.110 | 276  | 105733   | 12.706 | ng    | # 92     |
| 88) Benzo(b)fluoranthene      | 15.110 | 252  | 226566m  | 32.129 | ng    |          |
| 89) Benzo(k)fluoranthene      | 15.139 | 252  | 50875m   | 7.086  | ng    |          |
| 90) Benzo(a)pyrene            | 15.492 | 252  | 115883   | 16.994 | ng    | 94       |
| 91) Dibenzo(a,h)anthracene    | 17.115 | 278  | 29893    | 4.398  | ng    | # 87     |
| 92) Benzo(g,h,i)perylene      | 17.586 | 276  | 93891    | 13.395 | ng    | 95       |

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

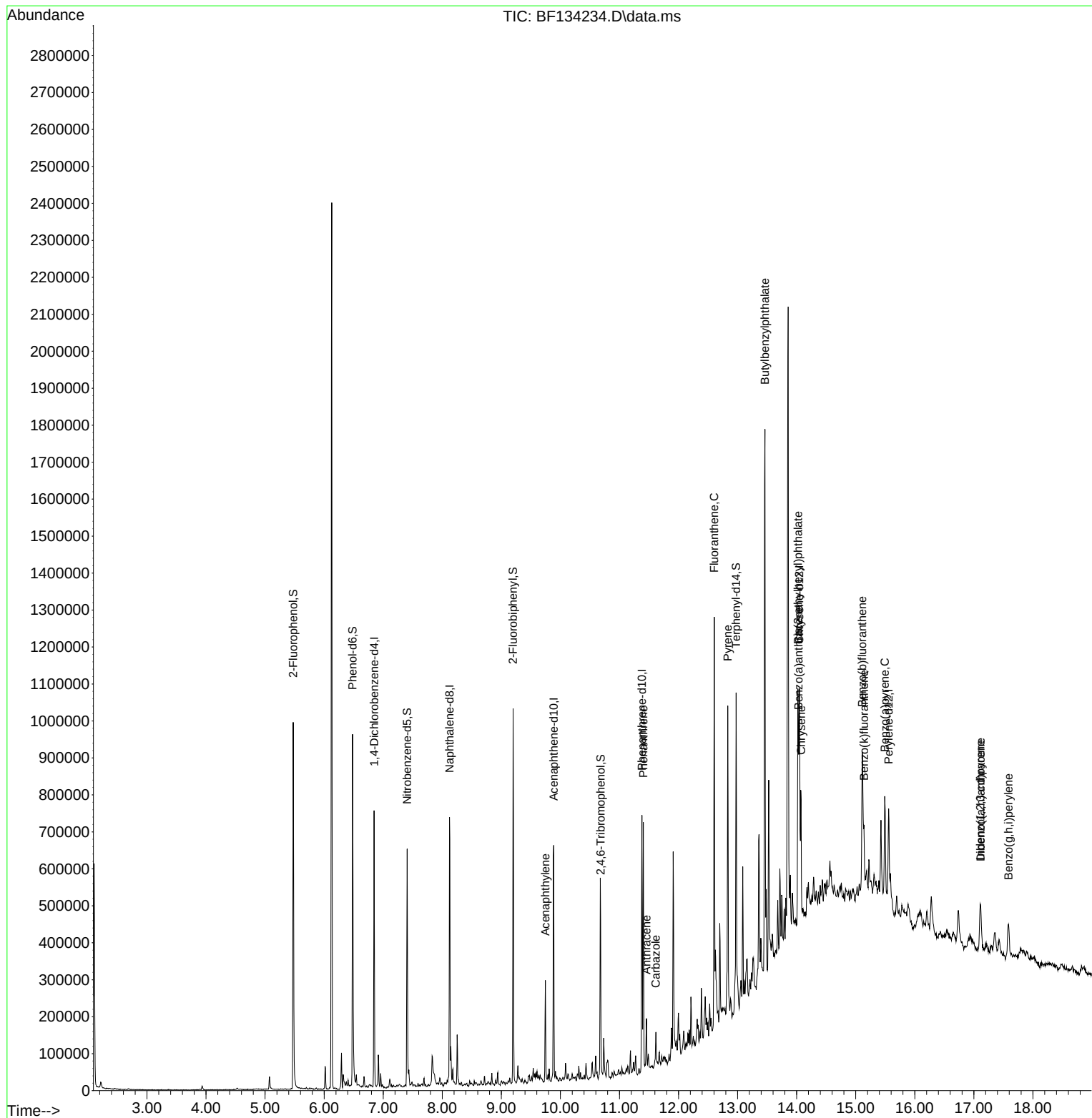
Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF071123\  
Data File : BF134234.D  
Acq On : 12 Jul 2023 02:49  
Operator : CG\JU  
Sample : 03375-01 2X  
Misc :  
ALS Vial : 19 Sample Multiplier: 1

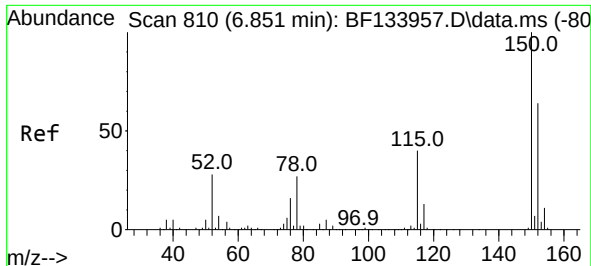
Instrument :  
BNA\_F  
ClientSampleId :  
SB-5(0-2)

Quant Time: Jul 12 03:56:15 2023  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF062623.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 11 13:06:48 2023  
Response via : Initial Calibration

Manual Integrations  
APPROVED

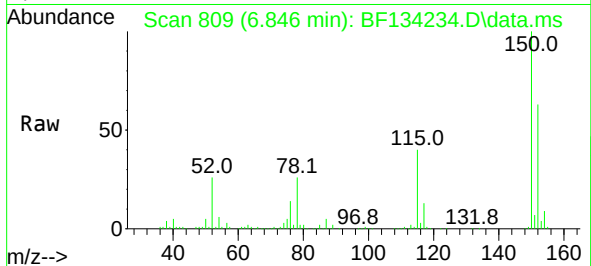
Reviewed By :Yogesh Patel 07/12/2023  
Supervised By :mohammad ahmed 07/12/2023





#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.846 min Scan# 809  
Delta R.T. 0.001 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49

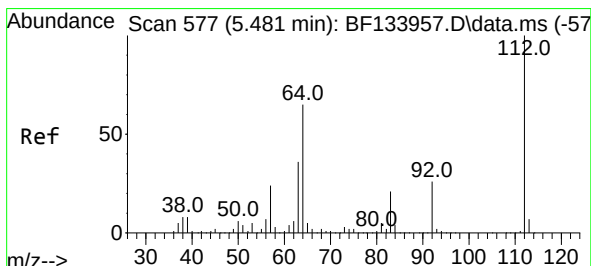
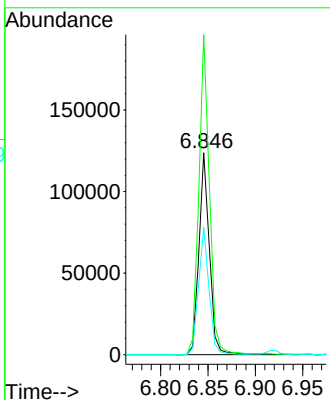
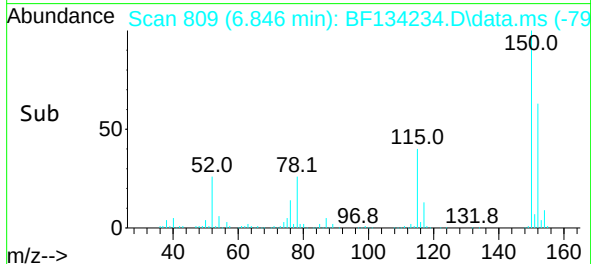
Instrument :  
BNA\_F  
ClientSampleId :  
SB-5(0-2)



Tgt Ion:152 Resp: 9524  
Ion Ratio Lower Upper  
152 100  
150 158.5 124.5 186.7  
115 63.1 50.2 75.2

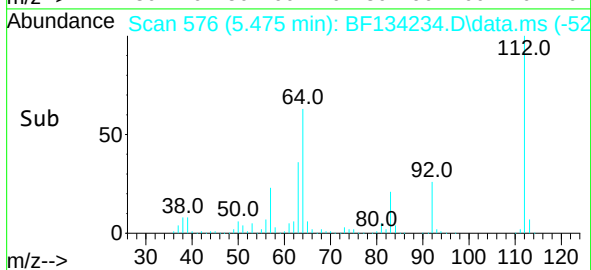
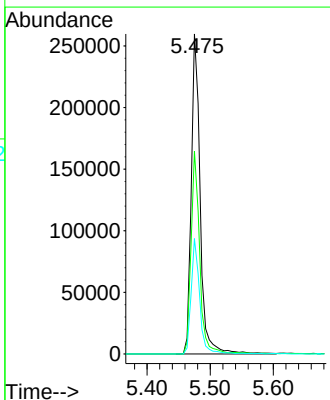
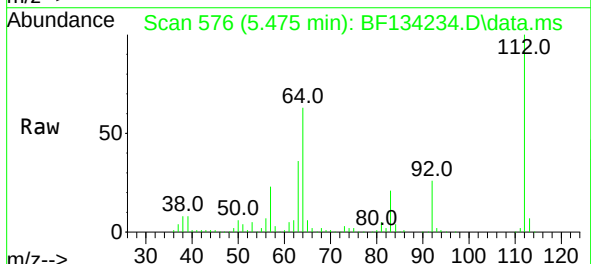
Manual Integrations  
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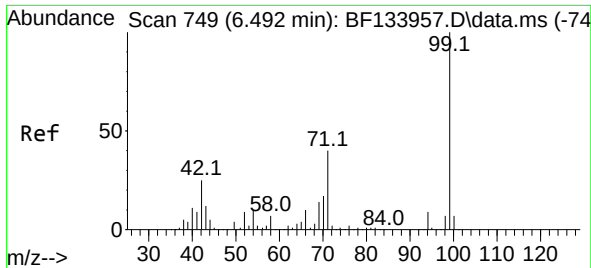
Reviewed By :Yogesh Patel 07/12/2023  
Supervised By :mohammad ahmed 07/12/2023



#5  
2-Fluorophenol  
Concen: 44.818 ng  
RT: 5.475 min Scan# 576  
Delta R.T. 0.000 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49

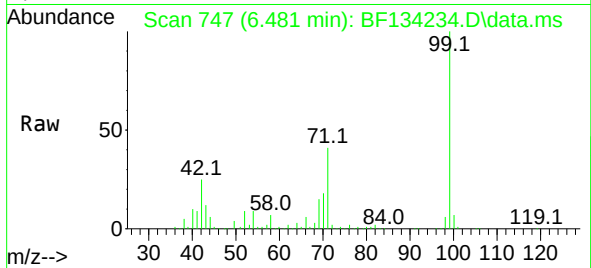
Tgt Ion:112 Resp: 255177  
Ion Ratio Lower Upper  
112 100  
64 63.4 52.1 78.1  
63 36.0 28.6 42.8





#7  
Phenol-d6  
Concen: 40.118 ng  
RT: 6.481 min Scan# 749  
Delta R.T. -0.006 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49

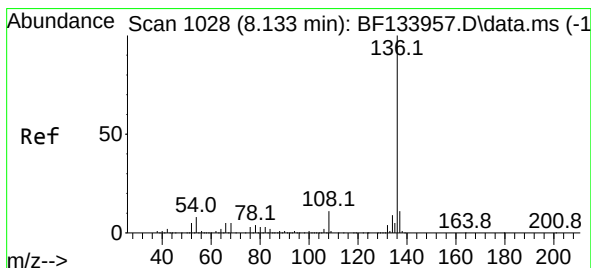
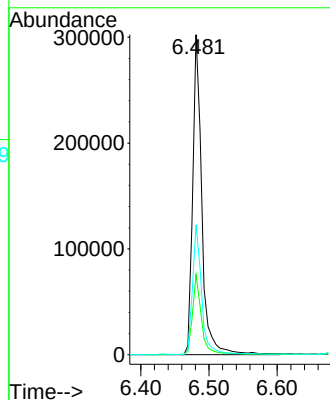
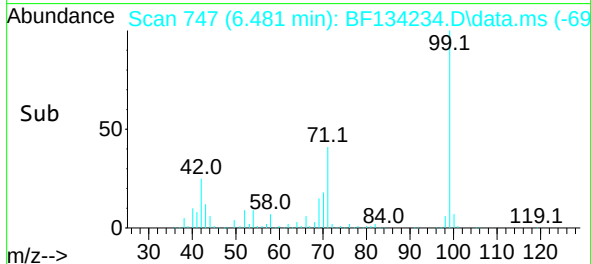
Instrument :  
BNA\_F  
ClientSampleId :  
SB-5(0-2)



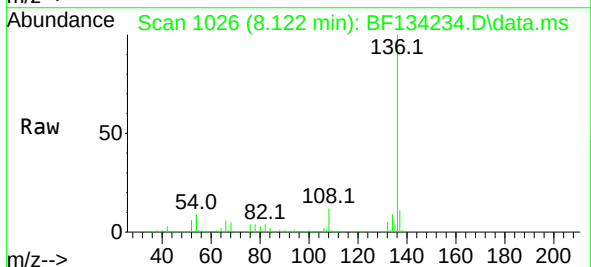
Tgt Ion: 99 Resp: 280909  
Ion Ratio Lower Upper  
99 100  
42 25.1 19.8 29.6  
71 40.6 31.9 47.9

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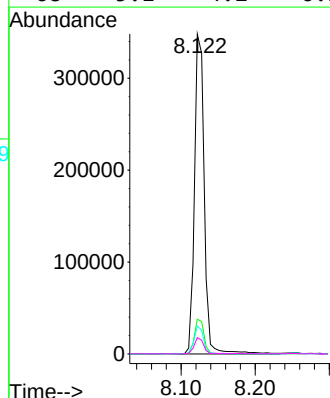
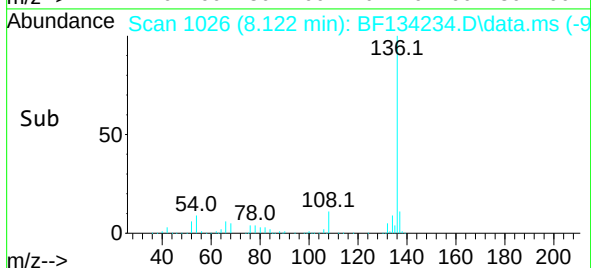
Reviewed By :Yogesh Patel 07/12/2023  
Supervised By :mohammad ahmed 07/12/2023

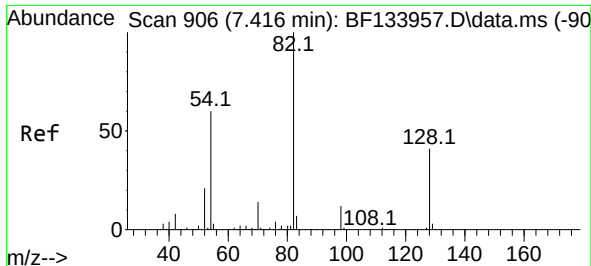


#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.122 min Scan# 1026  
Delta R.T. -0.006 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49



Tgt Ion:136 Resp: 319506  
Ion Ratio Lower Upper  
136 100  
137 10.9 8.6 12.8  
54 8.8 6.5 9.7  
68 5.1 4.2 6.2





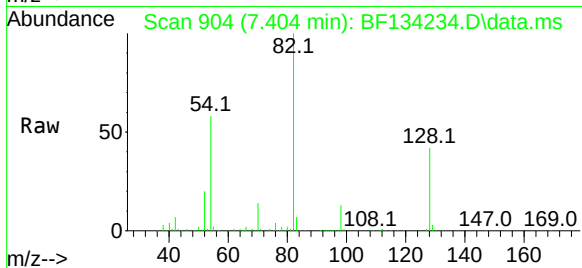
#23  
Nitrobenzene-d5  
Concen: 29.364 ng  
RT: 7.404 min Scan# 906  
Delta R.T. -0.006 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49

Instrument :

BNA\_F

ClientSampleId :

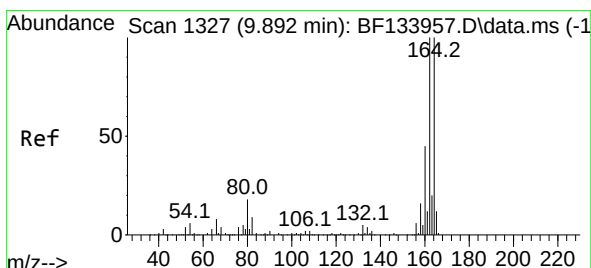
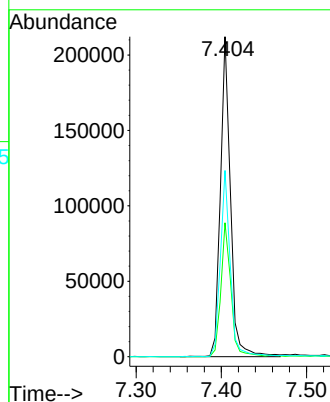
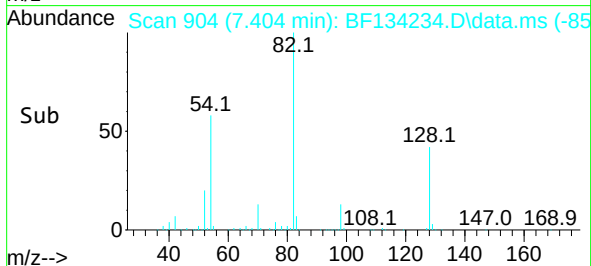
SB-5(0-2)



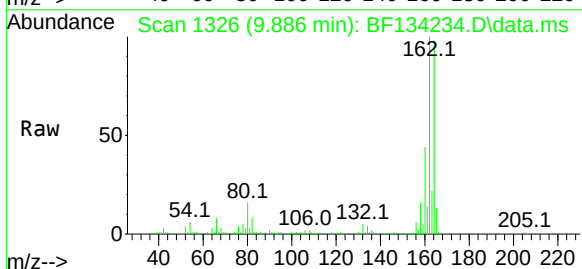
Tgt Ion: 82 Resp: 17404  
Ion Ratio Lower Upper  
82 100  
128 41.9 32.5 48.7  
54 58.2 48.2 72.2

Manual Integrations  
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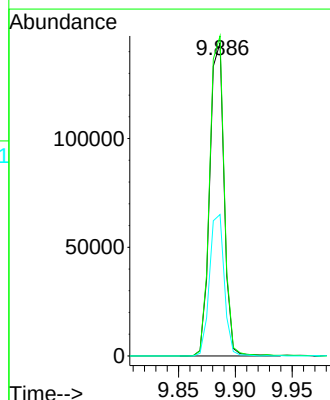
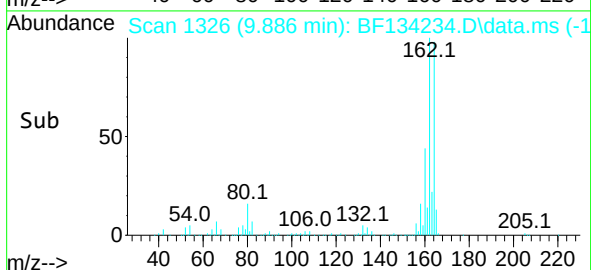
Reviewed By :Yogesh Patel 07/12/2023  
Supervised By :mohammad ahmed 07/12/2023

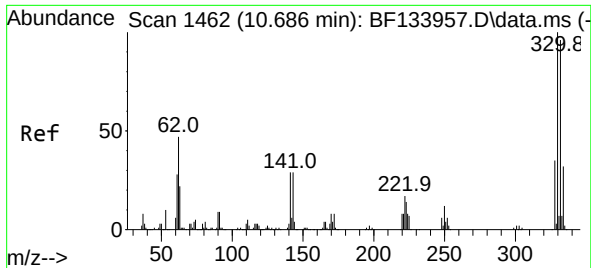


#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.886 min Scan# 1326  
Delta R.T. 0.000 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49



Tgt Ion:164 Resp: 126880  
Ion Ratio Lower Upper  
164 100  
162 102.2 80.0 120.0  
160 45.2 35.9 53.9





#42  
2,4,6-Tribromophenol  
Concen: 39.080 ng  
RT: 10.681 min Scan# 1461  
Delta R.T. 0.000 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49

Instrument :

BNA\_F

ClientSampleId :

SB-5(0-2)

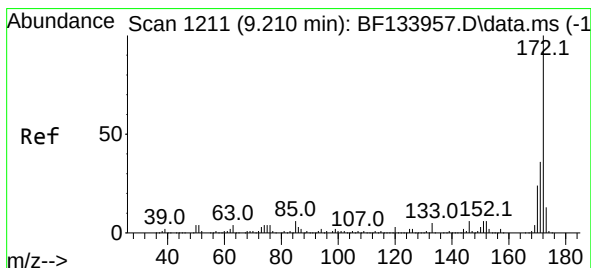
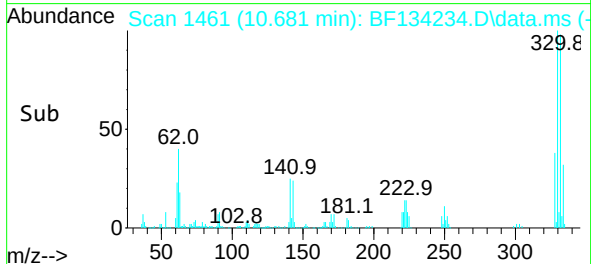
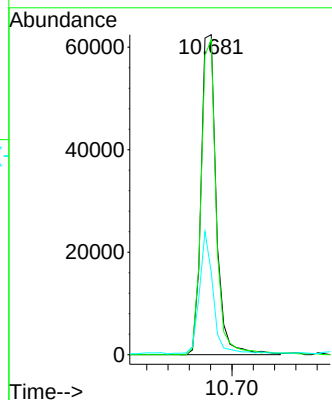
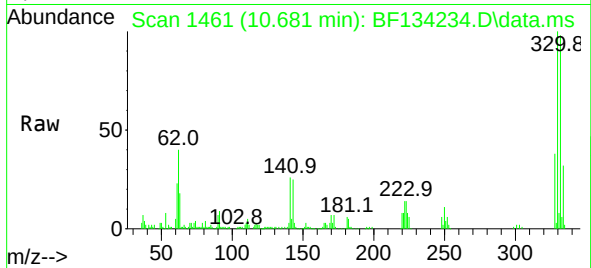
Tgt Ion:330 Resp: 62169  
Ion Ratio Lower Upper  
330 100  
332 97.4 77.0 115.6  
141 33.4 26.3 39.5

Manual Integrations

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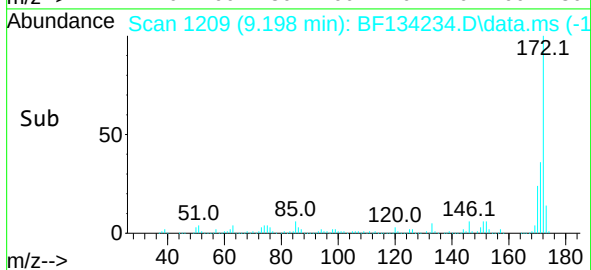
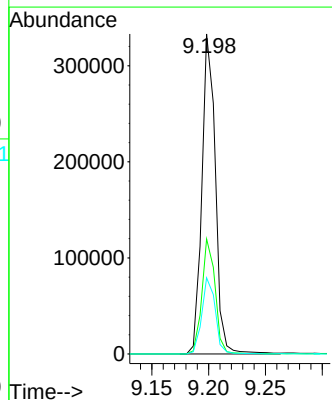
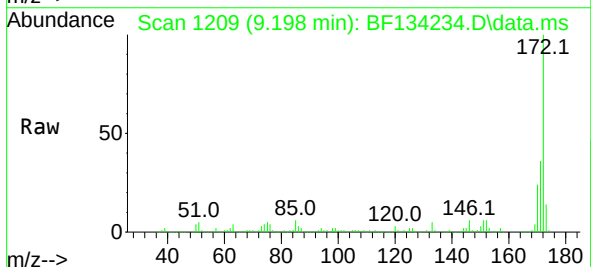
Reviewed By :Yogesh Patel 07/12/2023

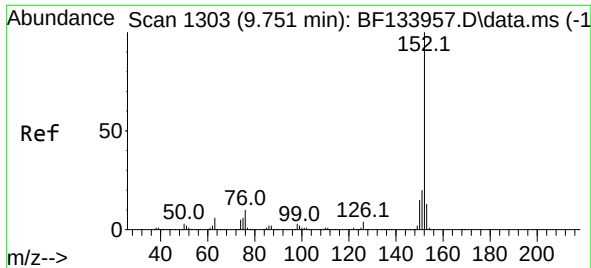
Supervised By :mohammad ahmed 07/12/2023



#45  
2-Fluorobiphenyl  
Concen: 31.660 ng  
RT: 9.198 min Scan# 1209  
Delta R.T. -0.006 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49

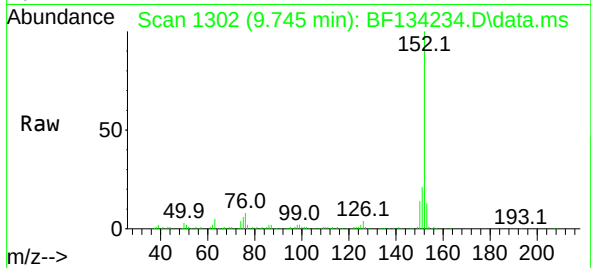
Tgt Ion:172 Resp: 276290  
Ion Ratio Lower Upper  
172 100  
171 35.9 28.6 43.0  
170 23.8 19.4 29.0





#49  
Acenaphthylene  
Concen: 8.236 ng  
RT: 9.745 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49

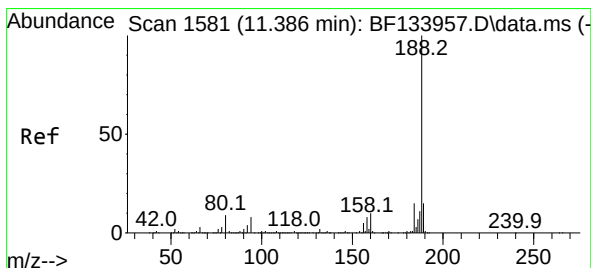
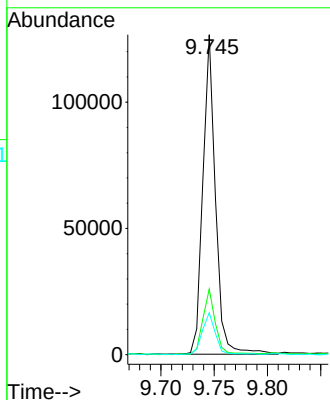
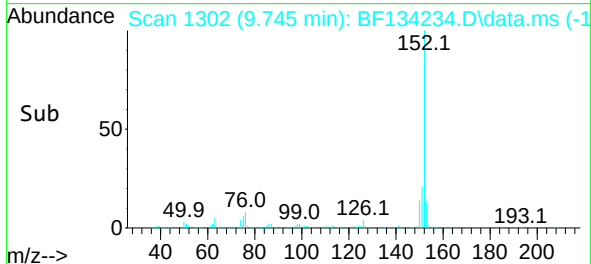
Instrument :  
BNA\_F  
ClientSampleId :  
SB-5(0-2)



Tgt Ion:152 Resp: 10476  
Ion Ratio Lower Upper  
152 100  
151 20.5 16.2 24.2  
153 13.1 10.8 16.2

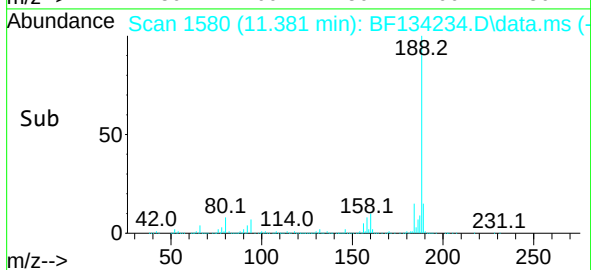
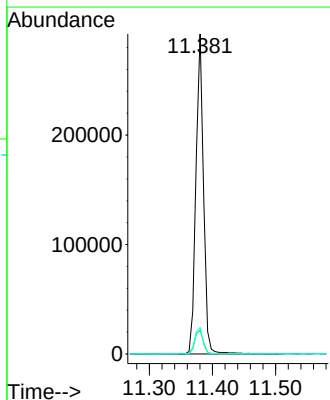
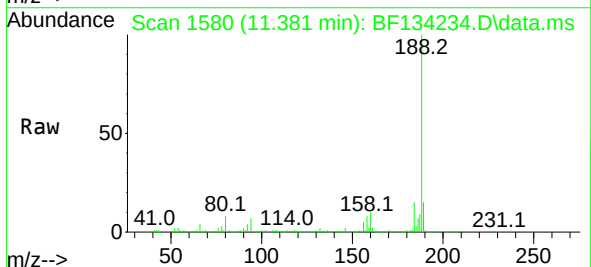
Manual Integrations  
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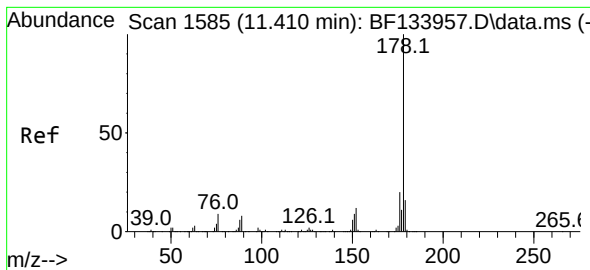
Reviewed By :Yogesh Patel 07/12/2023  
Supervised By :mohammad ahmed 07/12/2023



#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.381 min Scan# 1580  
Delta R.T. 0.000 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49

Tgt Ion:188 Resp: 244039  
Ion Ratio Lower Upper  
188 100  
94 7.4 6.4 9.6  
80 8.3 7.3 10.9





#71

Phenanthrene

Concen: 18.297 ng

RT: 11.404 min Scan# 11

Delta R.T. 0.000 min

Lab File: BF134234.D

Acq: 12 Jul 2023 02:49

Instrument :

BNA\_F

ClientSampleId :

SB-5(0-2)

Tgt Ion:178 Resp: 22478

Ion Ratio Lower Upper

178 100

176 18.4 16.0 24.0

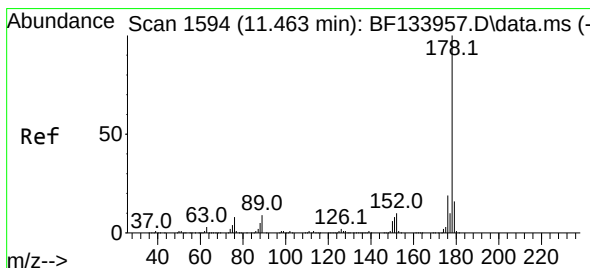
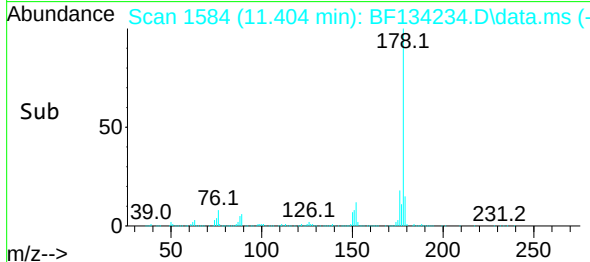
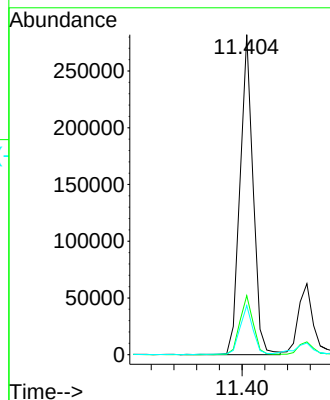
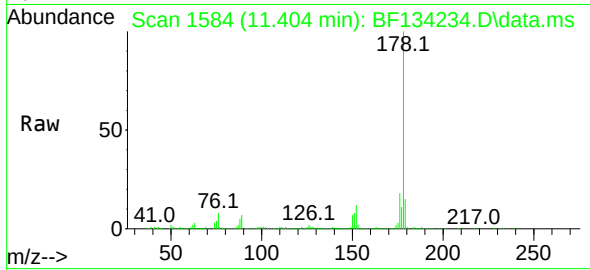
179 15.4 12.4 18.6

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 07/12/2023

Supervised By :mohammad ahmed 07/12/2023



#72

Anthracene

Concen: 4.588 ng

RT: 11.457 min Scan# 1593

Delta R.T. 0.000 min

Lab File: BF134234.D

Acq: 12 Jul 2023 02:49

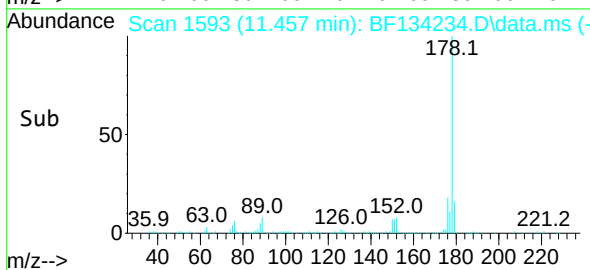
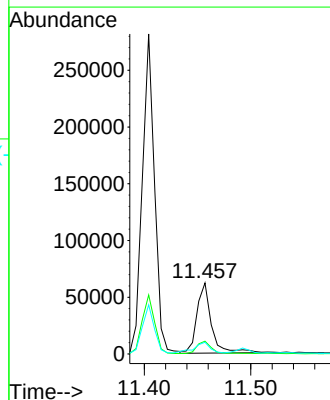
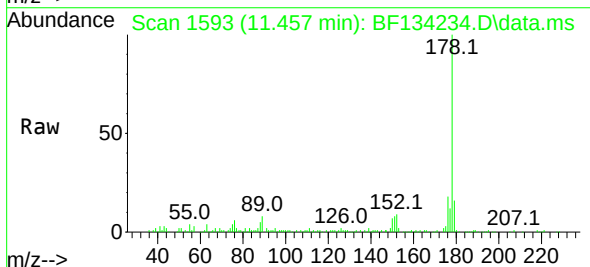
Tgt Ion:178 Resp: 58625

Ion Ratio Lower Upper

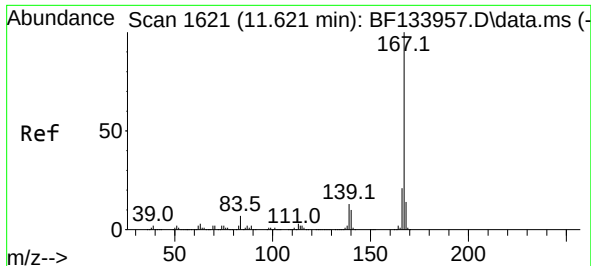
178 100

176 18.1 15.3 22.9

179 16.4 12.4 18.6

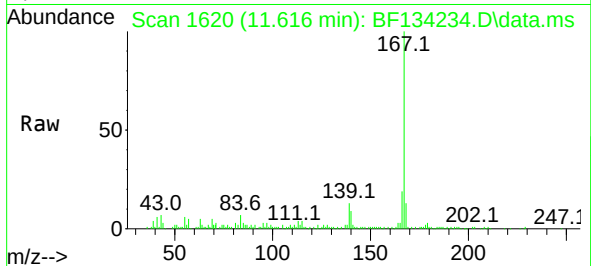






#73  
 Carbazole  
 Concen: 3.266 ng  
 RT: 11.616 min Scan# 1620  
 Delta R.T. 0.000 min  
 Lab File: BF134234.D  
 Acq: 12 Jul 2023 02:49

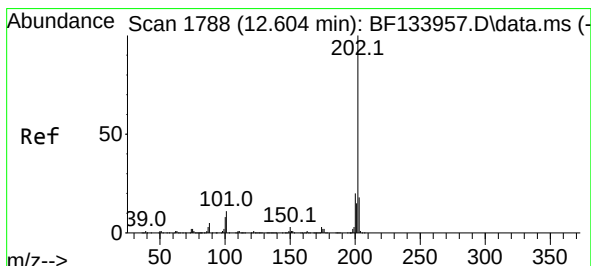
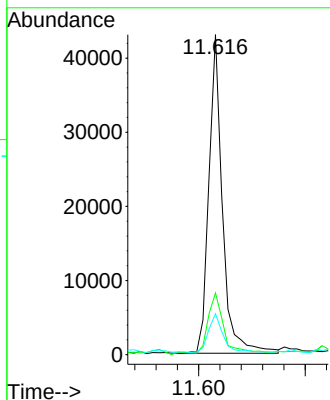
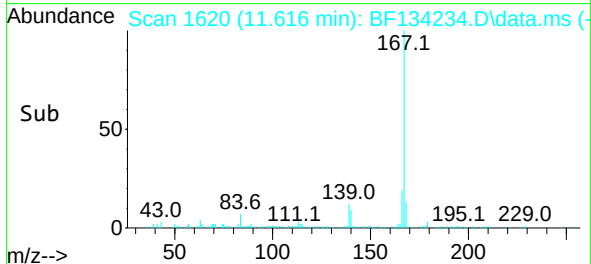
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-5(0-2)



Tgt Ion:167 Resp: 38199  
 Ion Ratio Lower Upper  
 167 100  
 166 19.3 17.0 25.6  
 139 12.8 10.4 15.6

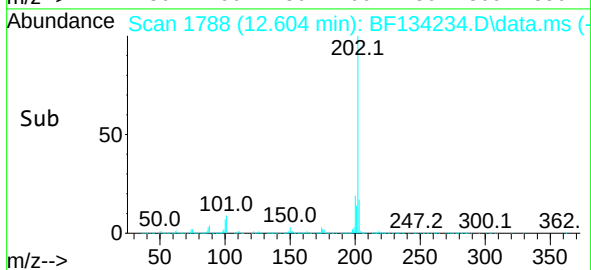
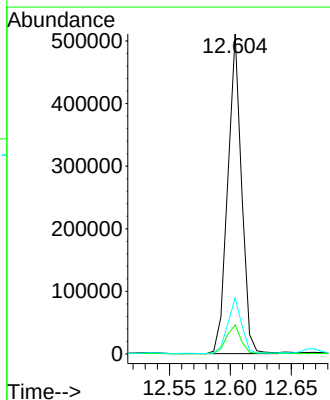
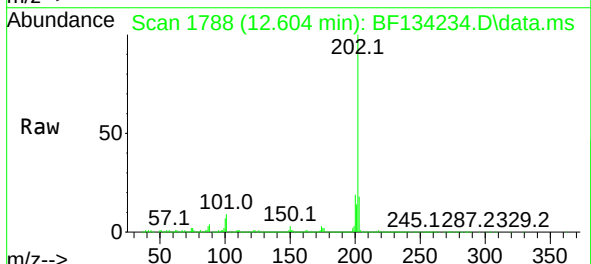
Manual Integrations  
 APPROVED

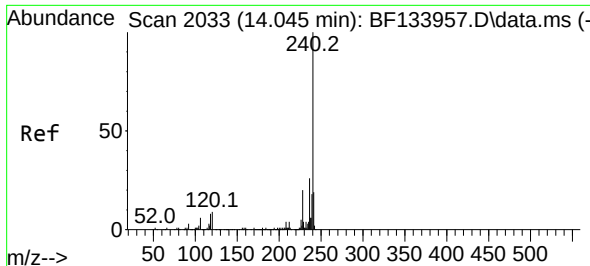
Reviewed By :Yogesh Patel 07/12/2023  
 Supervised By :mohammad ahmed 07/12/2023



#75  
 Fluoranthene  
 Concen: 30.438 ng  
 RT: 12.604 min Scan# 1788  
 Delta R.T. 0.000 min  
 Lab File: BF134234.D  
 Acq: 12 Jul 2023 02:49

Tgt Ion:202 Resp: 404271  
 Ion Ratio Lower Upper  
 202 100  
 101 9.1 0.0 31.0  
 203 17.6 0.0 37.6





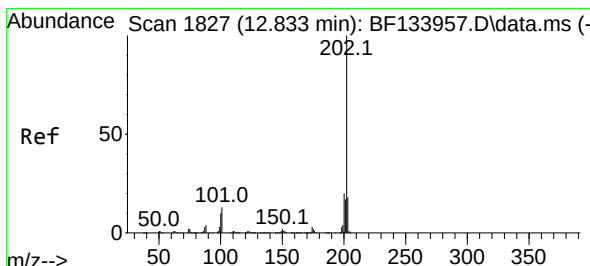
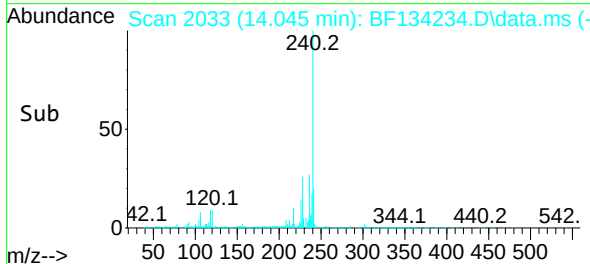
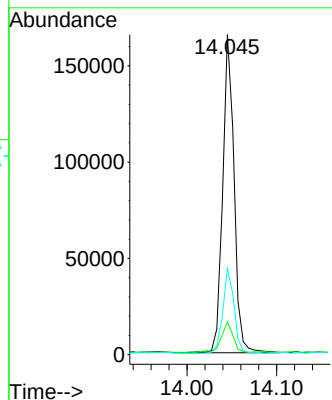
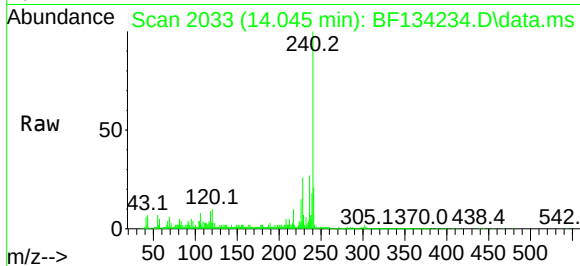
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.045 min Scan# 2033  
Delta R.T. 0.006 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49

Instrument :  
BNA\_F  
ClientSampleId :  
SB-5(0-2)

Tgt Ion:240 Resp: 145469  
Ion Ratio Lower Upper  
240 100  
120 10.2 7.4 11.0  
236 27.0 21.0 31.6

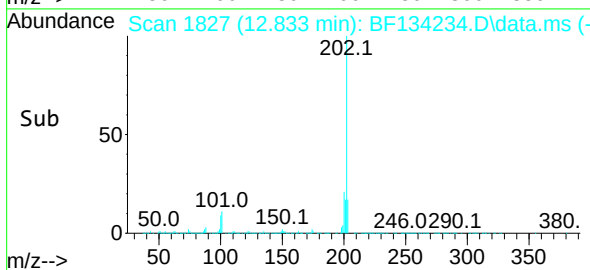
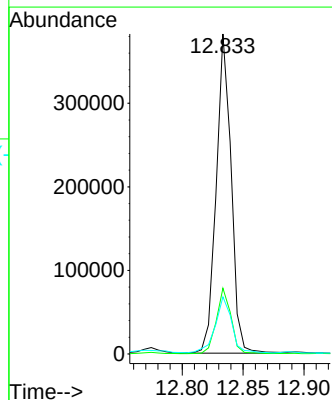
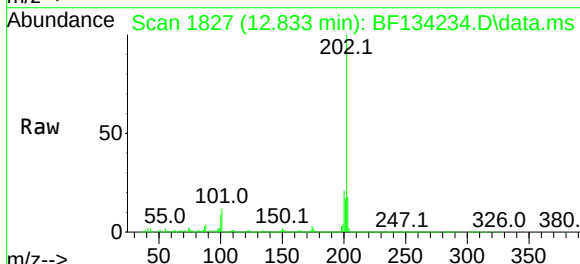
Manual Integrations  
APPROVED

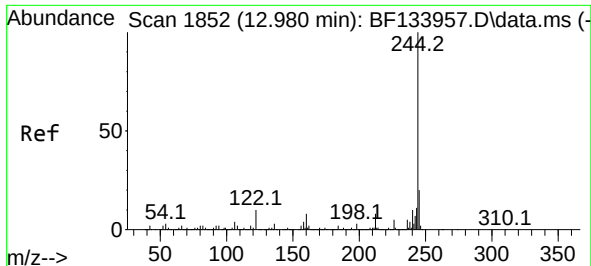
Reviewed By :Yogesh Patel 07/12/2023  
Supervised By :mohammad ahmed 07/12/2023



#78  
Pyrene  
Concen: 24.042 ng  
RT: 12.833 min Scan# 1827  
Delta R.T. 0.000 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49

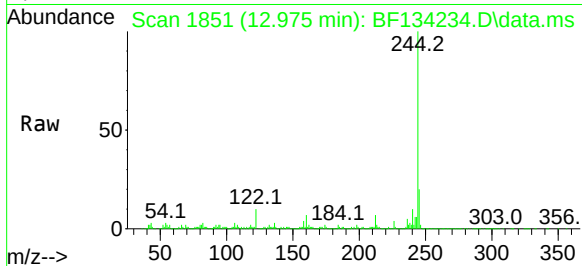
Tgt Ion:202 Resp: 325473  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.1 24.1  
203 17.9 14.3 21.5





#79  
 Terphenyl-d14  
 Concen: 29.408 ng  
 RT: 12.975 min Scan# 1851  
 Delta R.T. 0.000 min  
 Lab File: BF134234.D  
 Acq: 12 Jul 2023 02:49

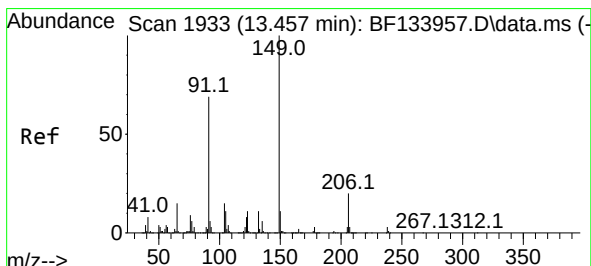
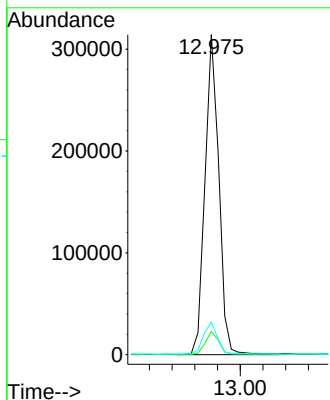
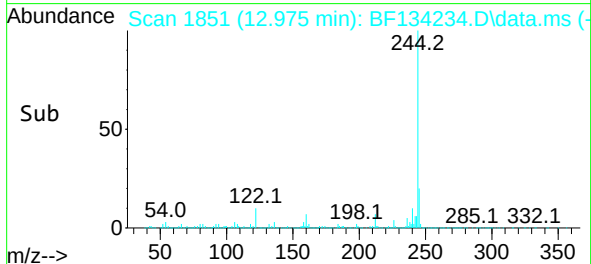
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-5(0-2)



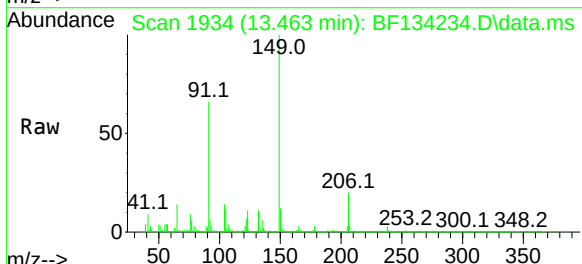
Tgt Ion:244 Resp: 26580  
 Ion Ratio Lower Upper  
 244 100  
 212 7.3 6.0 9.0  
 122 10.2 8.3 12.5

Manual Integrations  
 APPROVED

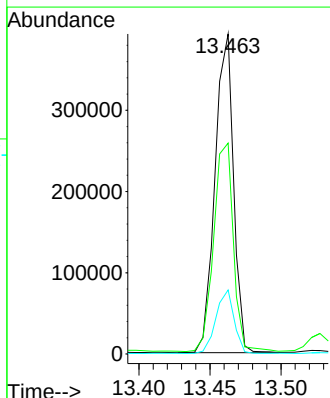
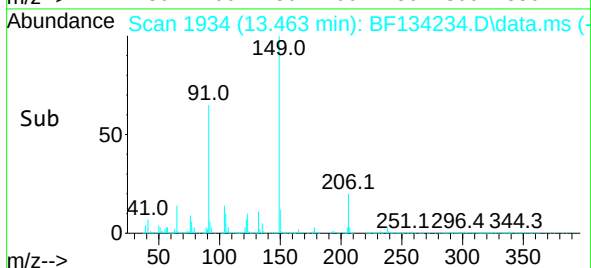
Reviewed By :Yogesh Patel 07/12/2023  
 Supervised By :mohammad ahmed 07/12/2023

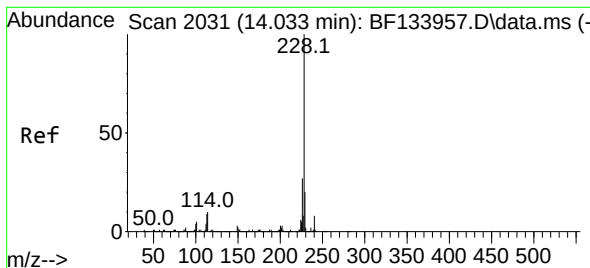


#80  
 Butylbenzylphthalate  
 Concen: 70.145 ng  
 RT: 13.463 min Scan# 1934  
 Delta R.T. 0.012 min  
 Lab File: BF134234.D  
 Acq: 12 Jul 2023 02:49



Tgt Ion:149 Resp: 356149  
 Ion Ratio Lower Upper  
 149 100  
 91 65.9 55.1 82.7  
 206 20.0 15.7 23.5





#81

Benzo(a)anthracene

Concen: 13.210 ng

RT: 14.033 min Scan# 2031

Delta R.T. 0.000 min

Lab File: BF134234.D

Acq: 12 Jul 2023 02:49

Instrument :

BNF\_F

ClientSampleId :

SB-5(0-2)

Tgt Ion:228 Resp: 133260

Ion Ratio Lower Upper

228 100

226 32.1 22.0 33.0

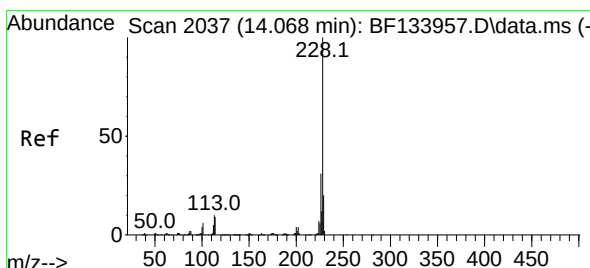
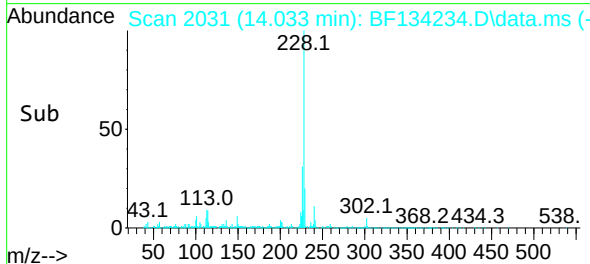
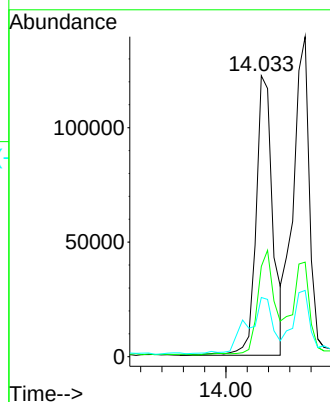
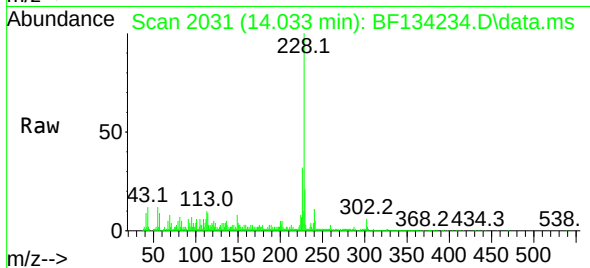
229 21.1 16.3 24.5

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 07/12/2023

Supervised By :mohammad ahmed 07/12/2023



#83

Chrysene

Concen: 15.148 ng

RT: 14.074 min Scan# 2038

Delta R.T. 0.006 min

Lab File: BF134234.D

Acq: 12 Jul 2023 02:49

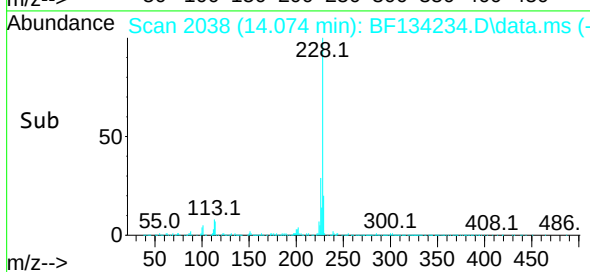
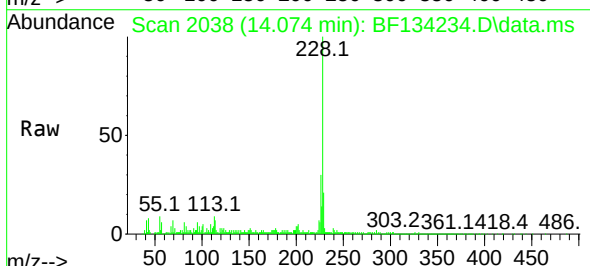
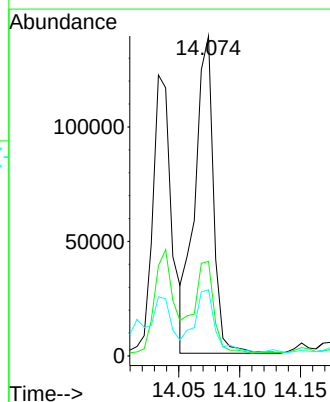
Tgt Ion:228 Resp: 148013

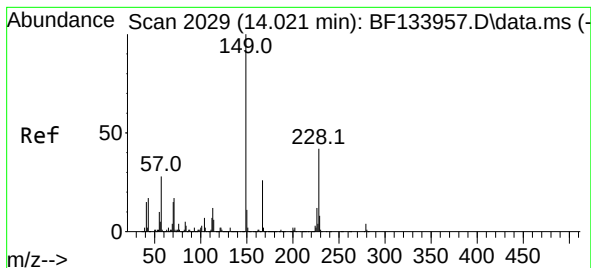
Ion Ratio Lower Upper

228 100

226 29.6 24.4 36.6

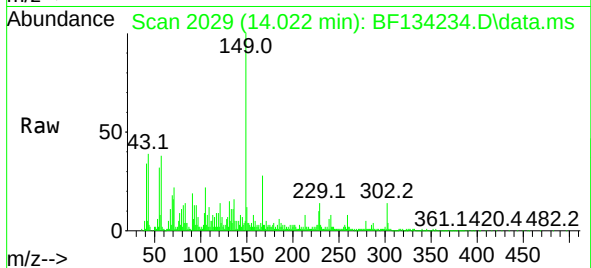
229 20.7 16.1 24.1





#84  
Bis(2-ethylhexyl)phthalate  
Concen: 13.159 ng  
RT: 14.022 min Scan# 2029  
Delta R.T. 0.006 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49

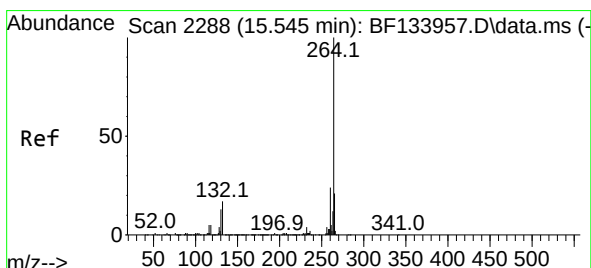
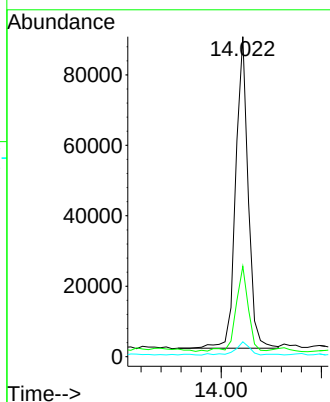
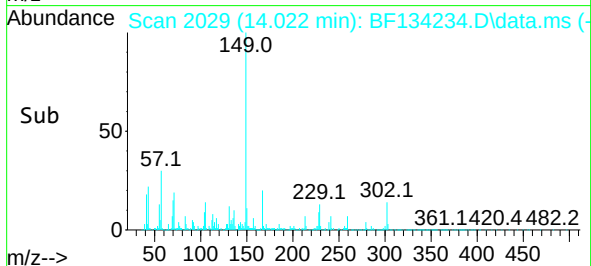
Instrument :  
BNA\_F  
ClientSampleId :  
SB-5(0-2)



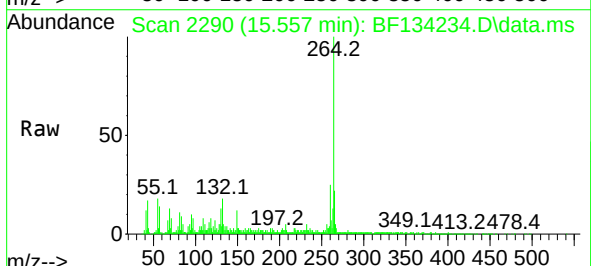
Tgt Ion:149 Resp: 76774  
Ion Ratio Lower Upper  
149 100  
167 28.3 21.0 31.4  
279 4.7 3.3 4.9

Manual Integrations  
APPROVED

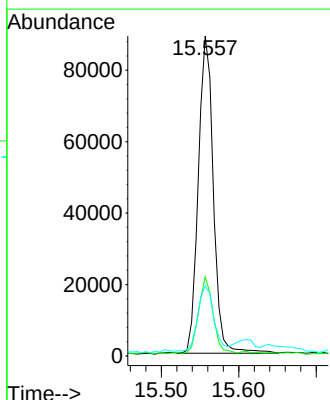
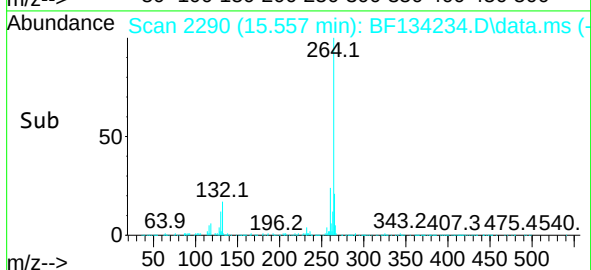
Reviewed By :Yogesh Patel 07/12/2023  
Supervised By :mohammad ahmed 07/12/2023

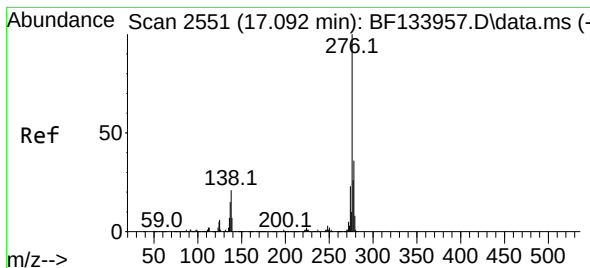


#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.557 min Scan# 2290  
Delta R.T. 0.012 min  
Lab File: BF134234.D  
Acq: 12 Jul 2023 02:49



Tgt Ion:264 Resp: 119925  
Ion Ratio Lower Upper  
264 100  
260 24.7 19.5 29.3  
265 21.9 16.6 25.0





#87

Indeno(1,2,3-cd)pyrene

Concen: 12.706 ng

RT: 17.110 min Scan# 2114

Delta R.T. 0.012 min

Lab File: BF134234.D

Acq: 12 Jul 2023 02:49

Instrument :

BNA\_F

ClientSampleId :

SB-5(0-2)

Tgt Ion:276 Resp: 10573

Ion Ratio Lower Upper

276 100

138 18.4 18.7 28.1

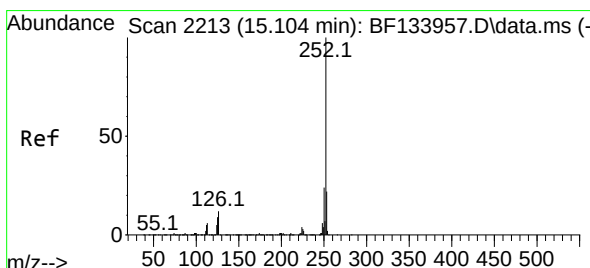
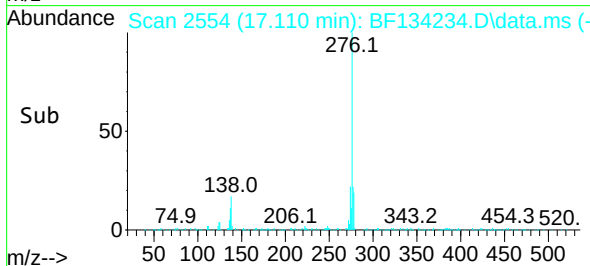
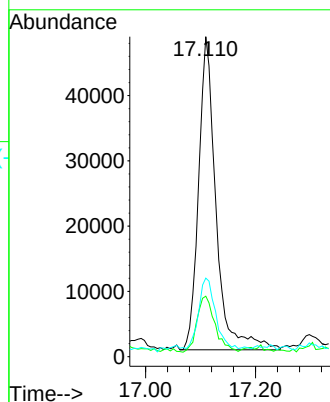
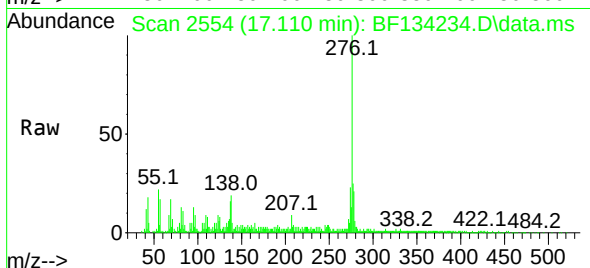
277 21.8 19.9 29.9

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 07/12/2023

Supervised By :mohammad ahmed 07/12/2023



#88

Benzo(b)fluoranthene

Concen: 32.129 ng m

RT: 15.110 min Scan# 2214

Delta R.T. 0.006 min

Lab File: BF134234.D

Acq: 12 Jul 2023 02:49

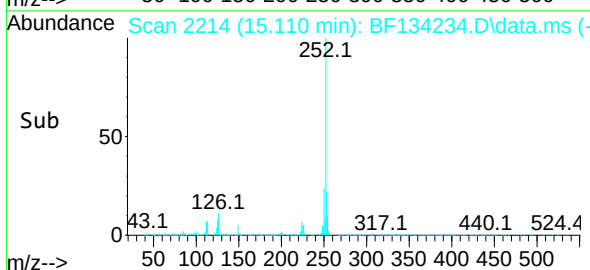
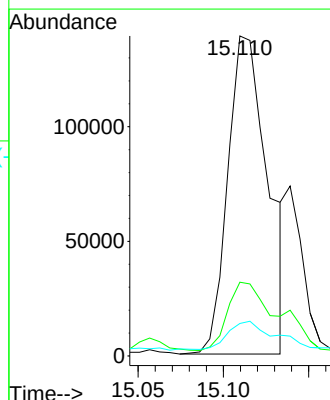
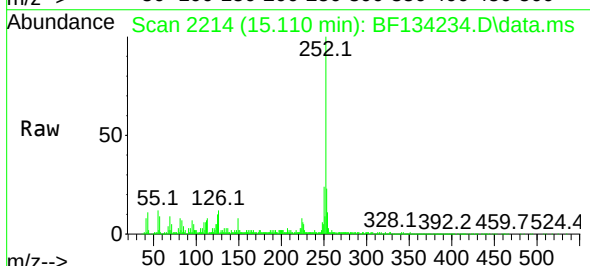
Tgt Ion:252 Resp: 226566

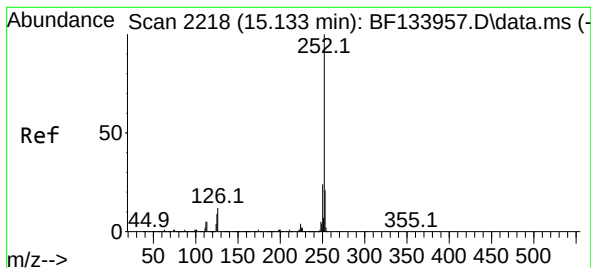
Ion Ratio Lower Upper

252 100

253 23.0 17.4 26.0

125 10.1 7.1 10.7





#89

Benzo(k)fluoranthene

Concen: 7.086 ng m

RT: 15.139 min Scan# 2218

Delta R.T. 0.006 min

Lab File: BF134234.D

Acq: 12 Jul 2023 02:49

Instrument :

BNA\_F

ClientSampleId :

SB-5(0-2)

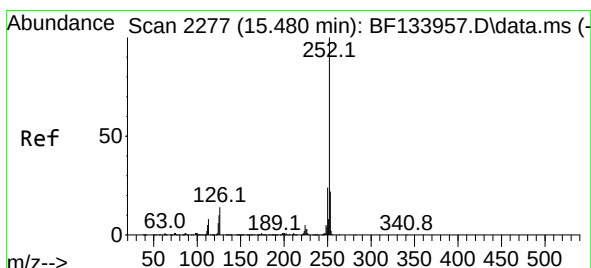
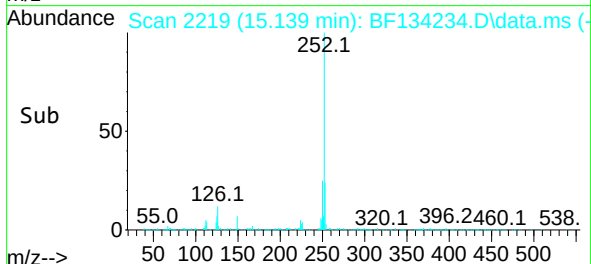
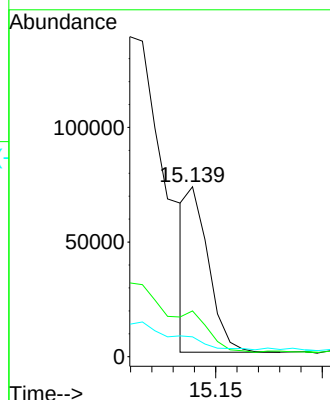
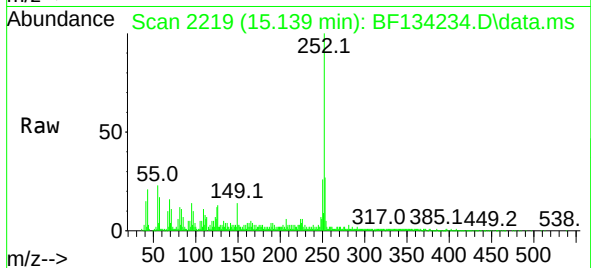
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 50879 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 26.9  | 16.9  | 25.3  |
| 125       | 11.7  | 7.4   | 11.2  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 07/12/2023

Supervised By :mohammad ahmed 07/12/2023



#90

Benzo(a)pyrene

Concen: 16.994 ng

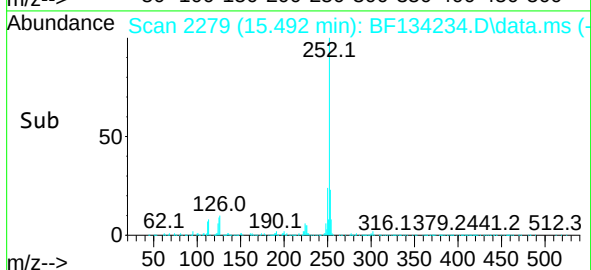
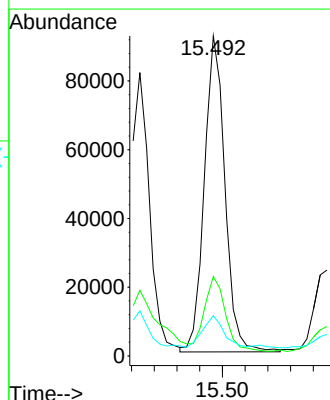
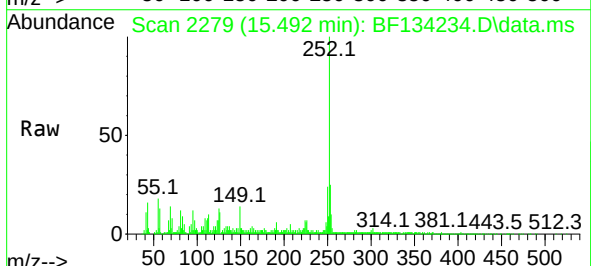
RT: 15.492 min Scan# 2279

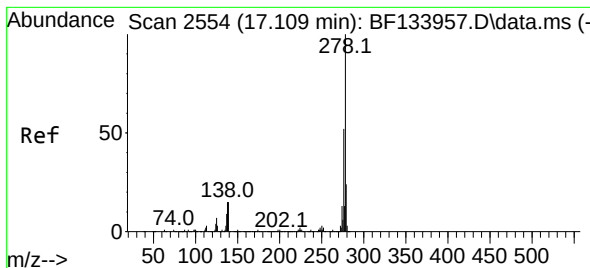
Delta R.T. 0.012 min

Lab File: BF134234.D

Acq: 12 Jul 2023 02:49

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 115883 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 24.8  | 17.4  | 26.0   |
| 125       | 12.6  | 8.4   | 12.6   |





#91

Dibenzo(a,h)anthracene

Concen: 4.398 ng

RT: 17.115 min Scan# 21

Delta R.T. 0.000 min

Lab File: BF134234.D

Acq: 12 Jul 2023 02:49

Instrument :

BNF

ClientSampleId :

SB-5(0-2)

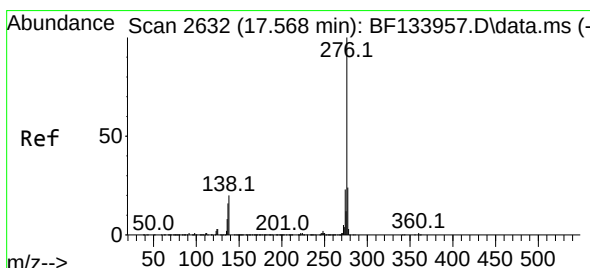
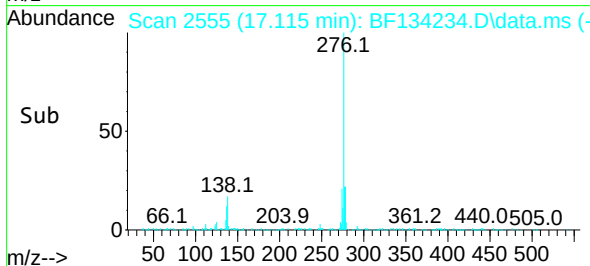
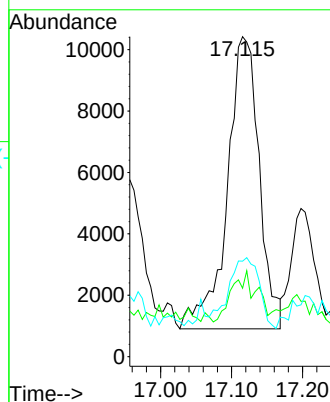
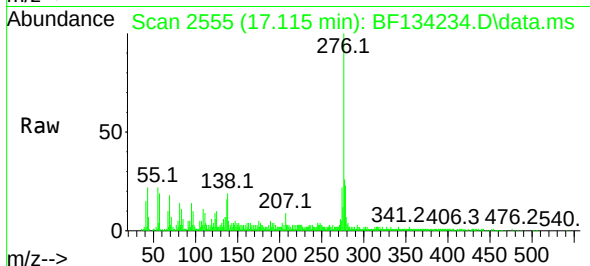
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 278   | Resp: | 2989 |
| Ion Ratio | Lower | Upper |      |
| 278       | 100   |       |      |
| 139       | 21.4  | 12.2  | 18.4 |
| 279       | 29.9  | 19.4  | 29.2 |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 07/12/2023

Supervised By :mohammad ahmed 07/12/2023



#92

Benzo(g,h,i)perylene

Concen: 13.395 ng

RT: 17.586 min Scan# 2635

Delta R.T. 0.018 min

Lab File: BF134234.D

Acq: 12 Jul 2023 02:49

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 93891 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 277       | 27.0  | 19.0  | 28.6  |
| 138       | 19.0  | 16.2  | 24.2  |

