

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF080624\  
 Data File : BF138831.D  
 Acq On : 07 Aug 2024 04:11  
 Operator : RC/JU  
 Sample : P3414-03DL 5X  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PL-02-07312024-BDL

Manual Integrations  
 APPROVED

Reviewed By :Yogesh Patel 08/08/2024  
 Supervised By :mohammad ahmed 08/08/2024

Quant Time: Aug 07 04:47:50 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF073024.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 30 17:50:01 2024  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|--------|------|----------|--------|-------|----------|
| -----                       |        |      |          |        |       |          |
| Internal Standards          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 6.840  | 152  | 38015    | 20.000 | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.122  | 136  | 135519   | 20.000 | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.869  | 164  | 59237    | 20.000 | ng    | -0.01    |
| 64) Phenanthrene-d10        | 11.357 | 188  | 94593    | 20.000 | ng    | -0.01    |
| 76) Chrysene-d12            | 13.998 | 240  | 79612    | 20.000 | ng    | 0.00     |
| 86) Perylene-d12            | 15.463 | 264  | 62068    | 20.000 | ng    | 0.00     |
|                             |        |      |          |        |       |          |
| System Monitoring Compounds |        |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.469  | 112  | 44494    | 18.067 | ng    | 0.00     |
| 7) Phenol-d6                | 6.481  | 99   | 56321    | 17.034 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.398  | 82   | 36182    | 13.053 | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol    | 10.663 | 330  | 7643     | 15.751 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.192  | 172  | 59961    | 15.209 | ng    | -0.01    |
| 79) Terphenyl-d14           | 12.939 | 244  | 62667    | 13.179 | ng    | 0.00     |
|                             |        |      |          |        |       |          |
| Target Compounds            |        |      |          |        |       | Qvalue   |
| 52) Acenaphthene            | 9.904  | 154  | 6717     | 2.042  | ng    | 98       |
| 58) Fluorene                | 10.422 | 166  | 14246    | 3.852  | ng    | # 92     |
| 71) Phenanthrene            | 11.380 | 178  | 168388   | 34.571 | ng    | 99       |
| 72) Anthracene              | 11.433 | 178  | 46287    | 9.646  | ng    | 99       |
| 75) Fluoranthene            | 12.575 | 202  | 281516   | 61.910 | ng    | 98       |
| 78) Pyrene                  | 12.804 | 202  | 264264   | 35.255 | ng    | 99       |
| 81) Benzo(a)anthracene      | 13.986 | 228  | 138675   | 25.295 | ng    | 96       |
| 83) Chrysene                | 14.021 | 228  | 112346   | 22.714 | ng    | 97       |
| 87) Indeno(1,2,3-cd)pyrene  | 16.921 | 276  | 36873    | 8.290  | ng    | # 93     |
| 88) Benzo(b)fluoranthene    | 15.039 | 252  | 107462m  | 27.930 | ng    |          |
| 89) Benzo(k)fluoranthene    | 15.051 | 252  | 41217m   | 12.373 | ng    |          |
| 90) Benzo(a)pyrene          | 15.398 | 252  | 78518    | 24.261 | ng    | 99       |
| 91) Dibenzo(a,h)anthracene  | 16.927 | 278  | 9876     | 2.705  | ng    | 94       |
| 92) Benzo(g,h,i)perylene    | 17.368 | 276  | 35610    | 9.398  | ng    | 97       |
| -----                       |        |      |          |        |       |          |

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

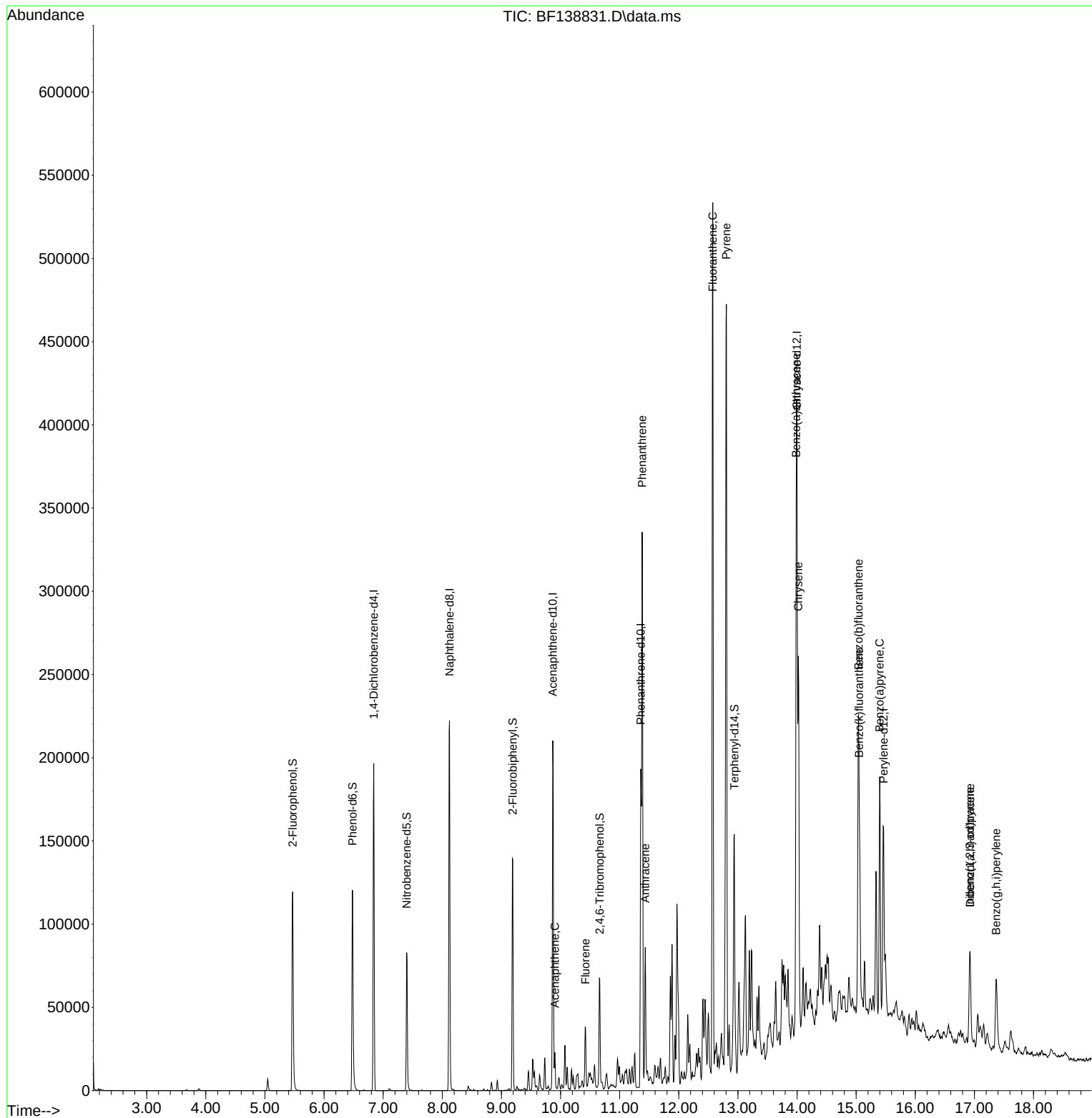
Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF080624\  
Data File : BF138831.D  
Acq On : 07 Aug 2024 04:11  
Operator : RC/JU  
Sample : P3414-03DL 5X  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

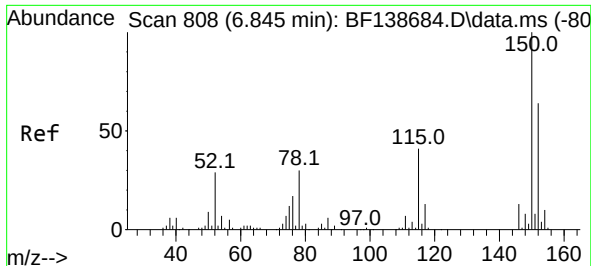
Instrument :  
BNA\_F  
ClientSampleId :  
PL-02-07312024-BDL

Quant Time: Aug 07 04:47:50 2024  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF073024.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 30 17:50:01 2024  
Response via : Initial Calibration

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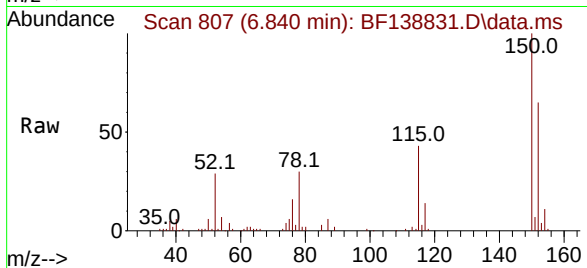
Reviewed By :Yogesh Patel 08/08/2024  
Supervised By :mohammad ahmed 08/08/2024





#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.840 min Scan# 808  
Delta R.T. -0.005 min  
Lab File: BF138831.D  
Acq: 07 Aug 2024 04:11

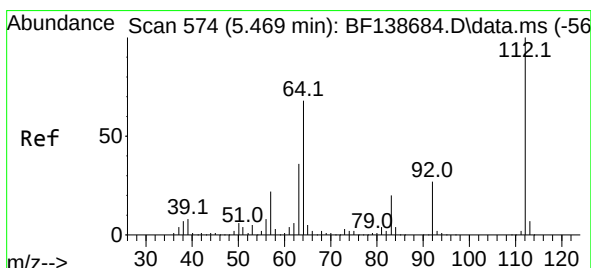
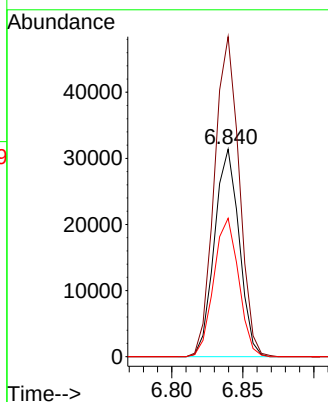
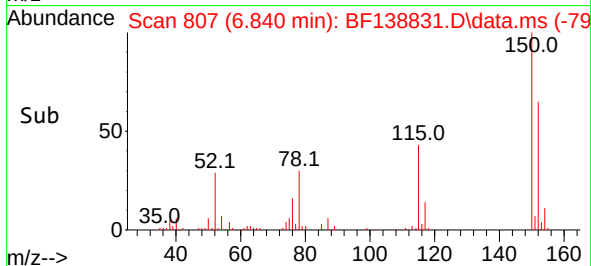
Instrument :  
BNA\_F  
ClientSampleId :  
PL-02-07312024-BDL



Tgt Ion:152 Resp: 38015  
Ion Ratio Lower Upper  
152 100  
150 154.2 126.0 189.0  
115 66.7 51.7 77.5

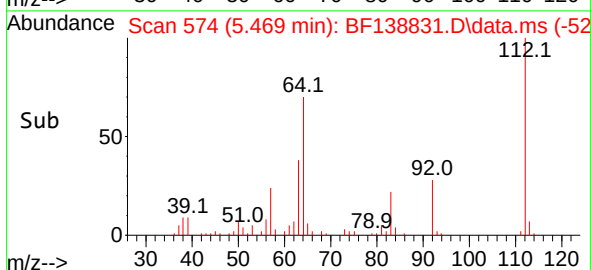
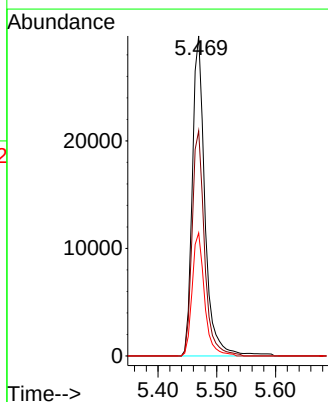
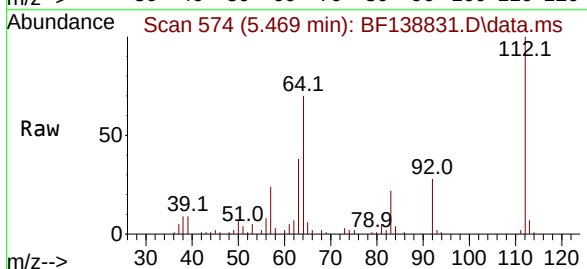
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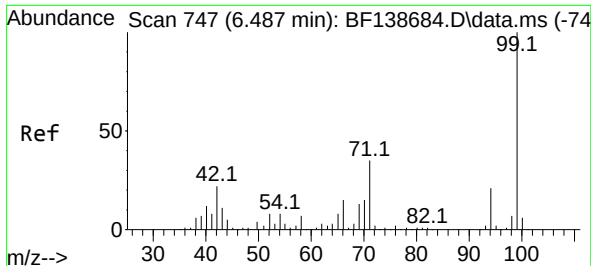
Reviewed By :Yogesh Patel 08/08/2024  
Supervised By :mohammad ahmed 08/08/2024



#5  
2-Fluorophenol  
Concen: 18.067 ng  
RT: 5.469 min Scan# 574  
Delta R.T. 0.000 min  
Lab File: BF138831.D  
Acq: 07 Aug 2024 04:11

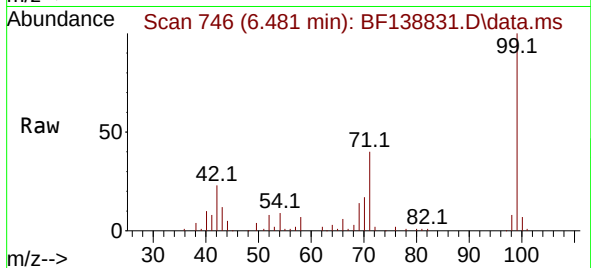
Tgt Ion:112 Resp: 44494  
Ion Ratio Lower Upper  
112 100  
64 70.4 54.2 81.4  
63 38.5 28.7 43.1





#7  
Phenol-d6  
Concen: 17.034 ng  
RT: 6.481 min Scan# 74  
Delta R.T. -0.006 min  
Lab File: BF138831.D  
Acq: 07 Aug 2024 04:11

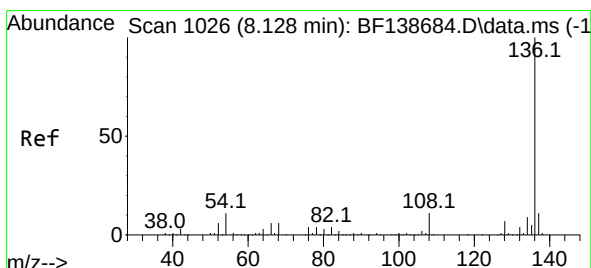
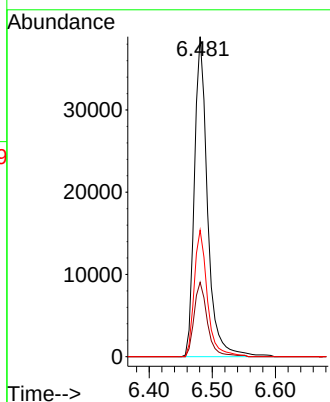
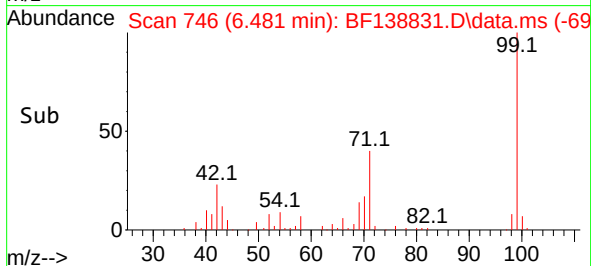
Instrument :  
BNA\_F  
ClientSampleId :  
PL-02-07312024-BDL



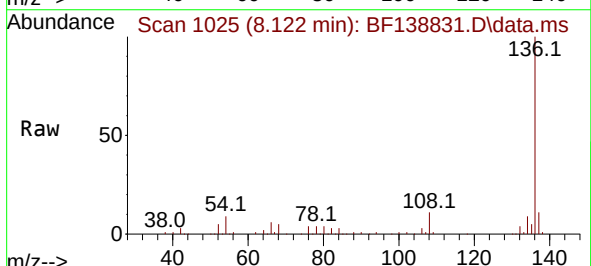
Tgt Ion: 99 Resp: 5632  
Ion Ratio Lower Upper  
99 100  
42 23.3 17.4 26.0  
71 39.5 28.1 42.1

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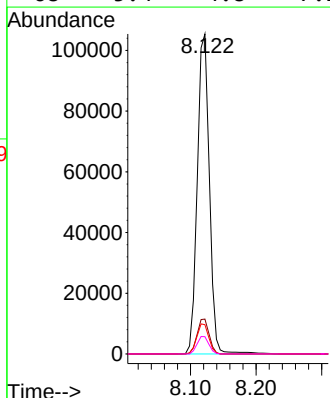
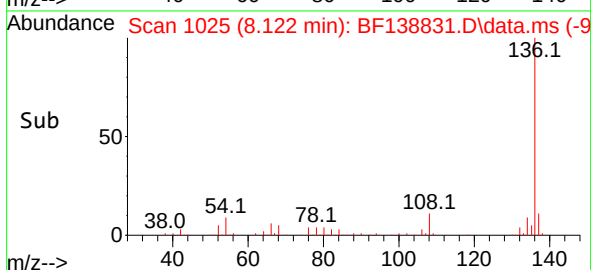
Reviewed By :Yogesh Patel 08/08/2024  
Supervised By :mohammad ahmed 08/08/2024

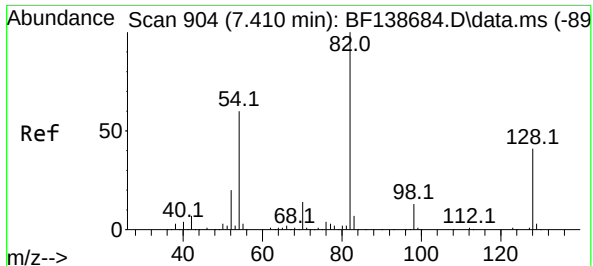


#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.122 min Scan# 1025  
Delta R.T. -0.006 min  
Lab File: BF138831.D  
Acq: 07 Aug 2024 04:11



Tgt Ion:136 Resp: 135519  
Ion Ratio Lower Upper  
136 100  
137 10.9 8.9 13.3  
54 9.2 8.6 12.8  
68 5.4 4.8 7.2





#23

Nitrobenzene-d5

Concen: 13.053 ng

RT: 7.398 min Scan# 904

Delta R.T. -0.012 min

Lab File: BF138831.D

Acq: 07 Aug 2024 04:11

Instrument :

BNA\_F

ClientSampleId :

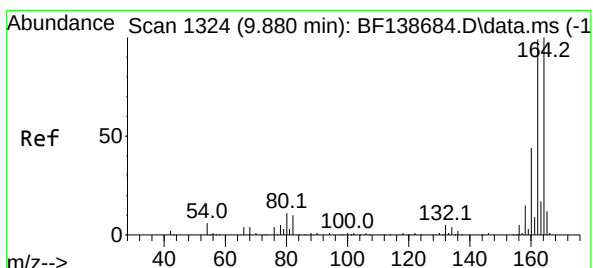
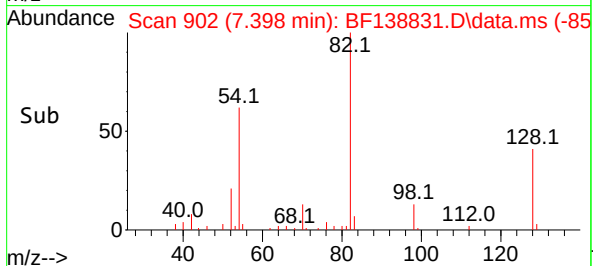
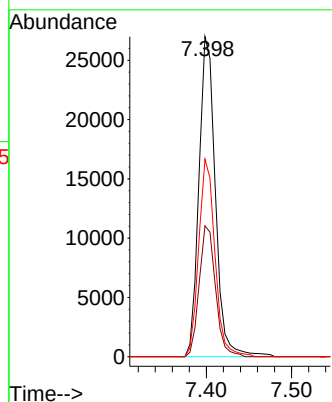
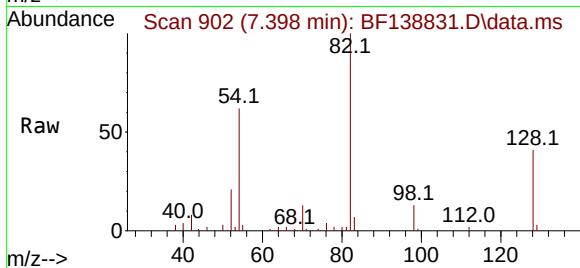
PL-02-07312024-BDL

|             |                |
|-------------|----------------|
| Tgt Ion: 82 | Resp: 3618     |
| Ion Ratio   | Lower Upper    |
| 82          | 100            |
| 128         | 40.9 32.8 49.2 |
| 54          | 61.7 48.3 72.5 |

Manual Integrations

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Reviewed By :Yogesh Patel 08/08/2024  
Supervised By :mohammad ahmed 08/08/2024



#39

Acenaphthene-d10

Concen: 20.000 ng

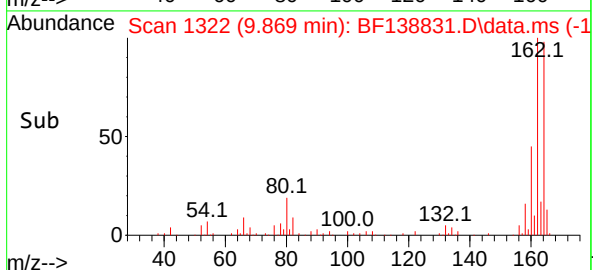
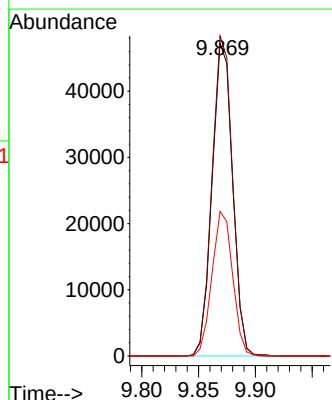
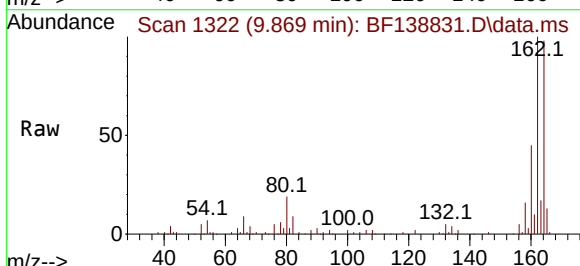
RT: 9.869 min Scan# 1322

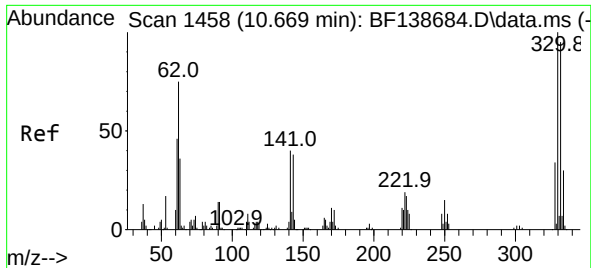
Delta R.T. -0.011 min

Lab File: BF138831.D

Acq: 07 Aug 2024 04:11

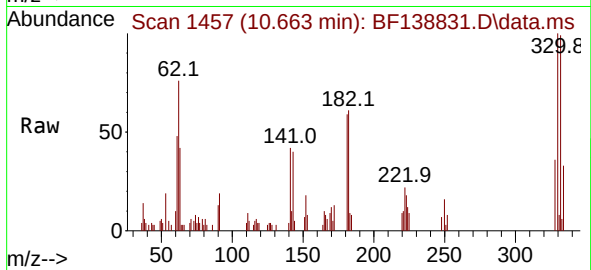
|             |                  |
|-------------|------------------|
| Tgt Ion:164 | Resp: 59237      |
| Ion Ratio   | Lower Upper      |
| 164         | 100              |
| 162         | 102.3 79.4 119.0 |
| 160         | 46.2 35.1 52.7   |





#42  
2,4,6-Tribromophenol  
Concen: 15.751 ng  
RT: 10.663 min Scan# 1458  
Delta R.T. -0.006 min  
Lab File: BF138831.D  
Acq: 07 Aug 2024 04:11

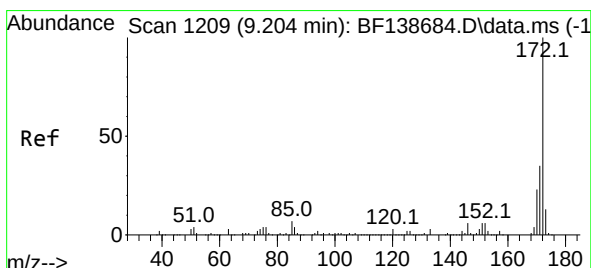
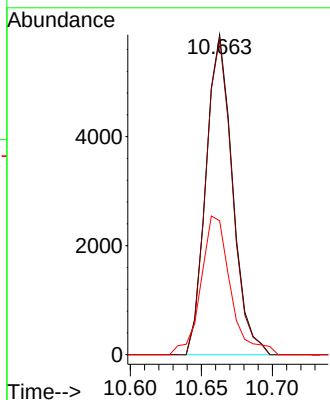
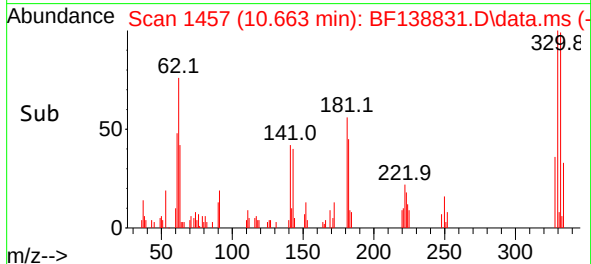
Instrument :  
BNA\_F  
ClientSampleId :  
PL-02-07312024-BDL



Tgt Ion: 330 Resp: 764  
Ion Ratio Lower Upper  
330 100  
332 98.3 76.4 114.6  
141 48.1 31.1 46.7

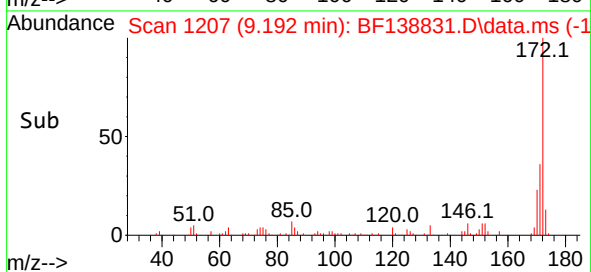
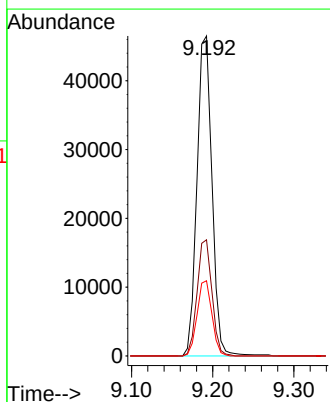
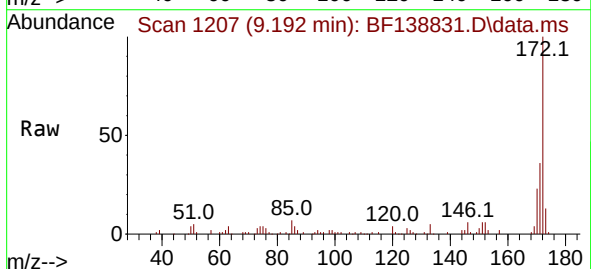
Manual Integrations  
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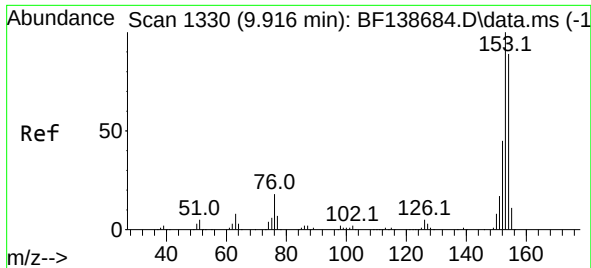
Reviewed By : Yogesh Patel 08/08/2024  
Supervised By : mohammad ahmed 08/08/2024



#45  
2-Fluorobiphenyl  
Concen: 15.209 ng  
RT: 9.192 min Scan# 1207  
Delta R.T. -0.012 min  
Lab File: BF138831.D  
Acq: 07 Aug 2024 04:11

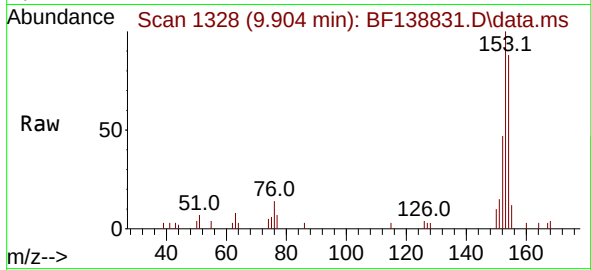
Tgt Ion: 172 Resp: 59961  
Ion Ratio Lower Upper  
172 100  
171 36.3 28.3 42.5  
170 23.5 18.8 28.2





#52  
Acenaphthene  
Concen: 2.042 ng  
RT: 9.904 min Scan# 1328  
Delta R.T. -0.012 min  
Lab File: BF138831.D  
Acq: 07 Aug 2024 04:11

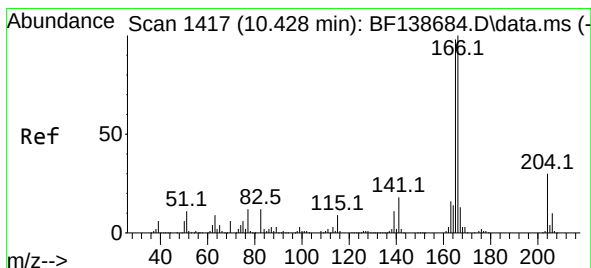
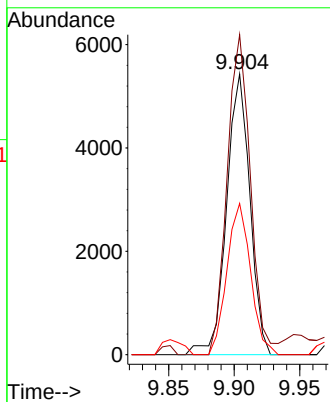
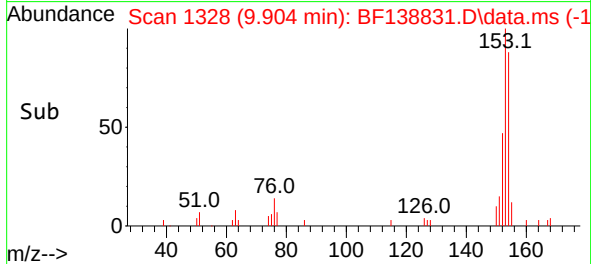
Instrument :  
BNA\_F  
ClientSampleId :  
PL-02-07312024-BDL



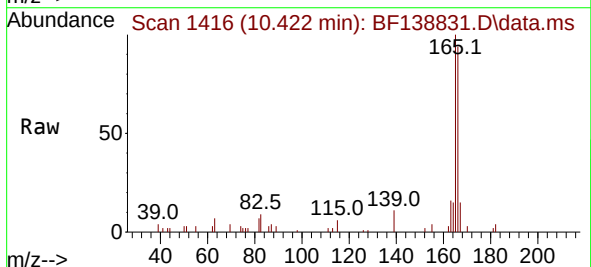
Tgt Ion:154 Resp: 671  
Ion Ratio Lower Upper  
154 100  
153 114.0 89.9 134.9  
152 53.9 40.6 60.8

Manual Integrations  
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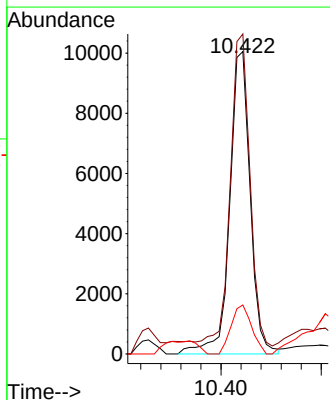
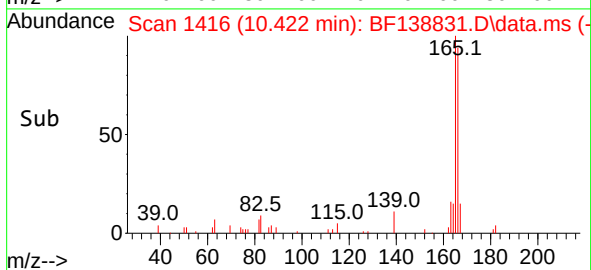
Reviewed By :Yogesh Patel 08/08/2024  
Supervised By :mohammad ahmed 08/08/2024

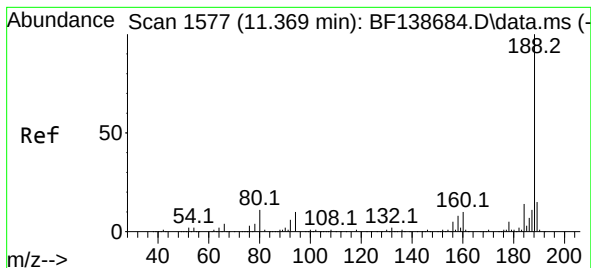


#58  
Fluorene  
Concen: 3.852 ng  
RT: 10.422 min Scan# 1416  
Delta R.T. -0.006 min  
Lab File: BF138831.D  
Acq: 07 Aug 2024 04:11



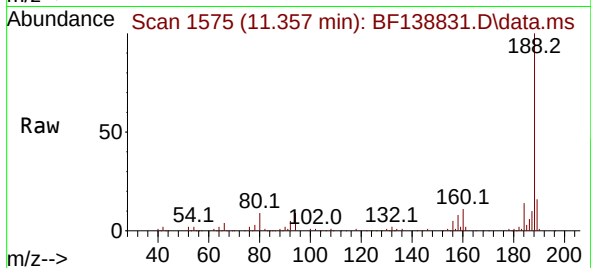
Tgt Ion:166 Resp: 14246  
Ion Ratio Lower Upper  
166 100  
165 105.8 78.4 117.6  
167 16.2 10.6 16.0#





#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.357 min Scan# 1575  
Delta R.T. -0.012 min  
Lab File: BF138831.D  
Acq: 07 Aug 2024 04:11

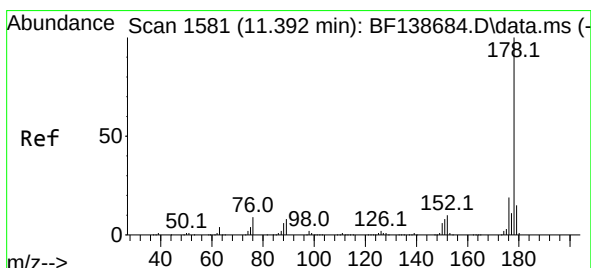
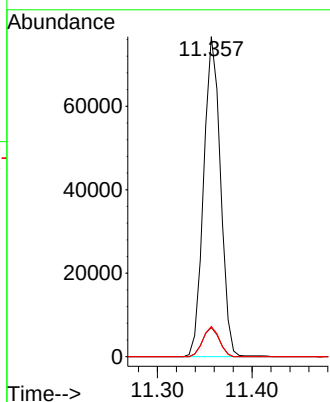
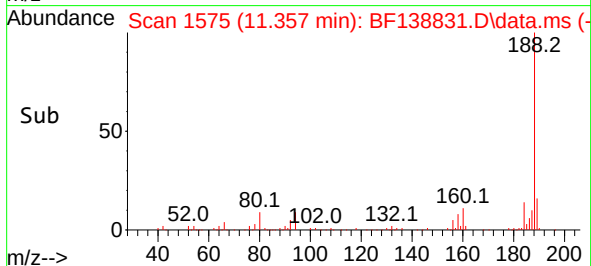
Instrument :  
BNA\_F  
ClientSampleId :  
PL-02-07312024-BDL



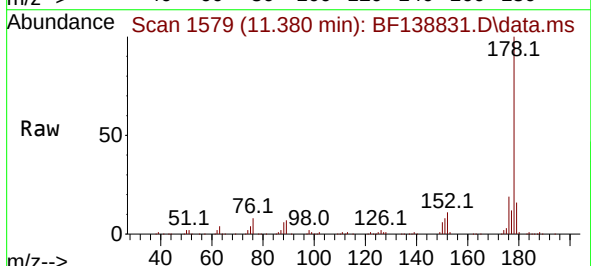
Tgt Ion:188 Resp: 9459  
Ion Ratio Lower Upper  
188 100  
94 9.1 7.6 11.4  
80 9.5 8.6 12.8

Manual Integrations  
APPROVED

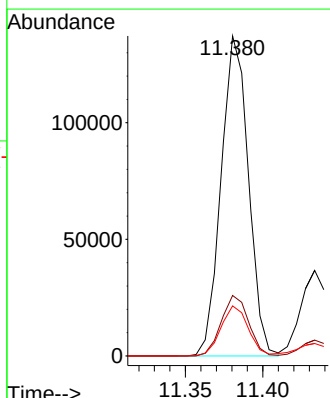
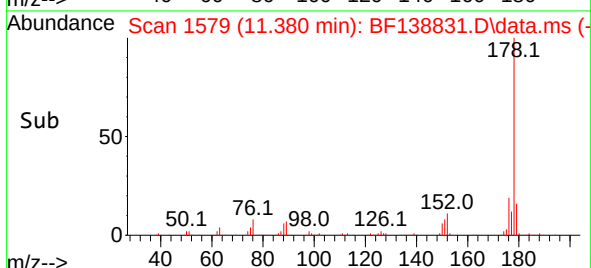
Reviewed By :Yogesh Patel 08/08/2024  
Supervised By :mohammad ahmed 08/08/2024



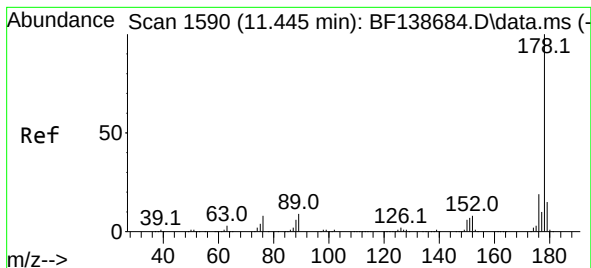
#71  
Phenanthrene  
Concen: 34.571 ng  
RT: 11.380 min Scan# 1579  
Delta R.T. -0.012 min  
Lab File: BF138831.D  
Acq: 07 Aug 2024 04:11



Tgt Ion:178 Resp: 168388  
Ion Ratio Lower Upper  
178 100  
176 18.9 15.4 23.0  
179 15.6 12.2 18.2







#72

Anthracene

Concen: 9.646 ng

RT: 11.433 min Scan# 11

Delta R.T. -0.012 min

Lab File: BF138831.D

Acq: 07 Aug 2024 04:11

Instrument :

BNA\_F

ClientSampleId :

PL-02-07312024-BDL

Tgt Ion:178 Resp: 4628

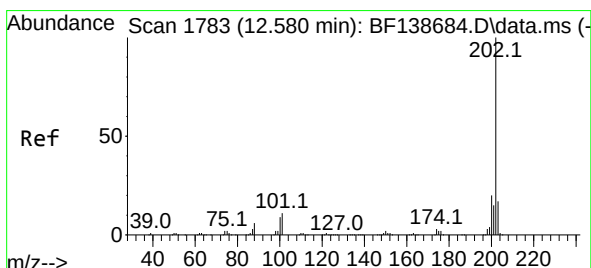
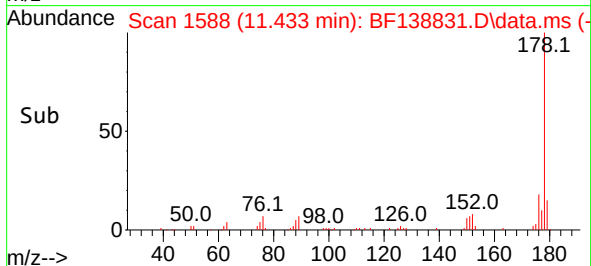
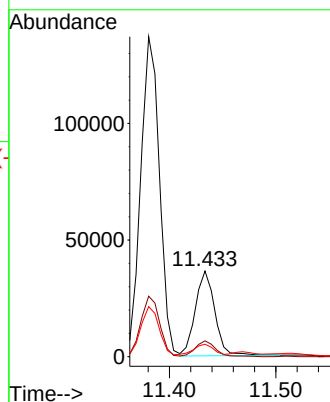
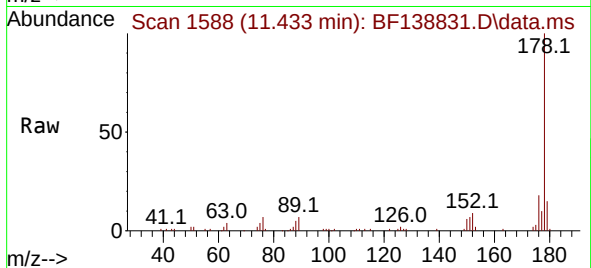
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 178 | 100   |       |       |
| 176 | 18.5  | 14.9  | 22.3  |
| 179 | 14.7  | 12.4  | 18.6  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/08/2024

Supervised By :mohammad ahmed 08/08/2024



#75

Fluoranthene

Concen: 61.910 ng

RT: 12.575 min Scan# 1782

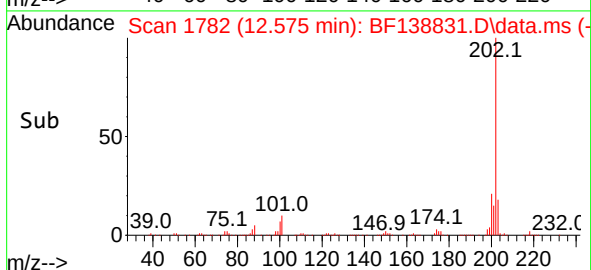
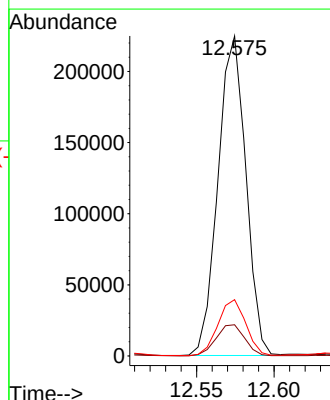
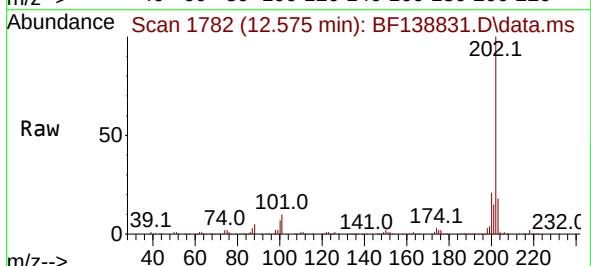
Delta R.T. -0.006 min

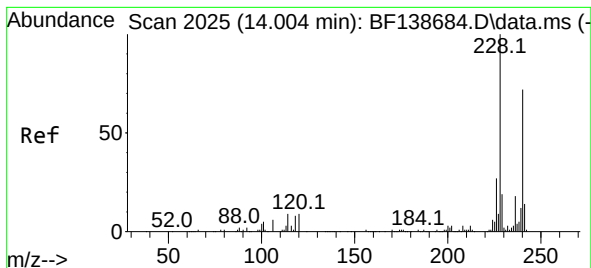
Lab File: BF138831.D

Acq: 07 Aug 2024 04:11

Tgt Ion:202 Resp: 281516

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 202 | 100   |       |       |
| 101 | 9.7   | 0.0   | 31.2  |
| 203 | 17.6  | 0.0   | 37.3  |





#76

Chrysene-d12

Concen: 20.000 ng

RT: 13.998 min Scan# 20

Delta R.T. -0.006 min

Lab File: BF138831.D

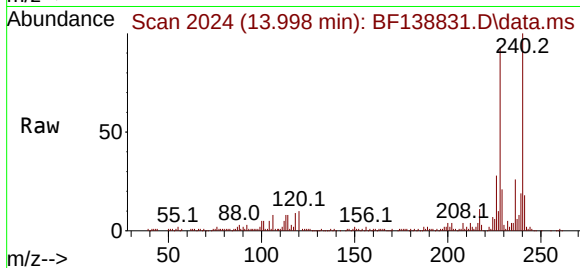
Acq: 07 Aug 2024 04:11

Instrument :

BNA\_F

ClientSampleId :

PL-02-07312024-BDL



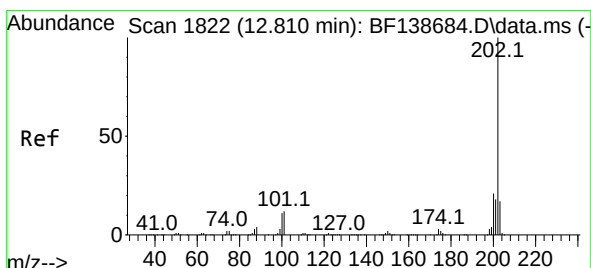
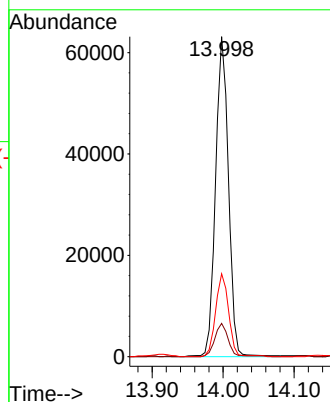
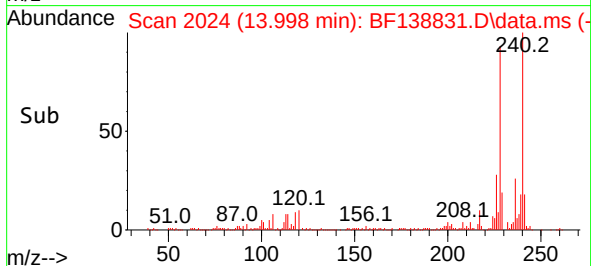
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 240   | Resp: | 7961 |
| Ion Ratio | Lower | Upper |      |
| 240       | 100   |       |      |
| 120       | 10.4  | 10.2  | 15.4 |
| 236       | 25.9  | 19.8  | 29.8 |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/08/2024

Supervised By :mohammad ahmed 08/08/2024



#78

Pyrene

Concen: 35.255 ng

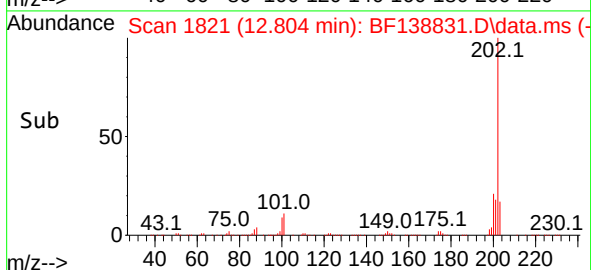
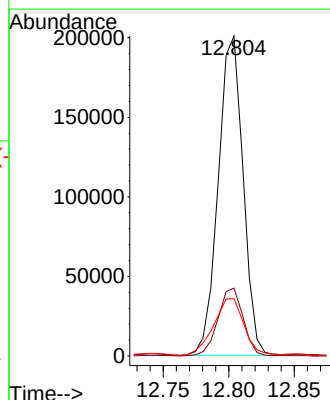
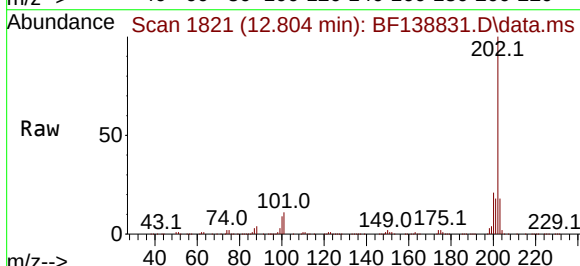
RT: 12.804 min Scan# 1821

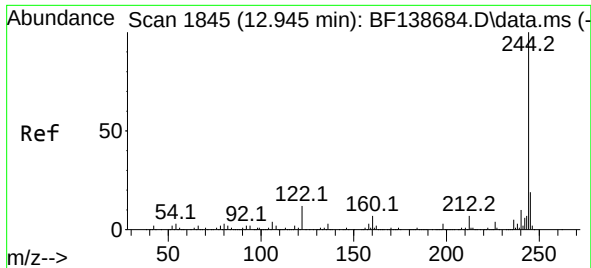
Delta R.T. -0.006 min

Lab File: BF138831.D

Acq: 07 Aug 2024 04:11

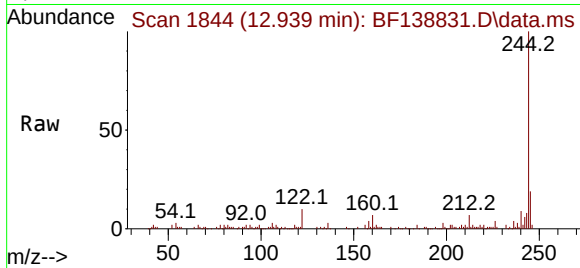
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 264264 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 200       | 21.2  | 16.8  | 25.2   |
| 203       | 17.9  | 13.8  | 20.6   |





#79  
 Terphenyl-d14  
 Concen: 13.179 ng  
 RT: 12.939 min Scan# 11  
 Delta R.T. -0.006 min  
 Lab File: BF138831.D  
 Acq: 07 Aug 2024 04:11

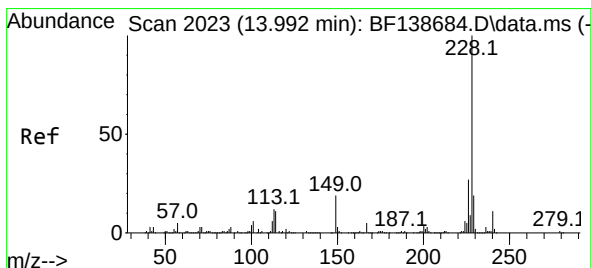
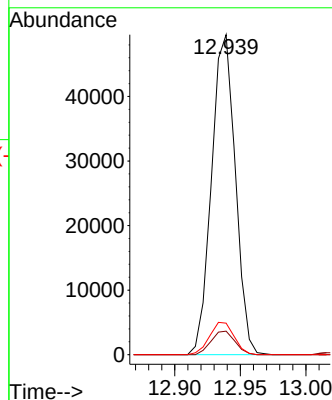
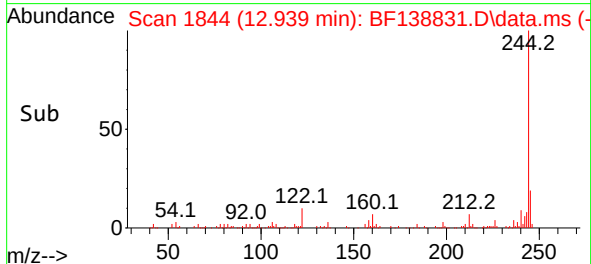
Instrument :  
 BNA\_F  
 ClientSampleId :  
 PL-02-07312024-BDL



Tgt Ion:244 Resp: 6266  
 Ion Ratio Lower Upper  
 244 100  
 212 7.3 5.4 8.2  
 122 9.9 9.6 14.4

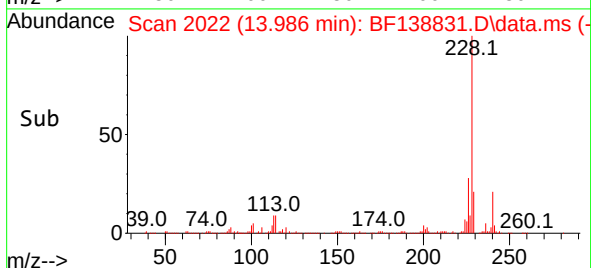
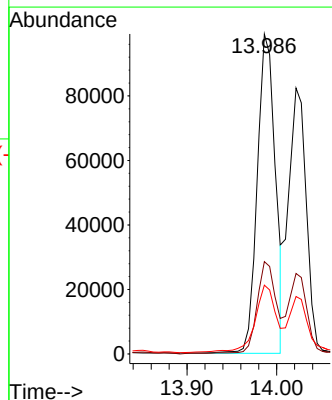
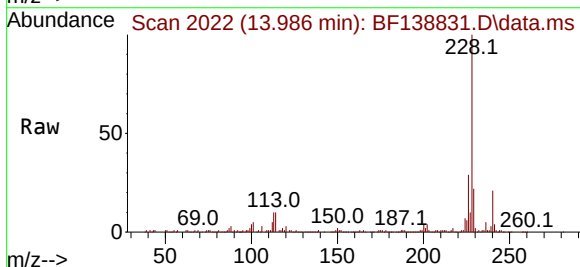
Manual Integrations  
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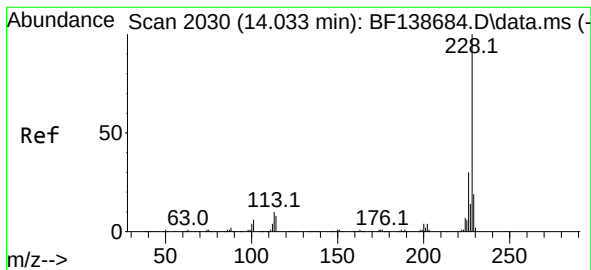
Reviewed By :Yogesh Patel 08/08/2024  
 Supervised By :mohammad ahmed 08/08/2024



#81  
 Benzo(a)anthracene  
 Concen: 25.295 ng  
 RT: 13.986 min Scan# 2022  
 Delta R.T. -0.006 min  
 Lab File: BF138831.D  
 Acq: 07 Aug 2024 04:11

Tgt Ion:228 Resp: 138675  
 Ion Ratio Lower Upper  
 228 100  
 226 28.9 22.1 33.1  
 229 21.5 15.4 23.0





#83

Chrysene

Concen: 22.714 ng

RT: 14.021 min Scan# 2030

Delta R.T. -0.012 min

Lab File: BF138831.D

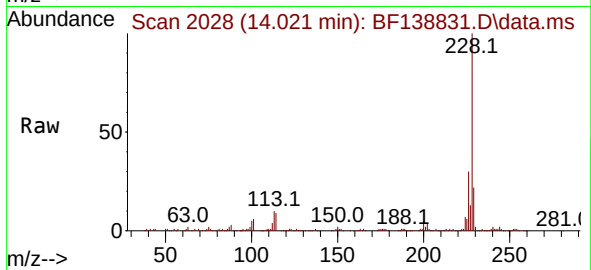
Acq: 07 Aug 2024 04:11

Instrument :

BNA\_F

ClientSampleId :

PL-02-07312024-BDL



Tgt Ion:228 Resp: 112340

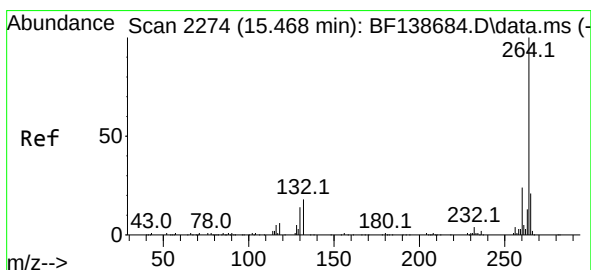
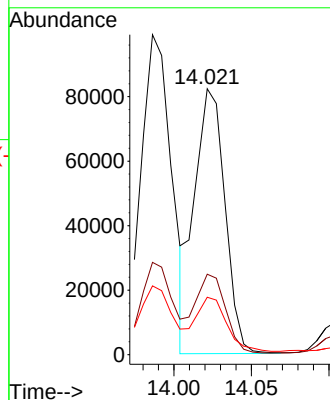
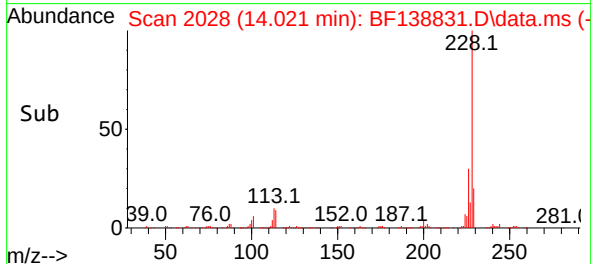
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 30.3  | 23.7  | 35.5  |
| 229 | 21.6  | 15.0  | 22.6  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/08/2024

Supervised By :mohammad ahmed 08/08/2024



#86

Perylene-d12

Concen: 20.000 ng

RT: 15.463 min Scan# 2273

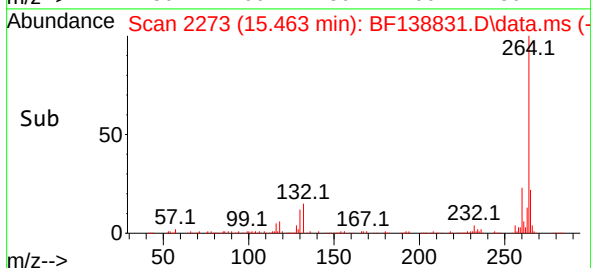
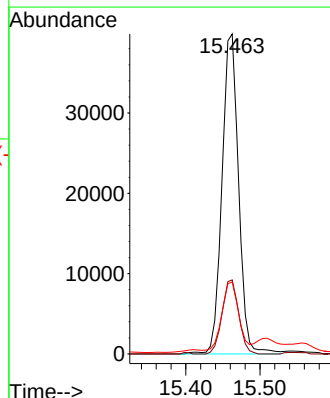
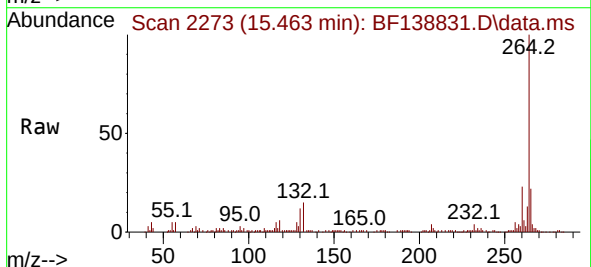
Delta R.T. -0.006 min

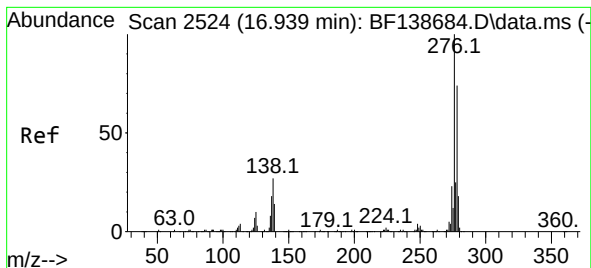
Lab File: BF138831.D

Acq: 07 Aug 2024 04:11

Tgt Ion:264 Resp: 62068

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 23.2  | 19.0  | 28.6  |
| 265 | 22.5  | 17.0  | 25.6  |





#87

Indeno(1,2,3-cd)pyrene

Concen: 8.290 ng

RT: 16.921 min Scan# 21

Delta R.T. -0.018 min

Lab File: BF138831.D

Acq: 07 Aug 2024 04:11

Instrument :

BNA\_F

ClientSampleId :

PL-02-07312024-BDL

Tgt Ion: 276 Resp: 3687

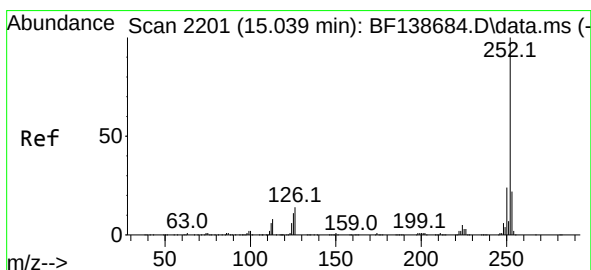
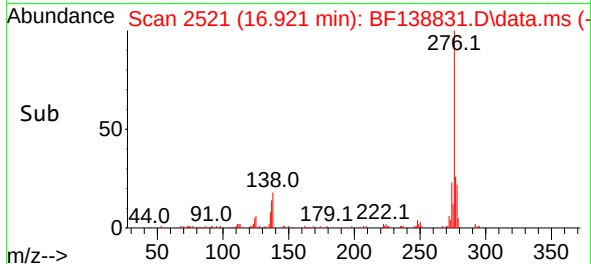
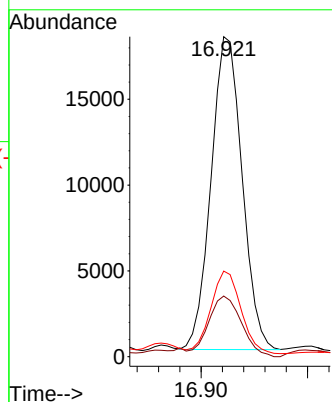
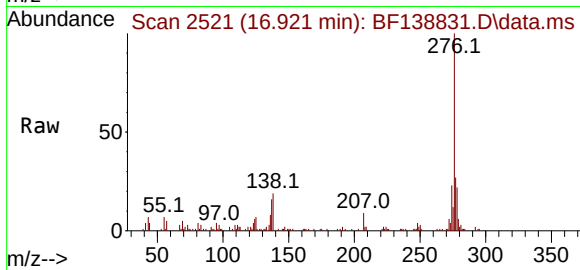
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 276 | 100   |       |       |
| 138 | 20.6  | 21.8  | 32.8  |
| 277 | 25.6  | 20.6  | 30.8  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/08/2024

Supervised By :mohammad ahmed 08/08/2024



#88

Benzo(b)fluoranthene

Concen: 27.930 ng m

RT: 15.039 min Scan# 2201

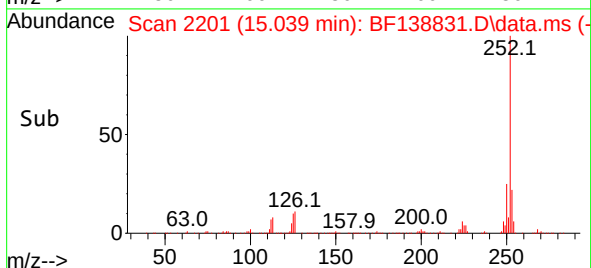
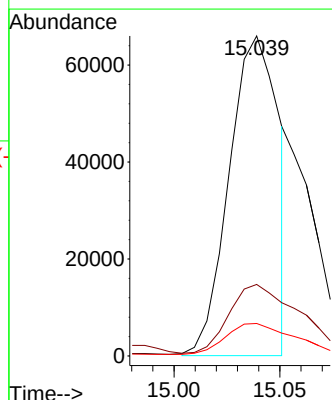
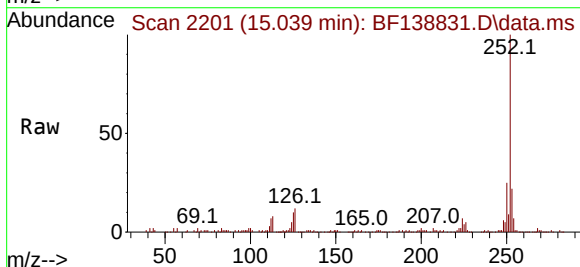
Delta R.T. 0.000 min

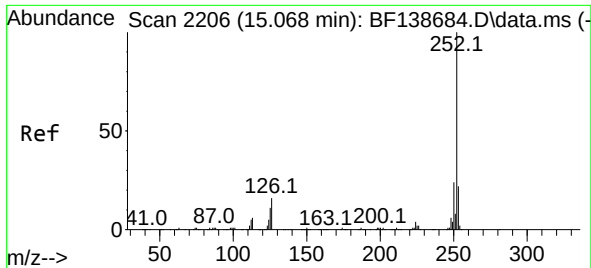
Lab File: BF138831.D

Acq: 07 Aug 2024 04:11

Tgt Ion: 252 Resp: 107462

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 22.3  | 17.5  | 26.3  |
| 125 | 10.1  | 8.9   | 13.3  |





#89

Benzo(k)fluoranthene

Concen: 12.373 ng m

RT: 15.051 min Scan# 21

Delta R.T. -0.018 min

Lab File: BF138831.D

Acq: 07 Aug 2024 04:11

Instrument :

BNA\_F

ClientSampleId :

PL-02-07312024-BDL

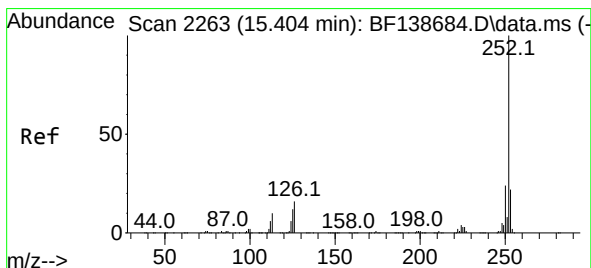
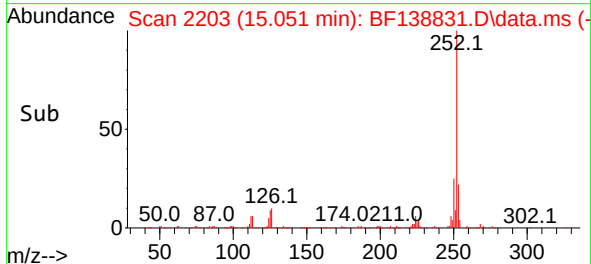
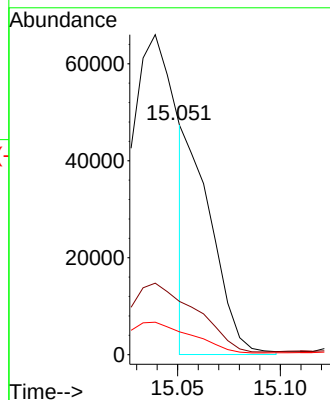
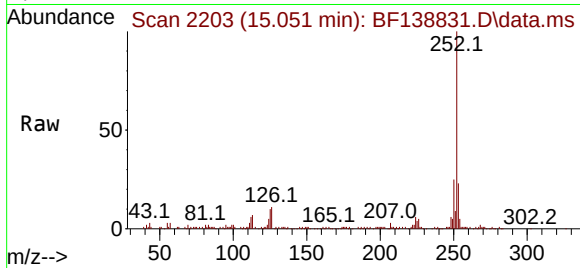
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 4121      |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 23.2  | 17.4 26.0 |
| 125         | 9.9   | 8.6 13.0  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/08/2024

Supervised By :mohammad ahmed 08/08/2024



#90

Benzo(a)pyrene

Concen: 24.261 ng

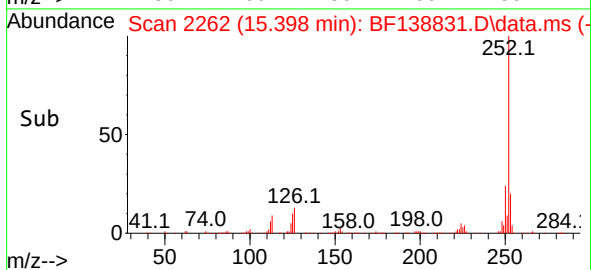
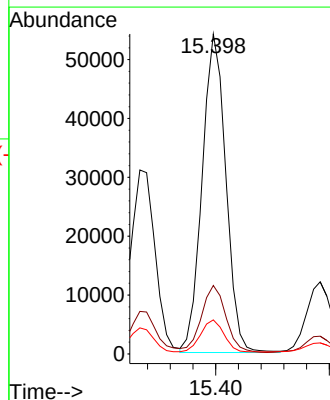
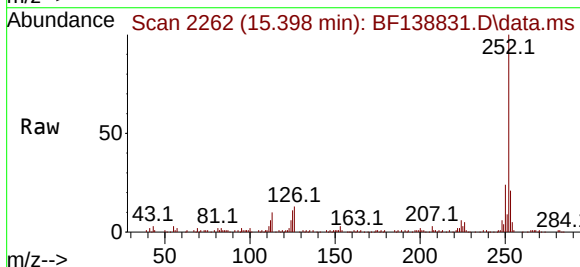
RT: 15.398 min Scan# 2262

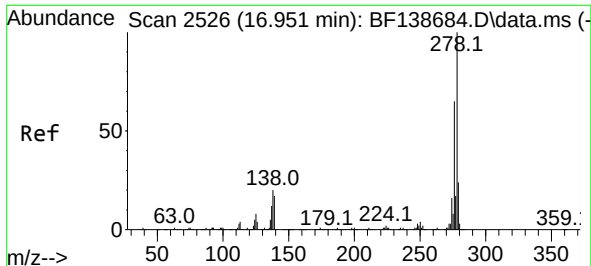
Delta R.T. -0.006 min

Lab File: BF138831.D

Acq: 07 Aug 2024 04:11

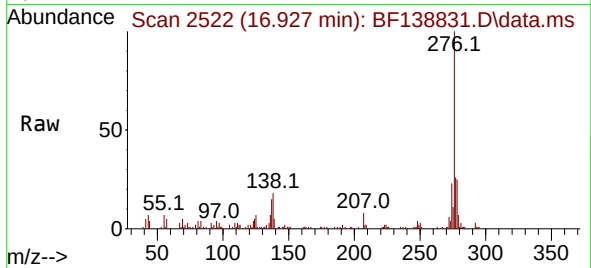
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 78518     |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 21.4  | 17.3 25.9 |
| 125         | 10.6  | 9.5 14.3  |





#91  
Dibenzo(a,h)anthracene  
Concen: 2.705 ng  
RT: 16.927 min Scan# 2522  
Delta R.T. -0.023 min  
Lab File: BF138831.D  
Acq: 07 Aug 2024 04:11

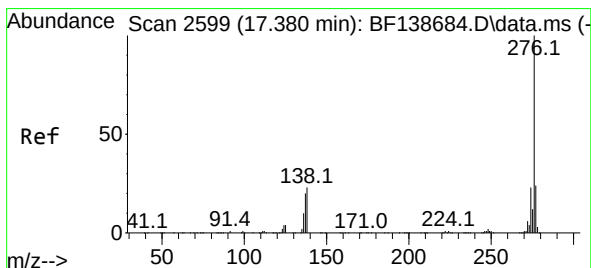
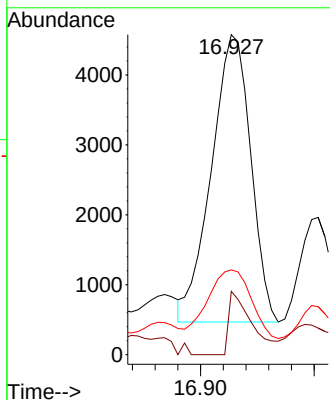
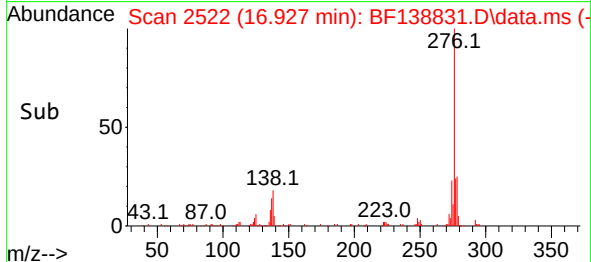
Instrument :  
BNA\_F  
ClientSampleId :  
PL-02-07312024-BDL



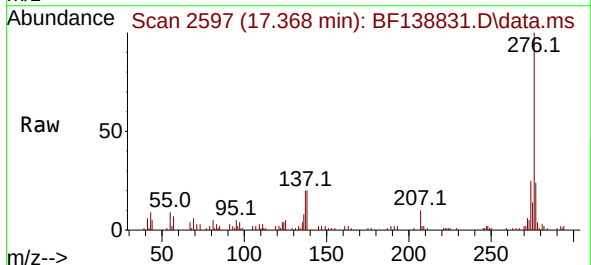
Tgt Ion: 278 Resp: 9870  
Ion Ratio Lower Upper  
278 100  
139 19.8 14.0 21.0  
279 26.5 19.0 28.4

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/08/2024  
Supervised By :mohammad ahmed 08/08/2024



#92  
Benzo(g,h,i)perylene  
Concen: 9.398 ng  
RT: 17.368 min Scan# 2597  
Delta R.T. -0.012 min  
Lab File: BF138831.D  
Acq: 07 Aug 2024 04:11



Tgt Ion: 276 Resp: 35610  
Ion Ratio Lower Upper  
276 100  
277 23.6 19.0 28.4  
138 20.2 18.5 27.7

