

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF071723\  
 Data File : BF134327.D  
 Acq On : 17 Jul 2023 21:31  
 Operator : CG\JU  
 Sample : 03597-03  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 RB-43-(0-2)

Manual Integrations  
 APPROVED

Reviewed By :Yogesh Patel 07/19/2023  
 Supervised By :mohammad ahmed 07/19/2023

Quant Time: Jul 18 01:17:20 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF062623.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Jul 14 22:51:27 2023  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|--------|------|----------|--------|-------|----------|
| -----                       |        |      |          |        |       |          |
| Internal Standards          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 6.840  | 152  | 72833    | 20.000 | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.116  | 136  | 261585   | 20.000 | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.875  | 164  | 113686   | 20.000 | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.369 | 188  | 204548   | 20.000 | ng    | 0.00     |
| 76) Chrysene-d12            | 14.033 | 240  | 126004   | 20.000 | ng    | 0.00     |
| 86) Perylene-d12            | 15.539 | 264  | 101276   | 20.000 | ng    | 0.00     |
|                             |        |      |          |        |       |          |
| System Monitoring Compounds |        |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.475  | 112  | 356538   | 81.887 | ng    | 0.00     |
| 7) Phenol-d6                | 6.481  | 99   | 426866   | 79.719 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.398  | 82   | 277724   | 57.231 | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol    | 10.669 | 330  | 116965   | 82.058 | ng    | -0.01    |
| 45) 2-Fluorobiphenyl        | 9.192  | 172  | 457067   | 58.453 | ng    | -0.01    |
| 79) Terphenyl-d14           | 12.963 | 244  | 420688   | 53.733 | ng    | -0.01    |
|                             |        |      |          |        |       |          |
| Target Compounds            |        |      |          |        |       | Qvalue   |
| 31) Naphthalene             | 8.139  | 128  | 25989    | 2.057  | ng    | # 95     |
| 52) Acenaphthene            | 9.904  | 154  | 25488    | 3.854  | ng    | 95       |
| 58) Fluorene                | 10.422 | 166  | 24550    | 3.053  | ng    | 97       |
| 71) Phenanthrene            | 11.392 | 178  | 309231   | 30.030 | ng    | 99       |
| 72) Anthracene              | 11.445 | 178  | 70552    | 6.587  | ng    | 99       |
| 73) Carbazole               | 11.604 | 167  | 39545    | 4.034  | ng    | 99       |
| 75) Fluoranthene            | 12.592 | 202  | 493476   | 44.328 | ng    | 98       |
| 78) Pyrene                  | 12.827 | 202  | 434216   | 37.029 | ng    | 99       |
| 81) Benzo(a)anthracene      | 14.021 | 228  | 192620   | 22.042 | ng    | 99       |
| 83) Chrysene                | 14.057 | 228  | 162924   | 19.249 | ng    | 97       |
| 87) Indeno(1,2,3-cd)pyrene  | 17.080 | 276  | 69521    | 9.893  | ng    | # 91     |
| 88) Benzo(b)fluoranthene    | 15.092 | 252  | 168728m  | 28.333 | ng    |          |
| 89) Benzo(k)fluoranthene    | 15.121 | 252  | 63876m   | 10.535 | ng    |          |
| 90) Benzo(a)pyrene          | 15.474 | 252  | 120744   | 20.968 | ng    | 96       |
| 91) Dibenzo(a,h)anthracene  | 17.092 | 278  | 16110m   | 2.807  | ng    |          |
| 92) Benzo(g,h,i)perylene    | 17.545 | 276  | 63312    | 10.696 | ng    | # 95     |
| -----                       |        |      |          |        |       |          |

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

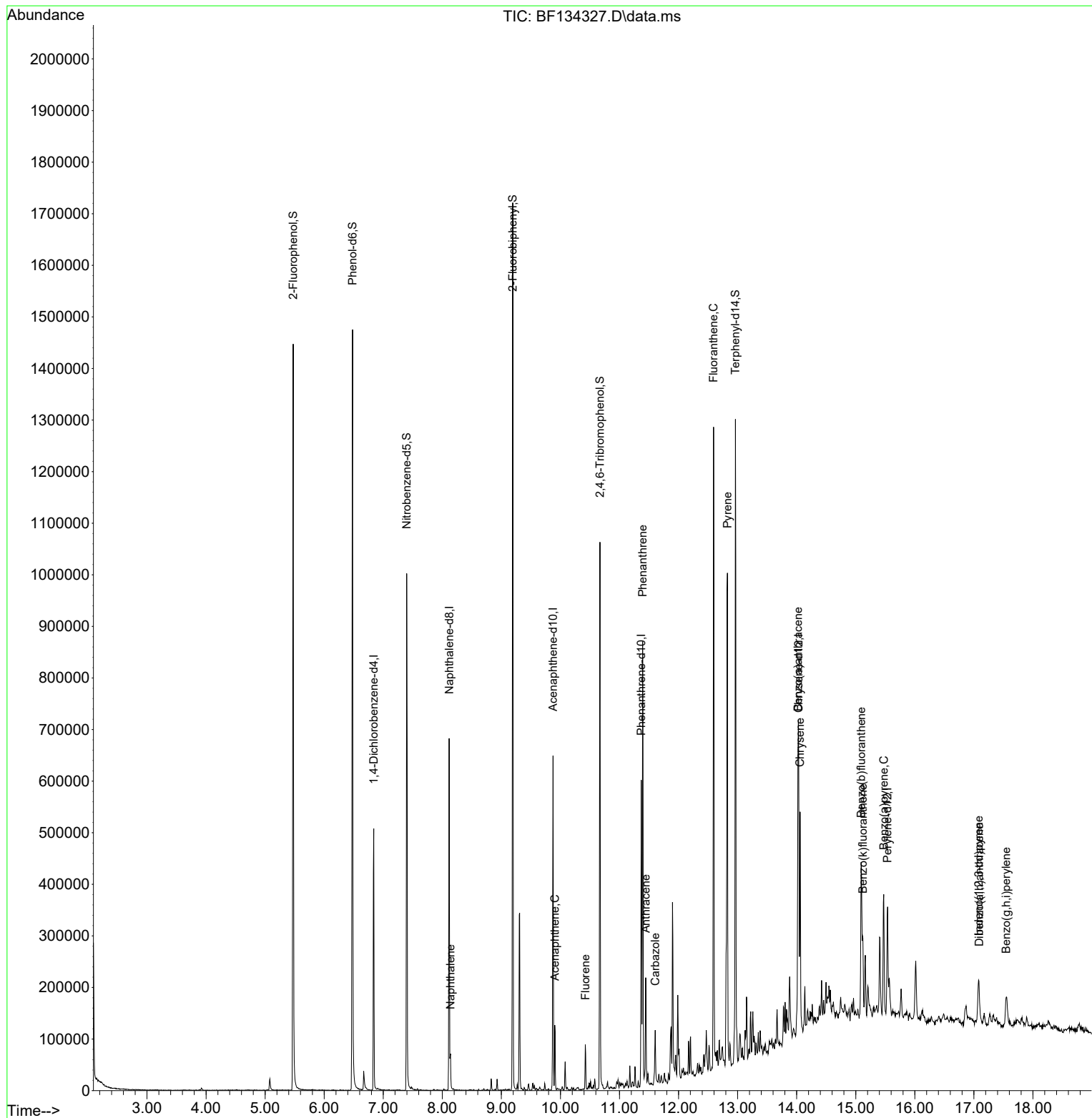
Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF071723\  
Data File : BF134327.D  
Acq On : 17 Jul 2023 21:31  
Operator : CG\JU  
Sample : 03597-03  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

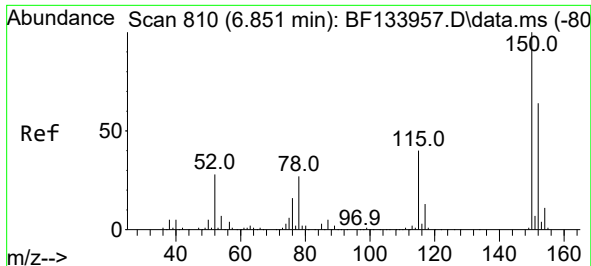
Instrument :  
BNA\_F  
ClientSampleId :  
RB-43-(0-2)

Quant Time: Jul 18 01:17:20 2023  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF062623.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Jul 14 22:51:27 2023  
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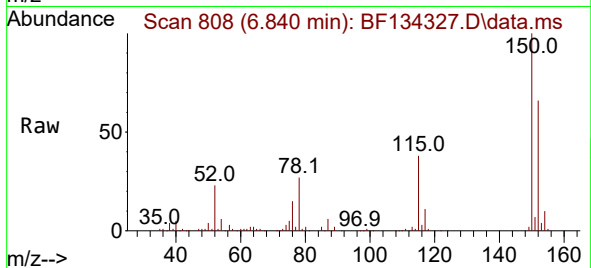
Reviewed By :Yogesh Patel 07/19/2023  
Supervised By :mohammad ahmed 07/19/2023





#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.840 min Scan# 80  
Delta R.T. -0.005 min  
Lab File: BF134327.D  
Acq: 17 Jul 2023 21:31

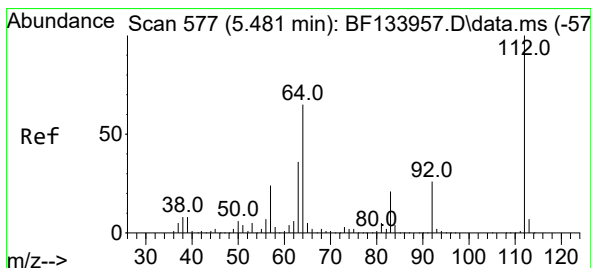
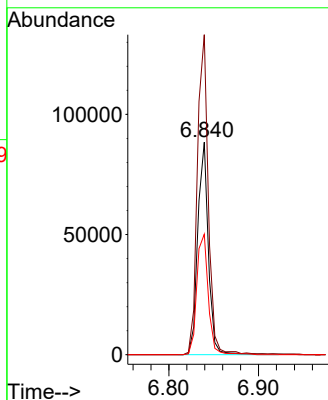
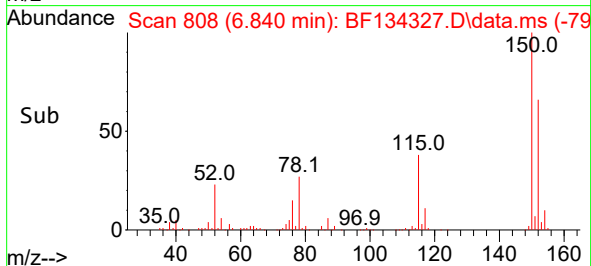
Instrument :  
BNA\_F  
ClientSampleId :  
RB-43-(0-2)



Tgt Ion:152 Resp: 7283  
Ion Ratio Lower Upper  
152 100  
150 150.6 124.5 186.7  
115 56.7 50.2 75.2

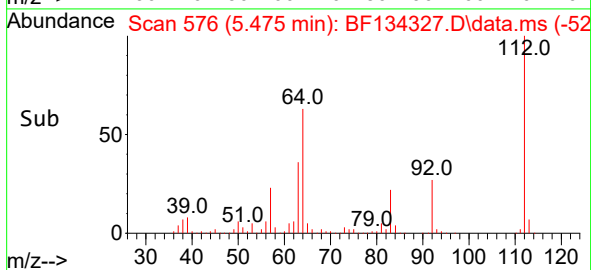
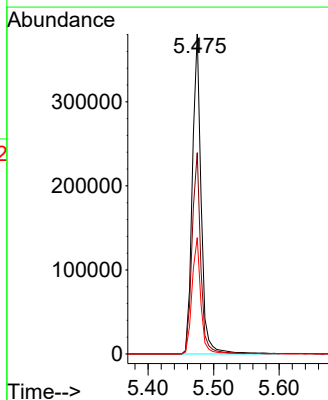
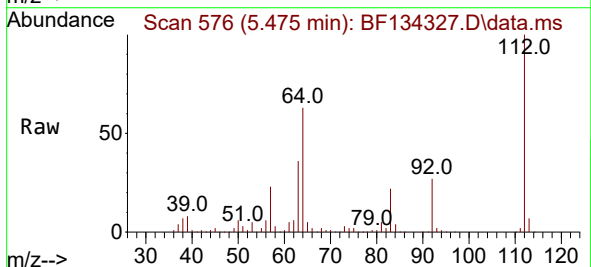
Manual Integrations  
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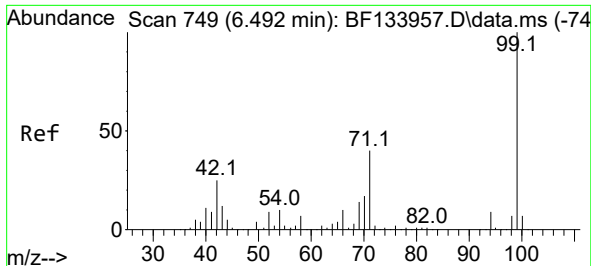
Reviewed By :Yogesh Patel 07/19/2023  
Supervised By :mohammad ahmed 07/19/2023



#5  
2-Fluorophenol  
Concen: 81.887 ng  
RT: 5.475 min Scan# 576  
Delta R.T. 0.006 min  
Lab File: BF134327.D  
Acq: 17 Jul 2023 21:31

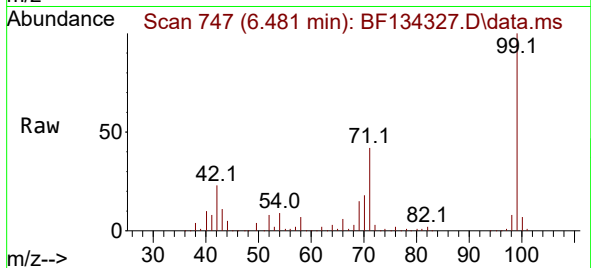
Tgt Ion:112 Resp: 356538  
Ion Ratio Lower Upper  
112 100  
64 62.9 52.1 78.1  
63 36.4 28.6 42.8





#7  
Phenol-d6  
Concen: 79.719 ng  
RT: 6.481 min Scan# 74  
Delta R.T. -0.006 min  
Lab File: BF134327.D  
Acq: 17 Jul 2023 21:31

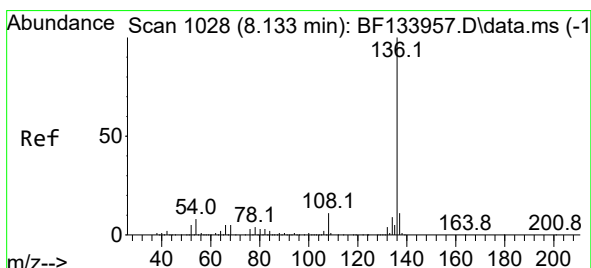
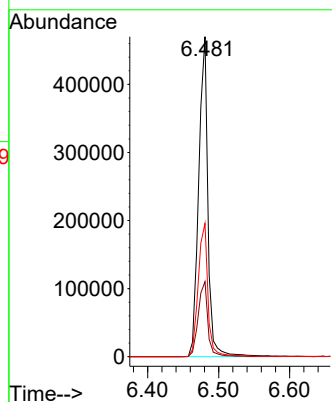
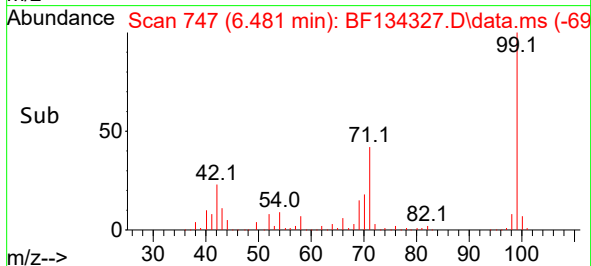
Instrument :  
BNA\_F  
ClientSampleId :  
RB-43-(0-2)



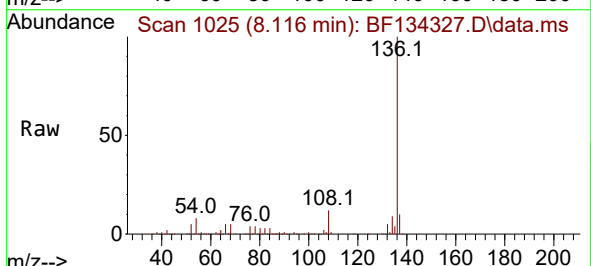
Tgt Ion: 99 Resp: 426860  
Ion Ratio Lower Upper  
99 100  
42 23.4 19.8 29.6  
71 41.7 31.9 47.9

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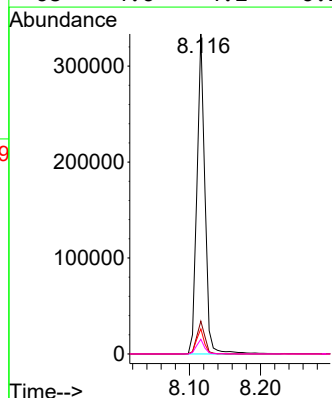
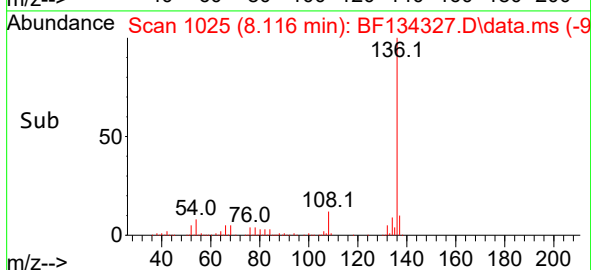
Reviewed By :Yogesh Patel 07/19/2023  
Supervised By :mohammad ahmed 07/19/2023

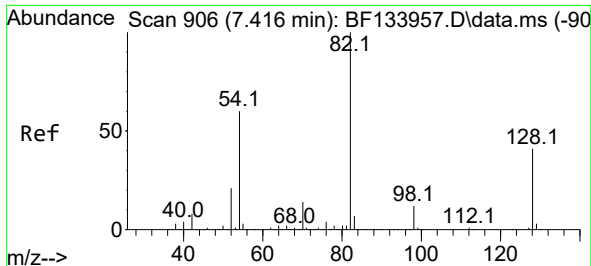


#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.116 min Scan# 1025  
Delta R.T. -0.006 min  
Lab File: BF134327.D  
Acq: 17 Jul 2023 21:31



Tgt Ion:136 Resp: 261585  
Ion Ratio Lower Upper  
136 100  
137 10.3 8.6 12.8  
54 7.9 6.5 9.7  
68 4.6 4.2 6.2





#23

Nitrobenzene-d5

Concen: 57.231 ng

RT: 7.398 min Scan# 90

Delta R.T. -0.012 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

Instrument :

BNA\_F

ClientSampleId :

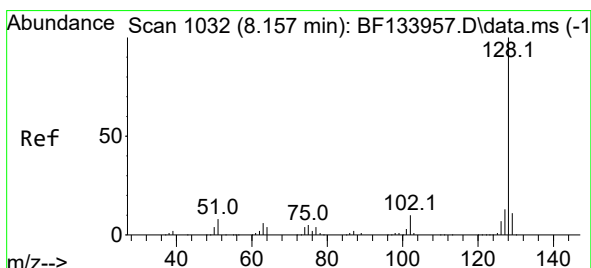
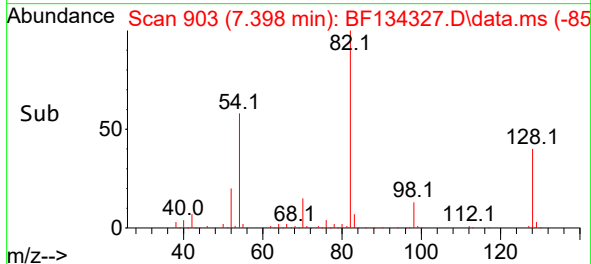
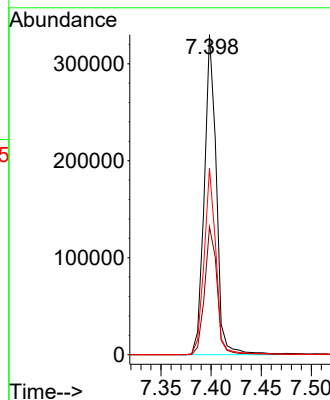
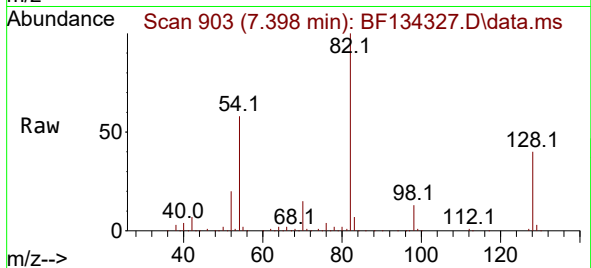
RB-43-(0-2)

Tgt Ion: 82 Resp: 277724  
 Ion Ratio Lower Upper  
 82 100  
 128 40.0 32.5 48.7  
 54 58.2 48.2 72.2

Manual Integrations

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Reviewed By :Yogesh Patel 07/19/2023  
 Supervised By :mohammad ahmed 07/19/2023



#31

Naphthalene

Concen: 2.057 ng

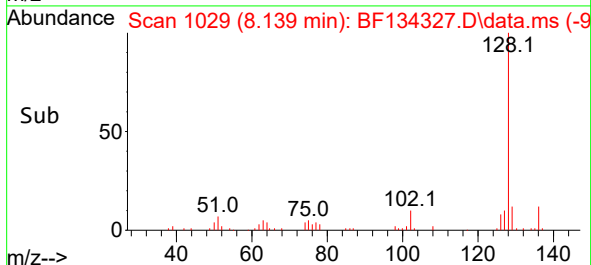
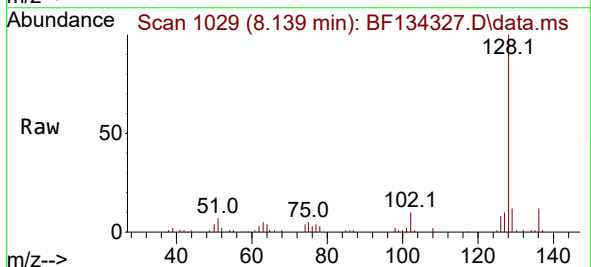
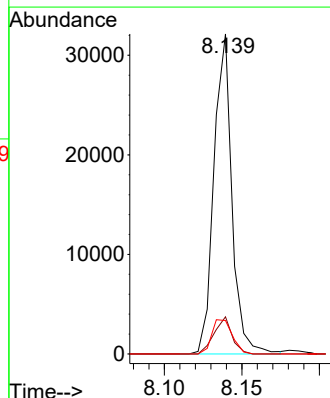
RT: 8.139 min Scan# 1029

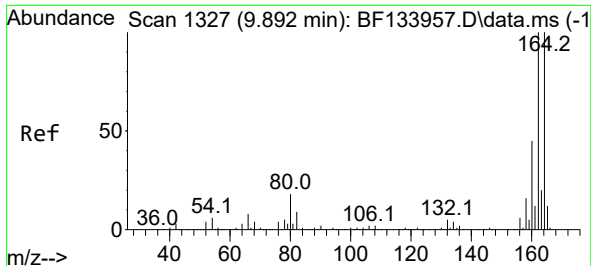
Delta R.T. -0.006 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

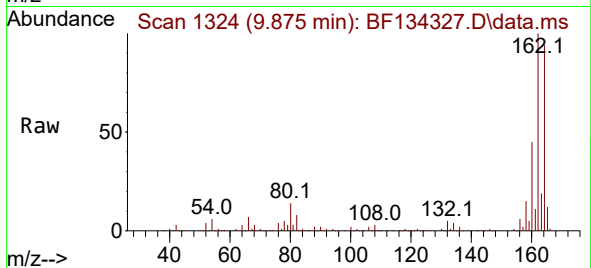
Tgt Ion:128 Resp: 25989  
 Ion Ratio Lower Upper  
 128 100  
 129 11.6 8.7 13.1  
 127 10.5 10.6 15.8#





#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.875 min Scan# 11  
Delta R.T. -0.006 min  
Lab File: BF134327.D  
Acq: 17 Jul 2023 21:31

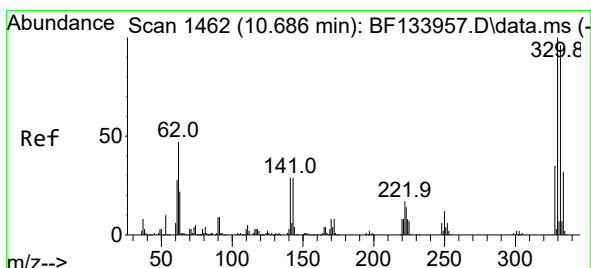
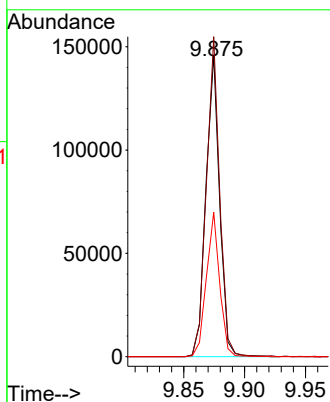
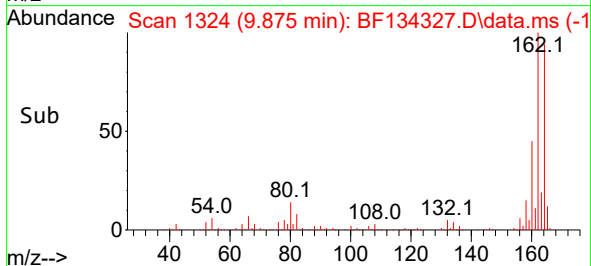
Instrument :  
BNA\_F  
ClientSampleId :  
RB-43-(0-2)



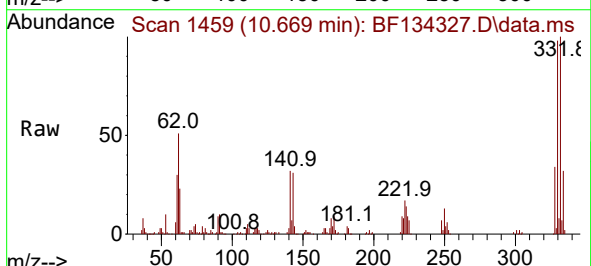
Tgt Ion:164 Resp: 113680  
Ion Ratio Lower Upper  
164 100  
162 106.1 80.0 120.0  
160 47.9 35.9 53.9

Manual Integrations  
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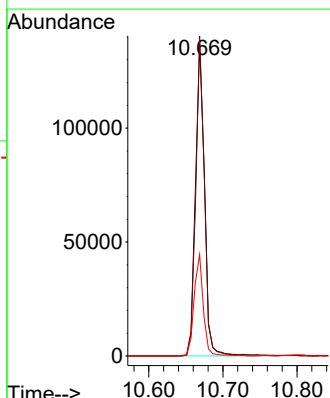
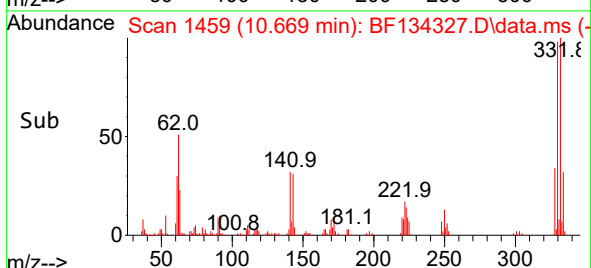
Reviewed By :Yogesh Patel 07/19/2023  
Supervised By :mohammad ahmed 07/19/2023

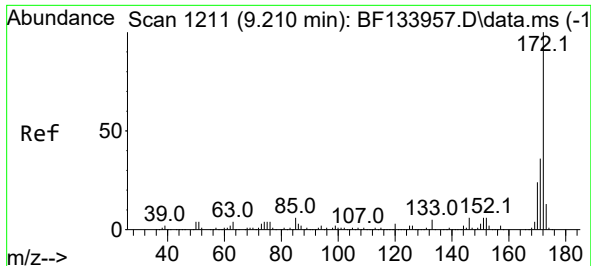


#42  
2,4,6-Tribromophenol  
Concen: 82.058 ng  
RT: 10.669 min Scan# 1459  
Delta R.T. -0.012 min  
Lab File: BF134327.D  
Acq: 17 Jul 2023 21:31



Tgt Ion:330 Resp: 116965  
Ion Ratio Lower Upper  
330 100  
332 97.6 77.0 115.6  
141 32.9 26.3 39.5





#45

2-Fluorobiphenyl

Concen: 58.453 ng

RT: 9.192 min Scan# 11

Delta R.T. -0.012 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

Instrument :

BNA\_F

ClientSampleId :

RB-43-(0-2)

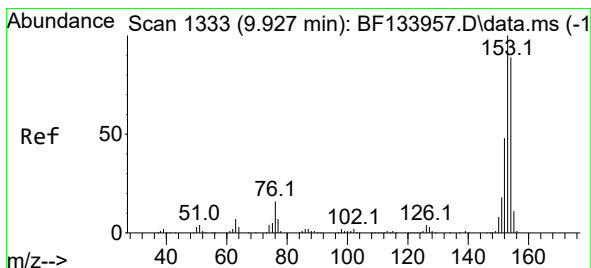
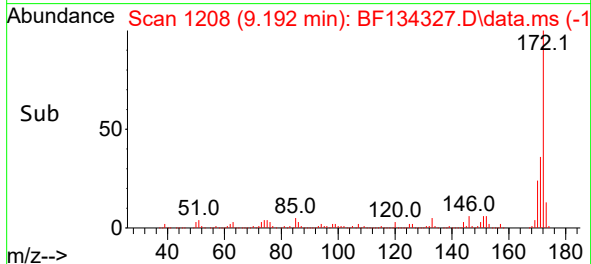
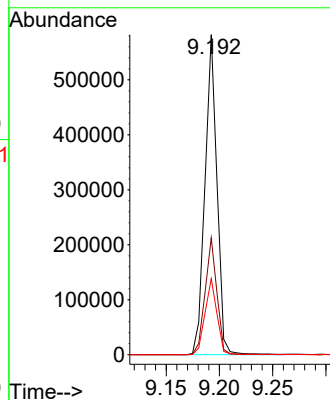
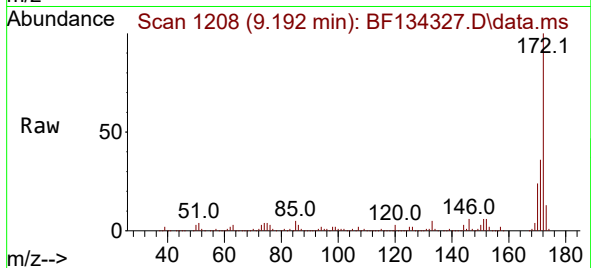
Tgt Ion:172 Resp: 45706  
 Ion Ratio Lower Upper  
 172 100  
 171 36.5 28.6 43.0  
 170 23.8 19.4 29.0

Manual Integrations

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Supervised By :mohammad ahmed 07/19/2023



#52

Acenaphthene

Concen: 3.854 ng

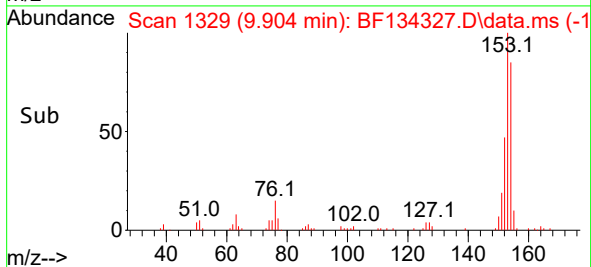
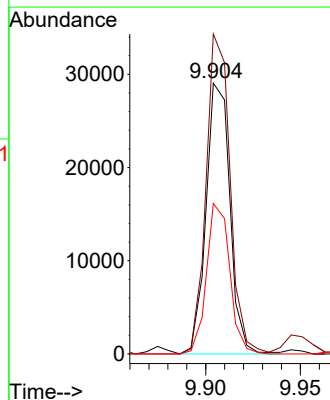
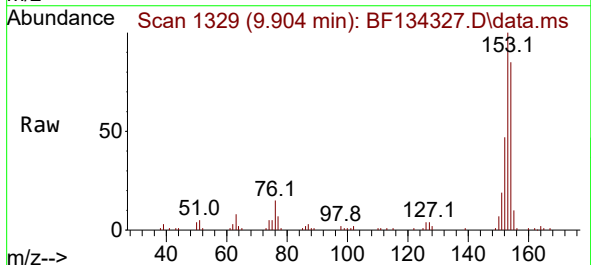
RT: 9.904 min Scan# 1329

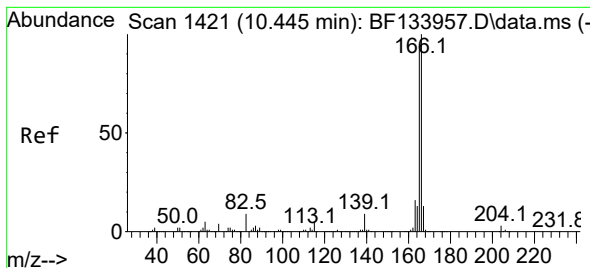
Delta R.T. -0.012 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

Tgt Ion:154 Resp: 25488  
 Ion Ratio Lower Upper  
 154 100  
 153 118.1 89.4 134.2  
 152 55.5 42.8 64.2





#58

Fluorene

Concen: 3.053 ng

RT: 10.422 min Scan# 14

Delta R.T. -0.012 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

Instrument :

BNA\_F

ClientSampleId :

RB-43-(0-2)

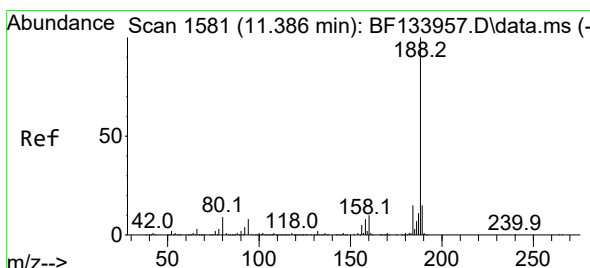
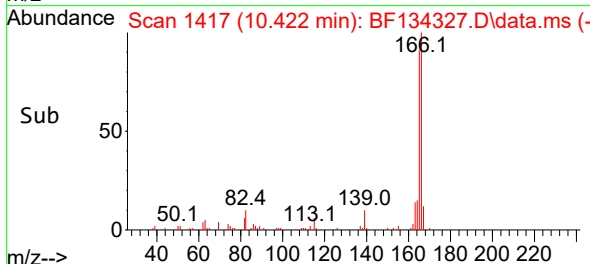
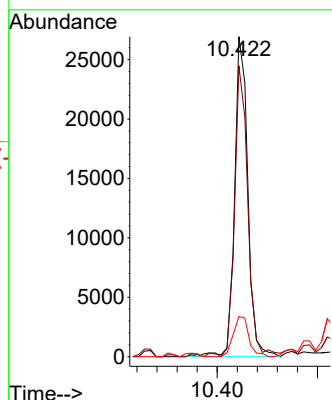
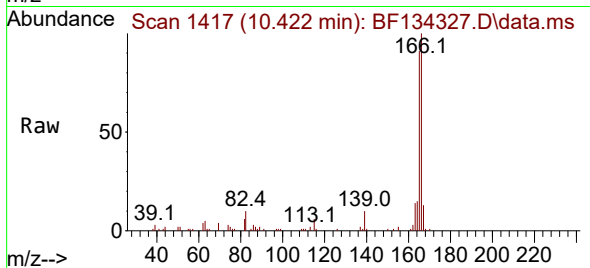
|             |       |            |
|-------------|-------|------------|
| Tgt Ion:166 | Resp: | 24550      |
| Ion Ratio   | Lower | Upper      |
| 166         | 100   |            |
| 165         | 90.9  | 75.0 112.4 |
| 167         | 12.6  | 10.6 15.8  |

Manual Integrations

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Reviewed By :Yogesh Patel 07/19/2023

Supervised By :mohammad ahmed 07/19/2023



#64

Phenanthrene-d10

Concen: 20.000 ng

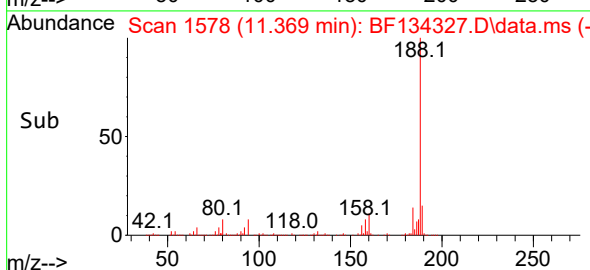
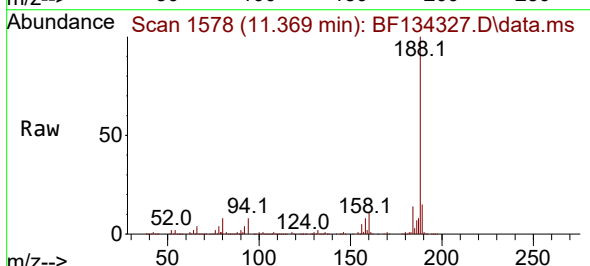
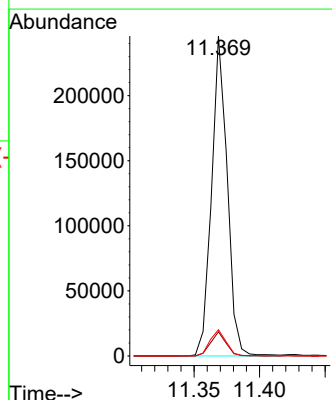
RT: 11.369 min Scan# 1578

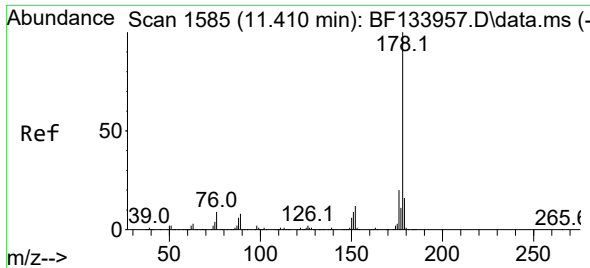
Delta R.T. -0.006 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

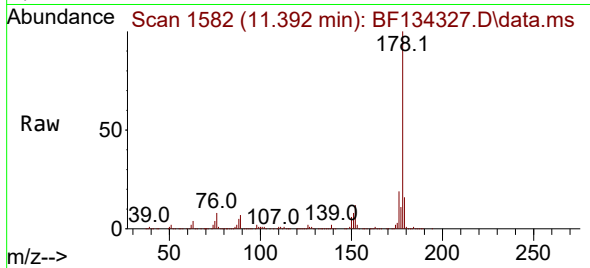
|             |       |          |
|-------------|-------|----------|
| Tgt Ion:188 | Resp: | 204548   |
| Ion Ratio   | Lower | Upper    |
| 188         | 100   |          |
| 94          | 7.5   | 6.4 9.6  |
| 80          | 8.2   | 7.3 10.9 |





#71  
Phenanthrene  
Concen: 30.030 ng  
RT: 11.392 min Scan# 11  
Delta R.T. -0.012 min  
Lab File: BF134327.D  
Acq: 17 Jul 2023 21:31

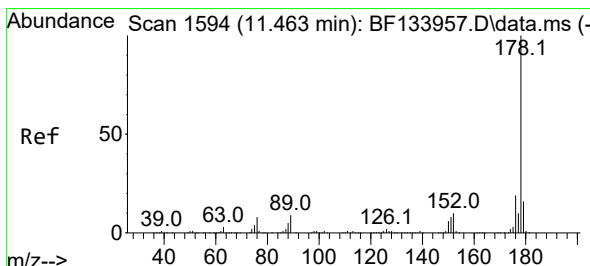
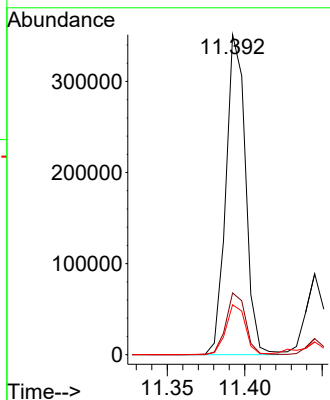
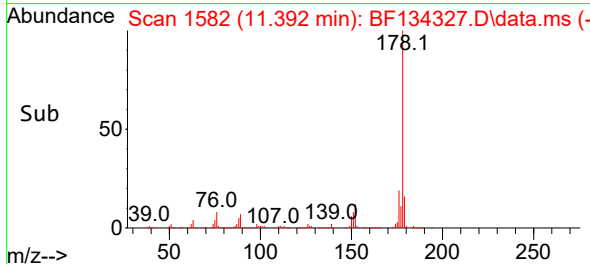
Instrument :  
BNA\_F  
ClientSampleId :  
RB-43-(0-2)



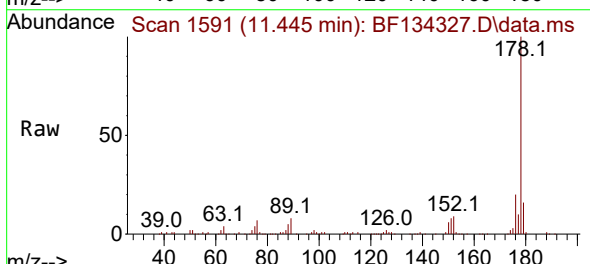
Tgt Ion:178 Resp: 30923  
Ion Ratio Lower Upper  
178 100  
176 19.3 16.0 24.0  
179 15.6 12.4 18.6

Manual Integrations  
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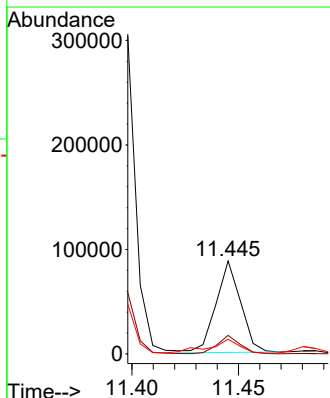
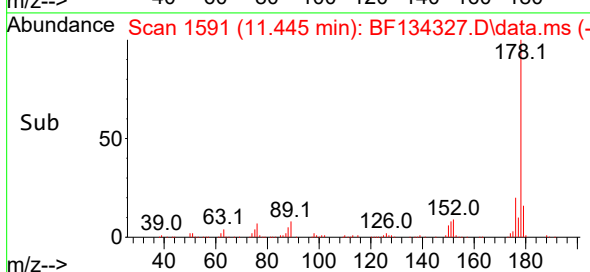
Reviewed By :Yogesh Patel 07/19/2023  
Supervised By :mohammad ahmed 07/19/2023

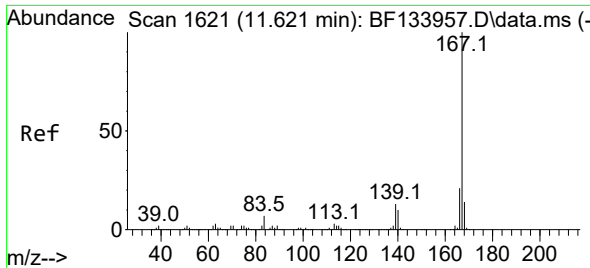


#72  
Anthracene  
Concen: 6.587 ng  
RT: 11.445 min Scan# 1591  
Delta R.T. -0.012 min  
Lab File: BF134327.D  
Acq: 17 Jul 2023 21:31



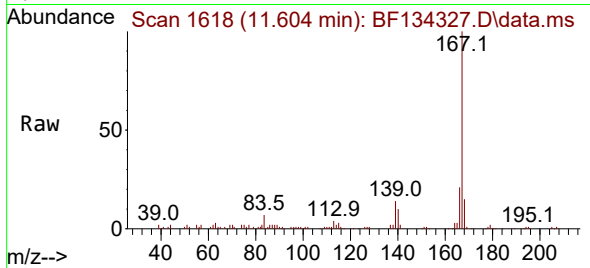
Tgt Ion:178 Resp: 70552  
Ion Ratio Lower Upper  
178 100  
176 19.9 15.3 22.9  
179 15.8 12.4 18.6





#73  
 Carbazole  
 Concen: 4.034 ng  
 RT: 11.604 min Scan# 1618  
 Delta R.T. -0.012 min  
 Lab File: BF134327.D  
 Acq: 17 Jul 2023 21:31

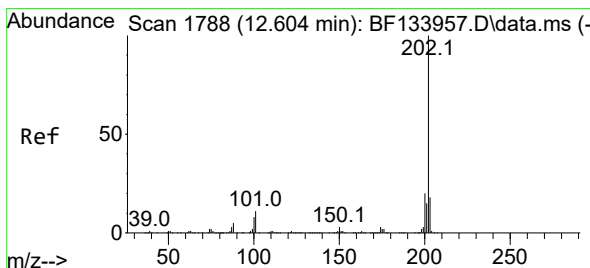
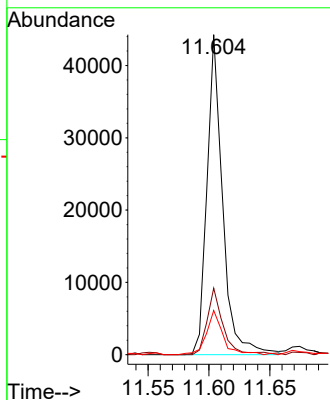
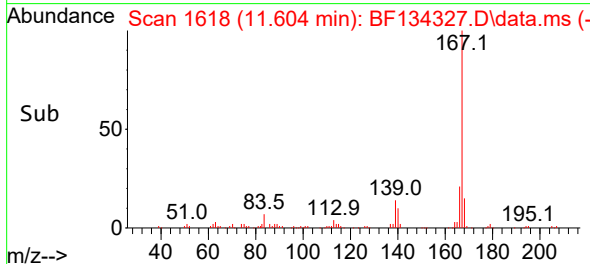
Instrument :  
 BNA\_F  
 ClientSampleId :  
 RB-43-(0-2)



Tgt Ion:167 Resp: 39549  
 Ion Ratio Lower Upper  
 167 100  
 166 20.8 17.0 25.6  
 139 13.8 10.4 15.6

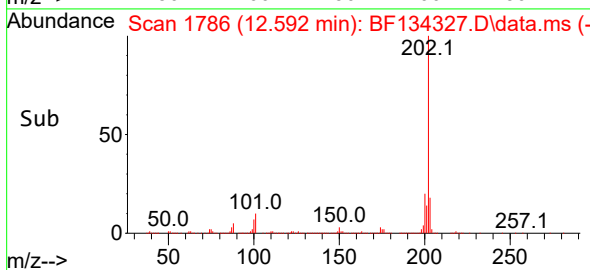
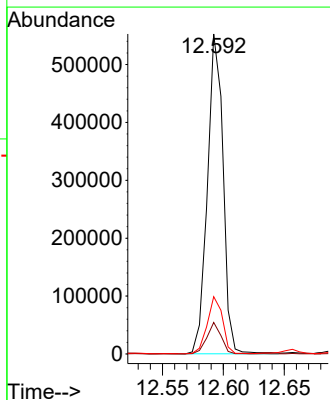
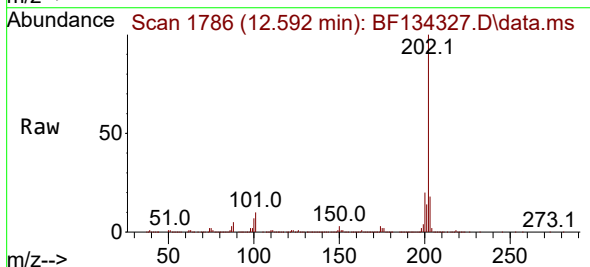
Manual Integrations  
 APPROVED

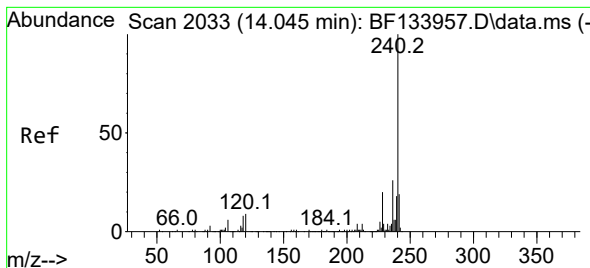
Reviewed By :Yogesh Patel 07/19/2023  
 Supervised By :mohammad ahmed 07/19/2023



#75  
 Fluoranthene  
 Concen: 44.328 ng  
 RT: 12.592 min Scan# 1786  
 Delta R.T. -0.006 min  
 Lab File: BF134327.D  
 Acq: 17 Jul 2023 21:31

Tgt Ion:202 Resp: 493476  
 Ion Ratio Lower Upper  
 202 100  
 101 9.8 0.0 31.0  
 203 17.9 0.0 37.6





#76

Chrysene-d12

Concen: 20.000 ng

RT: 14.033 min Scan# 2031

Delta R.T. -0.006 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

Instrument :

BNA\_F

ClientSampleId :

RB-43-(0-2)

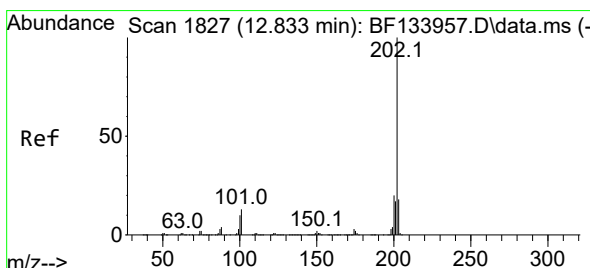
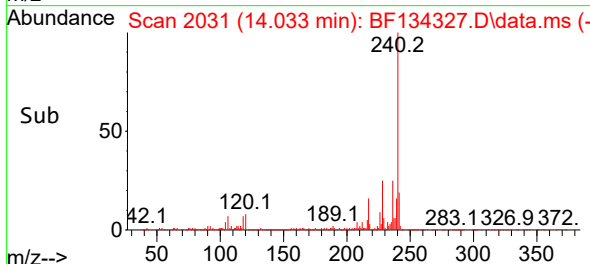
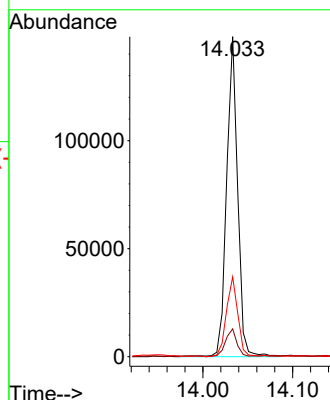
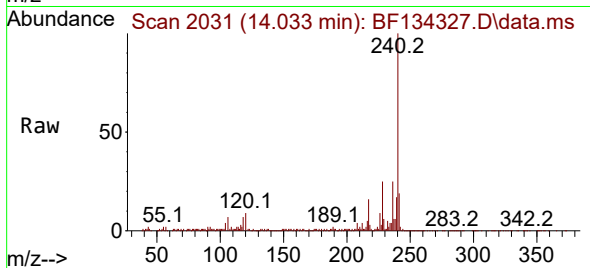
Tgt Ion:240 Resp: 126004  
 Ion Ratio Lower Upper  
 240 100  
 120 8.7 7.4 11.0  
 236 25.0 21.0 31.6

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 07/19/2023

Supervised By :mohammad ahmed 07/19/2023



#78

Pyrene

Concen: 37.029 ng

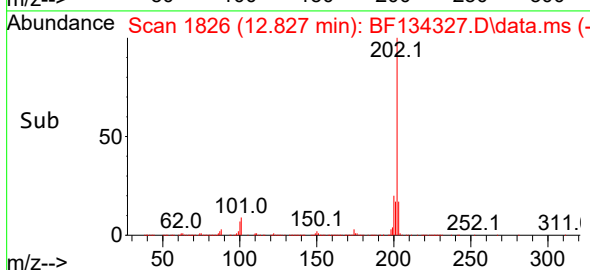
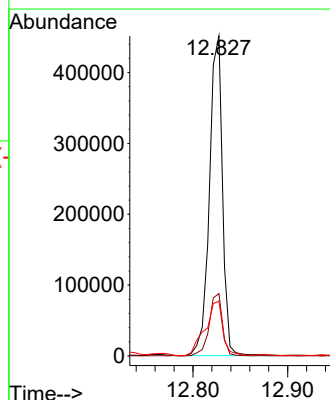
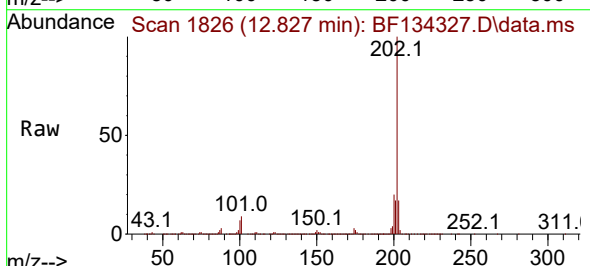
RT: 12.827 min Scan# 1826

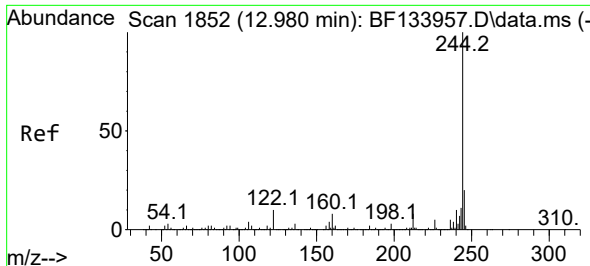
Delta R.T. -0.006 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

Tgt Ion:202 Resp: 434216  
 Ion Ratio Lower Upper  
 202 100  
 200 19.5 16.1 24.1  
 203 17.2 14.3 21.5





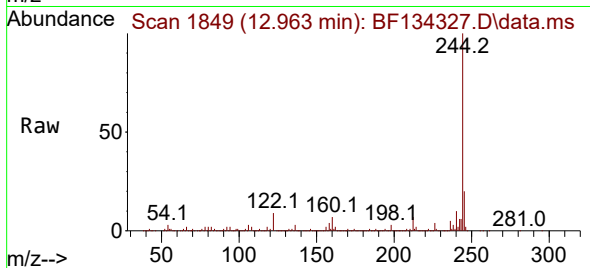
#79  
 Terphenyl-d14  
 Concen: 53.733 ng  
 RT: 12.963 min Scan# 11  
 Delta R.T. -0.012 min  
 Lab File: BF134327.D  
 Acq: 17 Jul 2023 21:31

Instrument :

BNA\_F

ClientSampleId :

RB-43-(0-2)



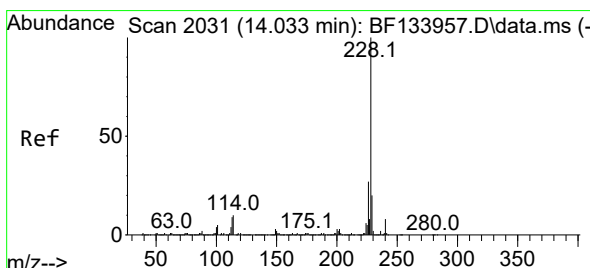
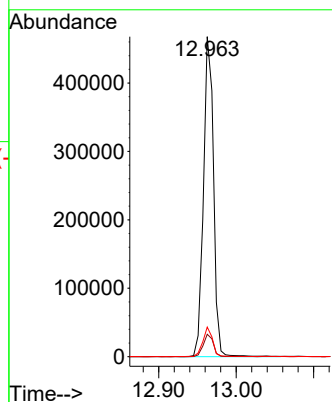
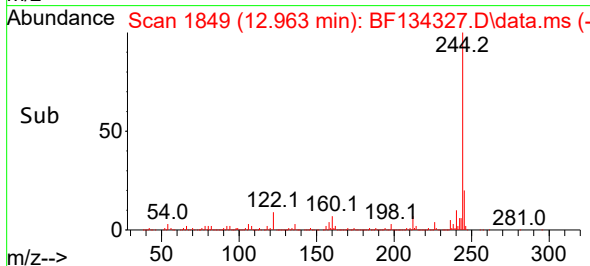
Tgt Ion:244 Resp: 420688  
 Ion Ratio Lower Upper  
 244 100  
 212 7.0 6.0 9.0  
 122 9.3 8.3 12.5

Manual Integrations

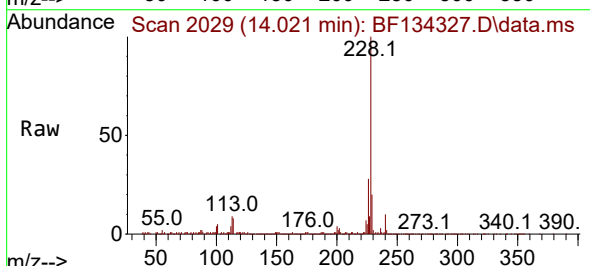
APPROVED

Reviewed By :Yogesh Patel 07/19/2023

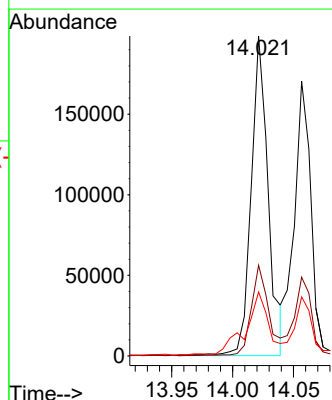
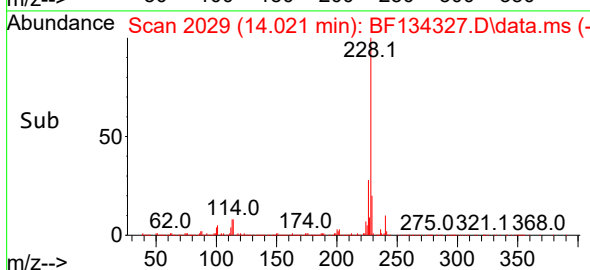
Supervised By :mohammad ahmed 07/19/2023

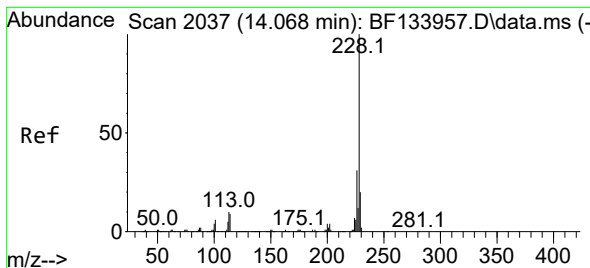


#81  
 Benzo(a)anthracene  
 Concen: 22.042 ng  
 RT: 14.021 min Scan# 2029  
 Delta R.T. -0.006 min  
 Lab File: BF134327.D  
 Acq: 17 Jul 2023 21:31



Tgt Ion:228 Resp: 192620  
 Ion Ratio Lower Upper  
 228 100  
 226 28.3 22.0 33.0  
 229 20.0 16.3 24.5





#83

Chrysene

Concen: 19.249 ng

RT: 14.057 min Scan# 2037

Delta R.T. -0.012 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

Instrument :

BNA\_F

ClientSampleId :

RB-43-(0-2)

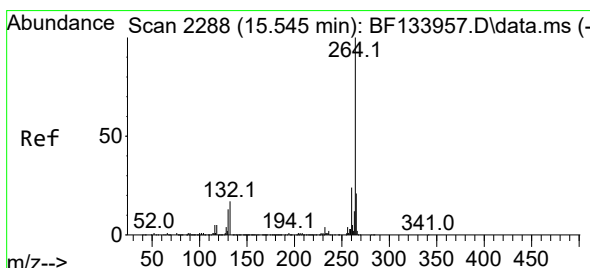
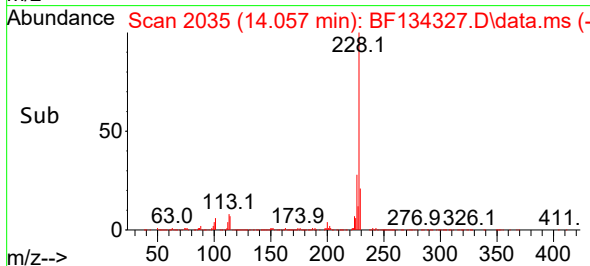
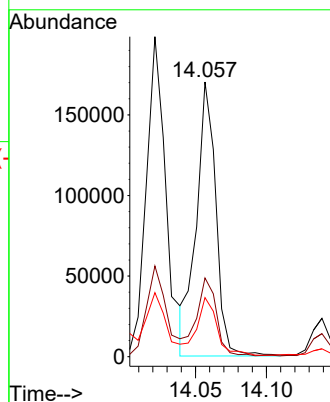
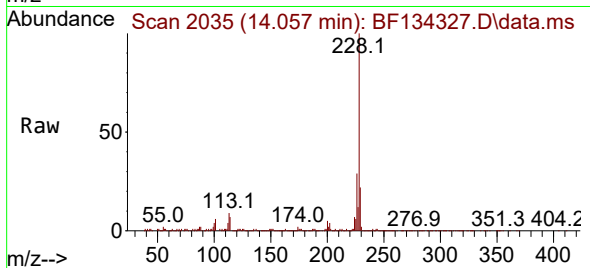
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 228   | Resp: | 162924 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 28.6  | 24.4  | 36.6   |
| 229       | 21.5  | 16.1  | 24.1   |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 07/19/2023

Supervised By :mohammad ahmed 07/19/2023



#86

Perylene-d12

Concen: 20.000 ng

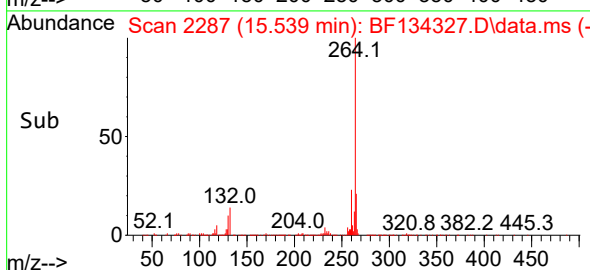
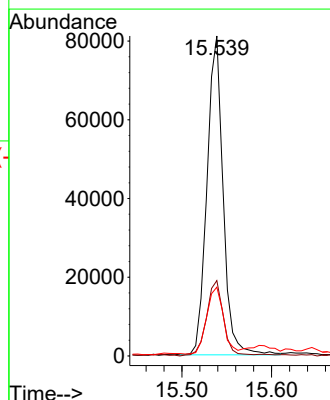
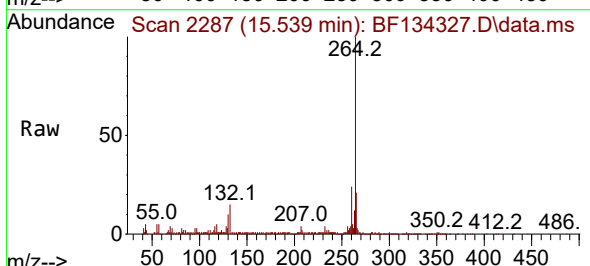
RT: 15.539 min Scan# 2287

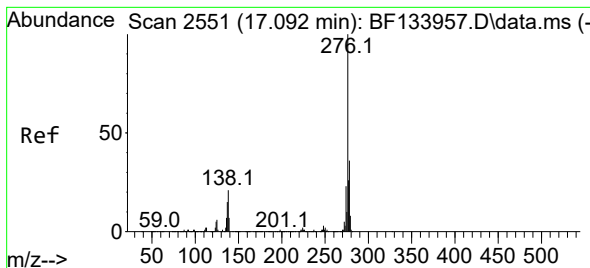
Delta R.T. -0.006 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 264   | Resp: | 101276 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 23.6  | 19.5  | 29.3   |
| 265       | 21.5  | 16.6  | 25.0   |





#87

Indeno(1,2,3-cd)pyrene

Concen: 9.893 ng

RT: 17.080 min Scan# 21

Delta R.T. -0.018 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

Instrument :

BNA\_F

ClientSampleId :

RB-43-(0-2)

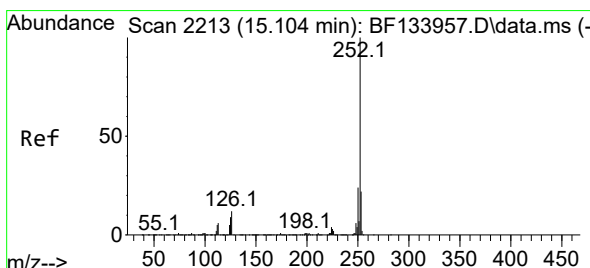
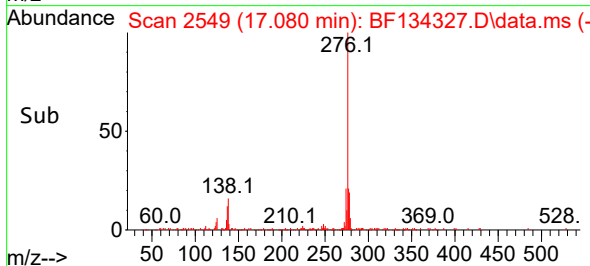
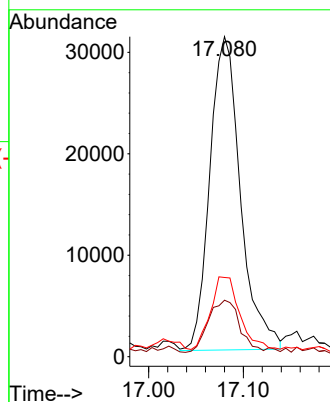
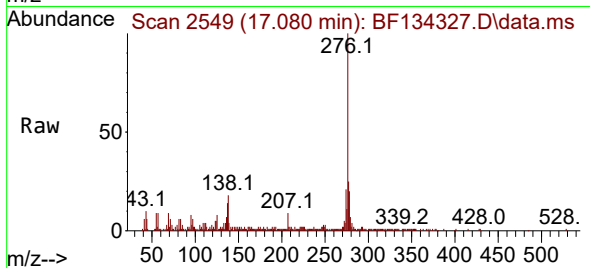
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 276   | Resp: | 6952 |
| Ion Ratio | Lower | Upper |      |
| 276       | 100   |       |      |
| 138       | 16.9  | 18.7  | 28.1 |
| 277       | 22.1  | 19.9  | 29.9 |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 07/19/2023

Supervised By :mohammad ahmed 07/19/2023



#88

Benzo(b)fluoranthene

Concen: 28.333 ng m

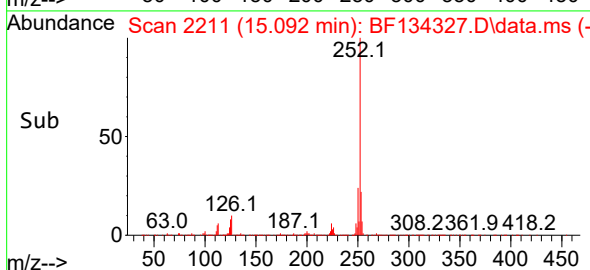
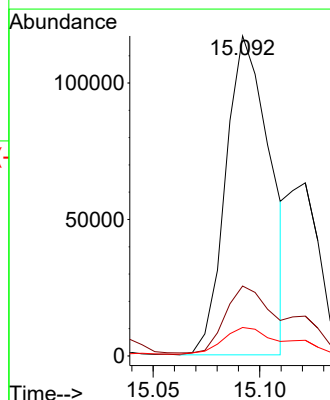
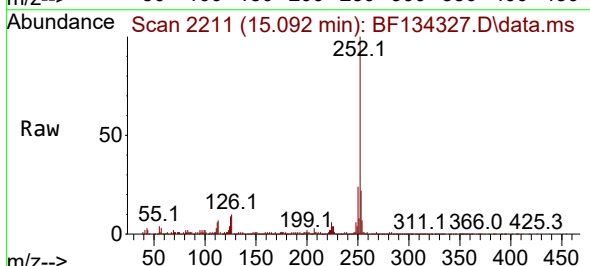
RT: 15.092 min Scan# 2211

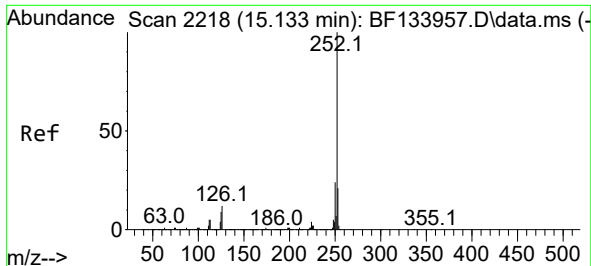
Delta R.T. -0.012 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 168728 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 21.9  | 17.4  | 26.0   |
| 125       | 8.9   | 7.1   | 10.7   |





#89

Benzo(k)fluoranthene

Concen: 10.535 ng m

RT: 15.121 min Scan# 21

Delta R.T. -0.012 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

Instrument :

BNA\_F

ClientSampleId :

RB-43-(0-2)

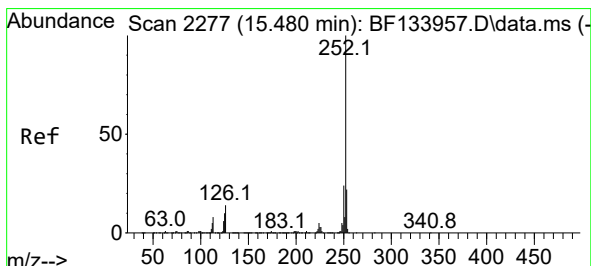
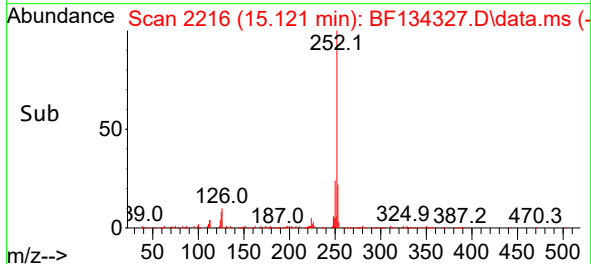
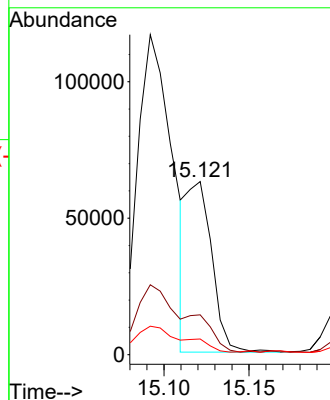
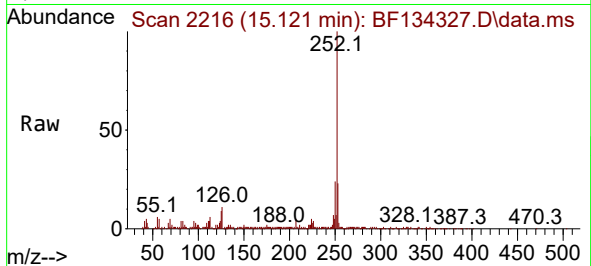
Tgt Ion:252 Resp: 63870  
 Ion Ratio Lower Upper  
 252 100  
 253 23.0 16.9 25.3  
 125 9.1 7.4 11.2

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 07/19/2023

Supervised By :mohammad ahmed 07/19/2023



#90

Benzo(a)pyrene

Concen: 20.968 ng

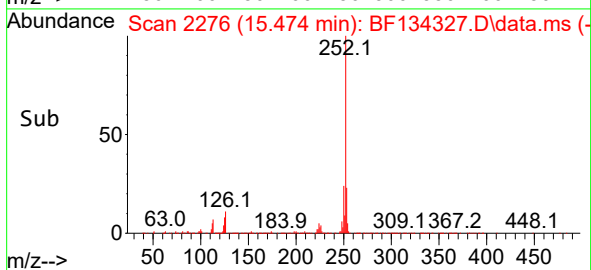
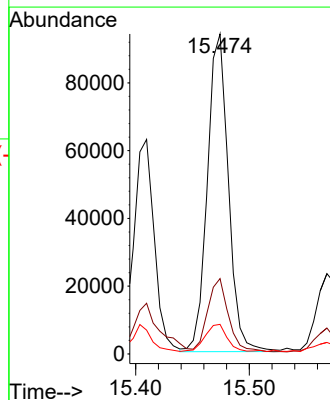
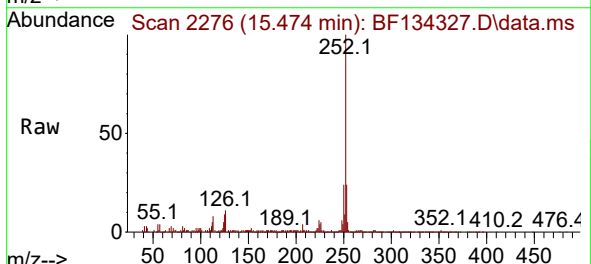
RT: 15.474 min Scan# 2276

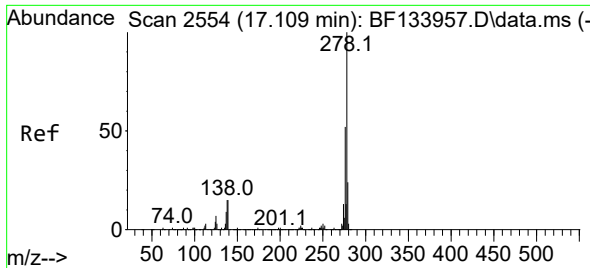
Delta R.T. -0.006 min

Lab File: BF134327.D

Acq: 17 Jul 2023 21:31

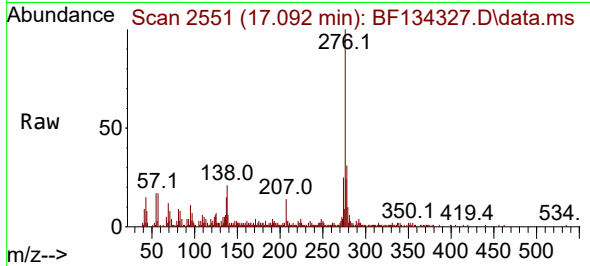
Tgt Ion:252 Resp: 120744  
 Ion Ratio Lower Upper  
 252 100  
 253 23.6 17.4 26.0  
 125 9.3 8.4 12.6





#91  
Dibenzo(a,h)anthracene  
Concen: 2.807 ng m  
RT: 17.092 min Scan# 21  
Delta R.T. -0.018 min  
Lab File: BF134327.D  
Acq: 17 Jul 2023 21:31

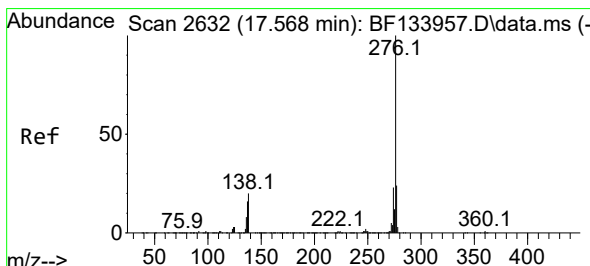
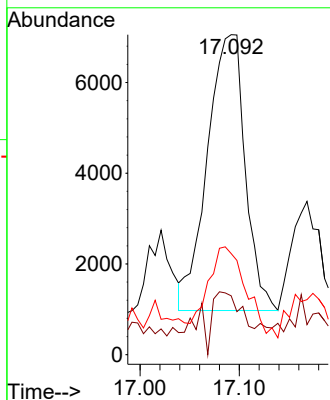
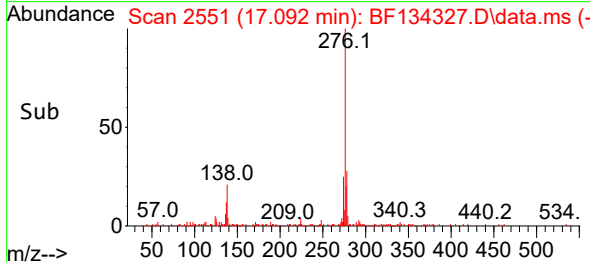
Instrument :  
BNA\_F  
ClientSampleId :  
RB-43-(0-2)



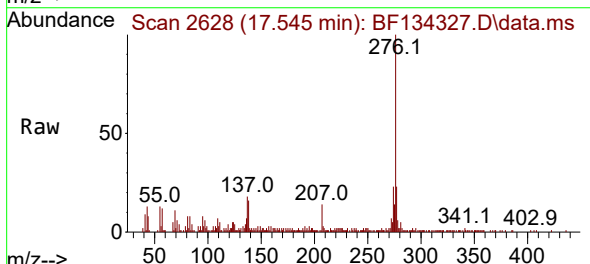
Tgt Ion:278 Resp: 16110  
Ion Ratio Lower Upper  
278 100  
139 18.4 12.2 18.4  
279 31.6 19.4 29.2

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 07/19/2023  
Supervised By :mohammad ahmed 07/19/2023



#92  
Benzo(g,h,i)perylene  
Concen: 10.696 ng  
RT: 17.545 min Scan# 2628  
Delta R.T. -0.023 min  
Lab File: BF134327.D  
Acq: 17 Jul 2023 21:31



Tgt Ion:276 Resp: 63312  
Ion Ratio Lower Upper  
276 100  
277 23.2 19.0 28.6  
138 15.7 16.2 24.2

