

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF082823\  
 Data File : BF134970.D  
 Acq On : 28 Aug 2023 16:00  
 Operator : CG\JU  
 Sample : 04093-01DL 10X  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 NEVINS-SB04-Z45-46DL

Manual Integrations  
 APPROVED

Reviewed By :Yogesh Patel 08/29/2023  
 Supervised By :mohammad ahmed 08/29/2023

Quant Time: Aug 29 03:49:34 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF082223.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Aug 28 02:45:19 2023  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|--------|------|----------|--------|-------|----------|
| -----                       |        |      |          |        |       |          |
| Internal Standards          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 6.792  | 152  | 104099   | 20.000 | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.069  | 136  | 408857   | 20.000 | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.827  | 164  | 189352   | 20.000 | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.321 | 188  | 296723   | 20.000 | ng    | 0.00     |
| 76) Chrysene-d12            | 13.974 | 240  | 240909   | 20.000 | ng    | 0.00     |
| 86) Perylene-d12            | 15.451 | 264  | 221793   | 20.000 | ng    | 0.00     |
|                             |        |      |          |        |       |          |
| System Monitoring Compounds |        |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.410  | 112  | 50724    | 7.770  | ng    | -0.01    |
| 7) Phenol-d6                | 6.422  | 99   | 65134    | 7.808  | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.345  | 82   | 37937    | 5.113  | ng    | -0.02    |
| 42) 2,4,6-Tribromophenol    | 10.622 | 330  | 11264    | 5.051  | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.145  | 172  | 76005    | 6.205  | ng    | -0.01    |
| 79) Terphenyl-d14           | 12.915 | 244  | 65981    | 3.767  | ng    | 0.00     |
|                             |        |      |          |        |       |          |
| Target Compounds            |        |      |          |        |       | Qvalue   |
| 31) Naphthalene             | 8.092  | 128  | 1229323  | 60.215 | ng    | 99       |
| 37) 2-Methylnaphthalene     | 8.786  | 142  | 140254   | 10.302 | ng    | 99       |
| 38) 1-Methylnaphthalene     | 8.886  | 142  | 256187   | 20.123 | ng    | 99       |
| 46) 1,1'-Biphenyl           | 9.245  | 154  | 72490    | 4.849  | ng    | 97       |
| 52) Acenaphthene            | 9.863  | 154  | 230612   | 21.292 | ng    | 99       |
| 58) Fluorene                | 10.374 | 166  | 119815   | 10.018 | ng    | 99       |
| 71) Phenanthrene            | 11.345 | 178  | 543777   | 34.972 | ng    | 99       |
| 72) Anthracene              | 11.398 | 178  | 157734   | 9.901  | ng    | 99       |
| 75) Fluoranthene            | 12.539 | 202  | 213909   | 14.519 | ng    | 99       |
| 78) Pyrene                  | 12.768 | 202  | 330315   | 12.932 | ng    | 98       |
| 81) Benzo(a)anthracene      | 13.968 | 228  | 126075m  | 7.670  | ng    |          |
| 83) Chrysene                | 14.004 | 228  | 111526   | 6.877  | ng    | 100      |
| 88) Benzo(b)fluoranthene    | 15.021 | 252  | 70666m   | 5.647  | ng    |          |
| 90) Benzo(a)pyrene          | 15.386 | 252  | 81077    | 6.490  | ng    | 98       |
| -----                       |        |      |          |        |       |          |

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

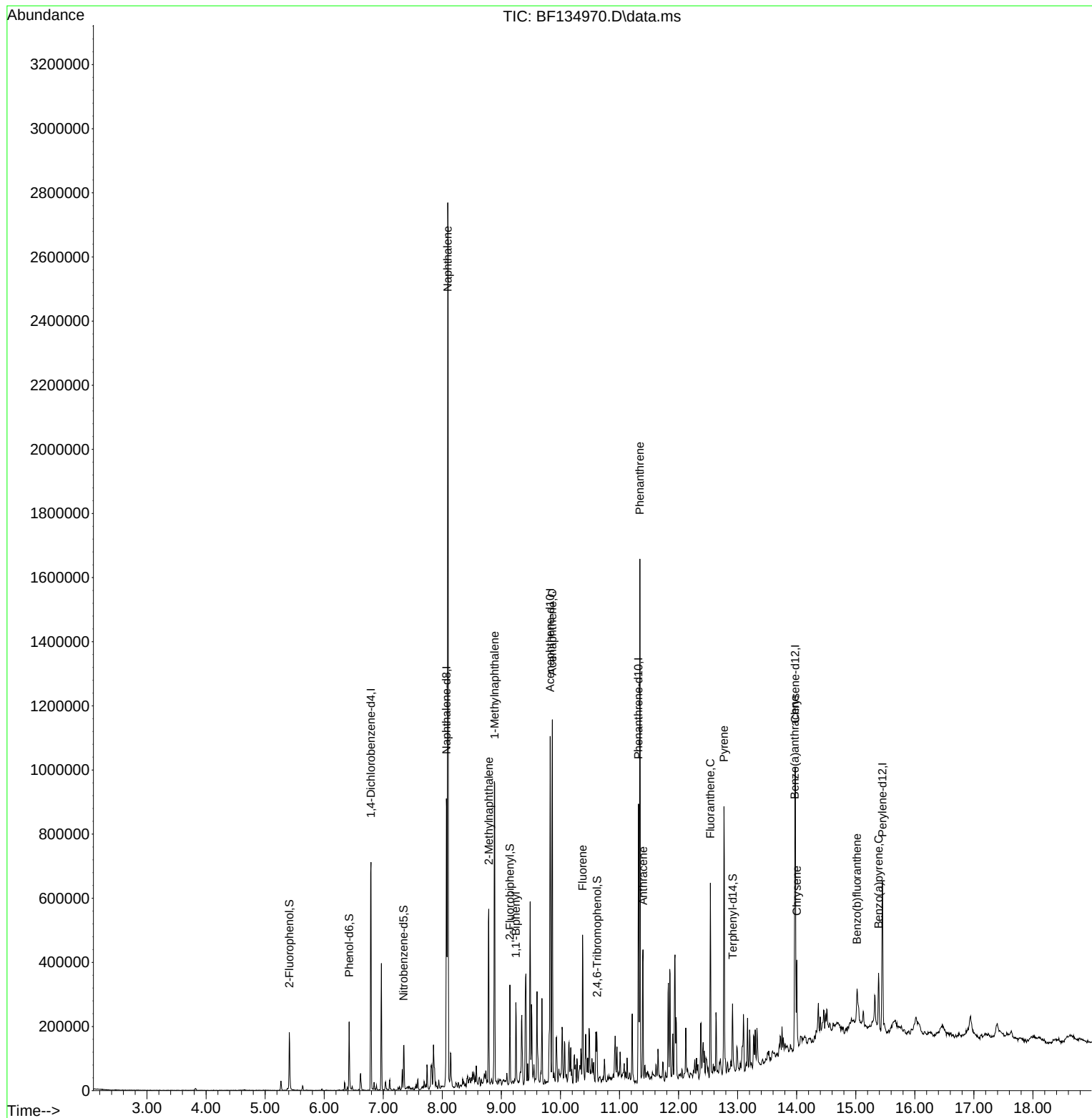
Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF082823\  
Data File : BF134970.D  
Acq On : 28 Aug 2023 16:00  
Operator : CG\JU  
Sample : 04093-01DL 10X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

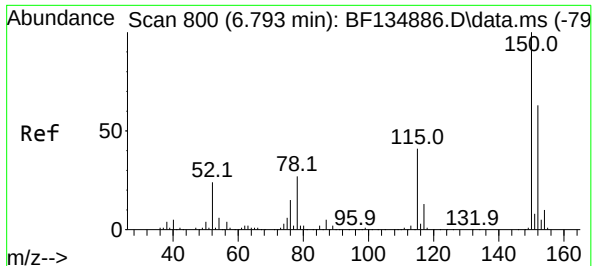
Instrument :  
BNA\_F  
ClientSampleId :  
NEVINS-SB04-Z45-46DL

Quant Time: Aug 29 03:49:34 2023  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF082223.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 28 02:45:19 2023  
Response via : Initial Calibration

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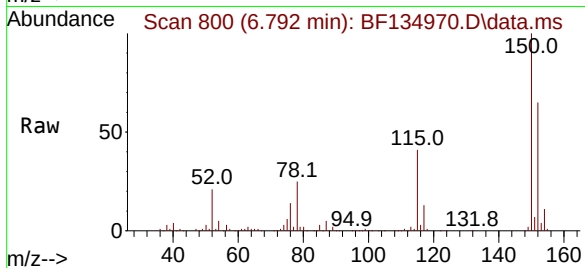
Reviewed By :Yogesh Patel 08/29/2023  
Supervised By :mohammad ahmed 08/29/2023





#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.792 min Scan# 800  
Delta R.T. -0.001 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00

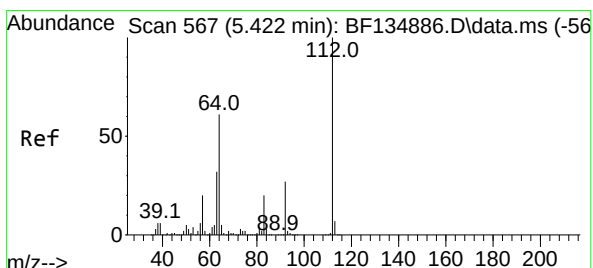
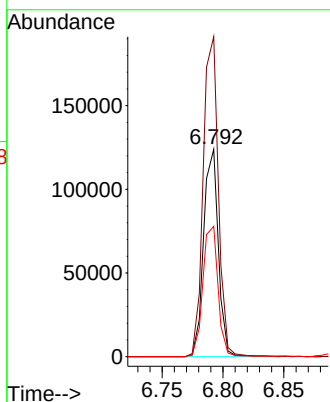
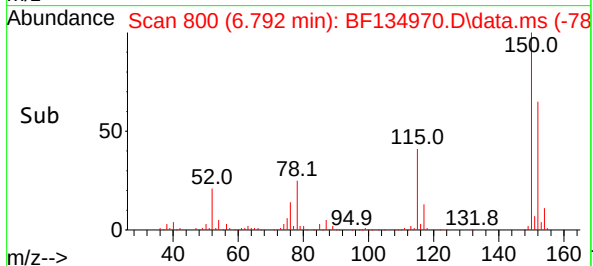
Instrument :  
BNA\_F  
ClientSampleId :  
NEVINS-SB04-Z45-46DL



Tgt Ion:152 Resp: 104099  
Ion Ratio Lower Upper  
152 100  
150 154.3 126.1 189.1  
115 62.9 51.1 76.7

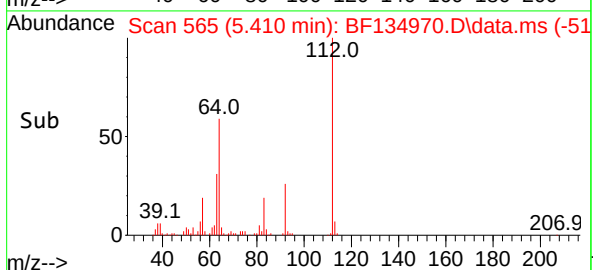
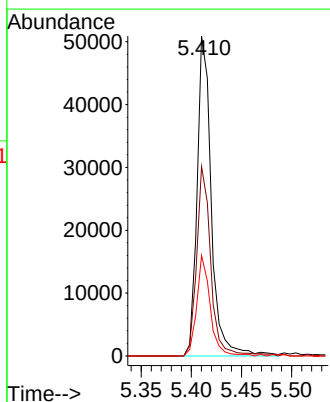
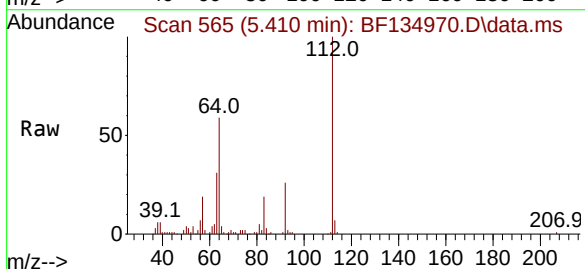
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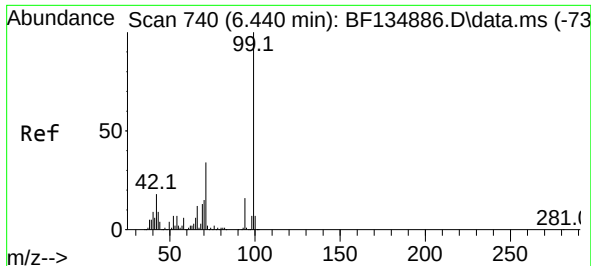
Reviewed By :Yogesh Patel 08/29/2023  
Supervised By :mohammad ahmed 08/29/2023



#5  
2-Fluorophenol  
Concen: 7.770 ng  
RT: 5.410 min Scan# 565  
Delta R.T. -0.012 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00

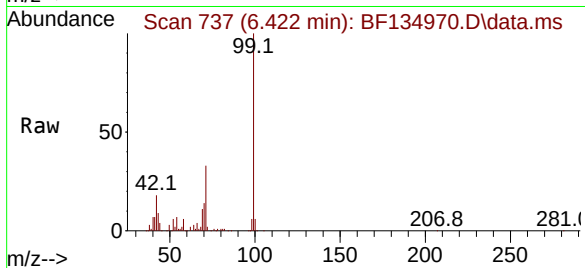
Tgt Ion:112 Resp: 50724  
Ion Ratio Lower Upper  
112 100  
64 59.2 48.6 73.0  
63 31.4 25.7 38.5





#7  
Phenol-d6  
Concen: 7.808 ng  
RT: 6.422 min Scan# 71  
Delta R.T. -0.018 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00

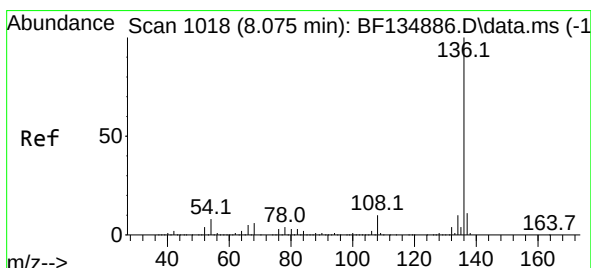
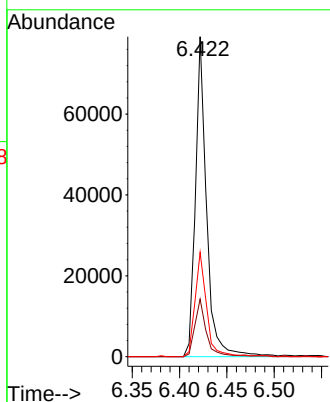
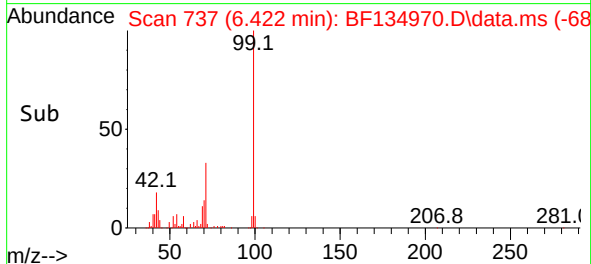
Instrument :  
BNA\_F  
ClientSampleId :  
NEVINS-SB04-Z45-46DL



Tgt Ion: 99 Resp: 65134  
Ion Ratio Lower Upper  
99 100  
42 18.0 14.6 22.0  
71 32.6 27.6 41.4

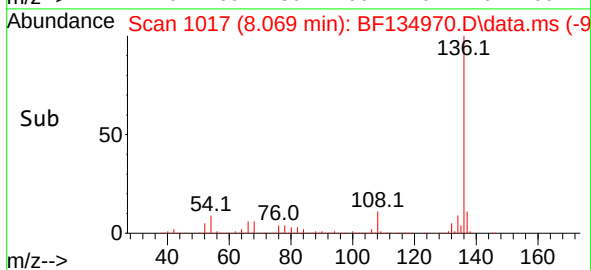
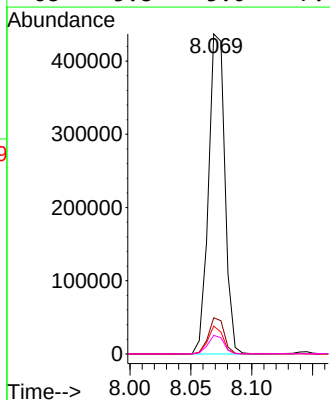
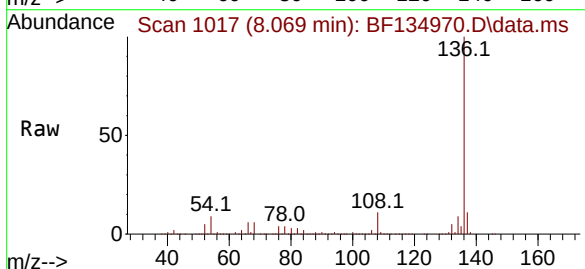
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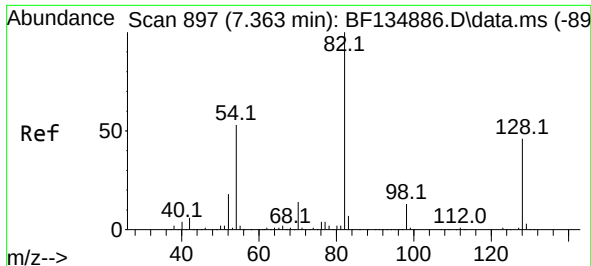
Reviewed By :Yogesh Patel 08/29/2023  
Supervised By :mohammad ahmed 08/29/2023



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.069 min Scan# 1017  
Delta R.T. -0.006 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00

Tgt Ion:136 Resp: 408857  
Ion Ratio Lower Upper  
136 100  
137 11.3 8.9 13.3  
54 8.7 6.6 9.8  
68 5.8 5.0 7.4





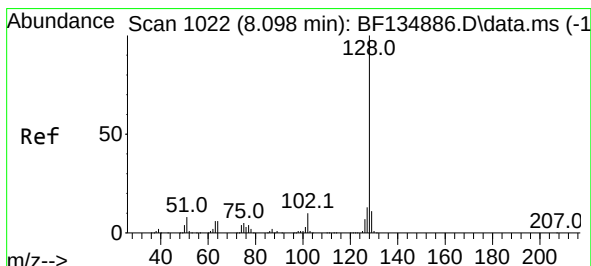
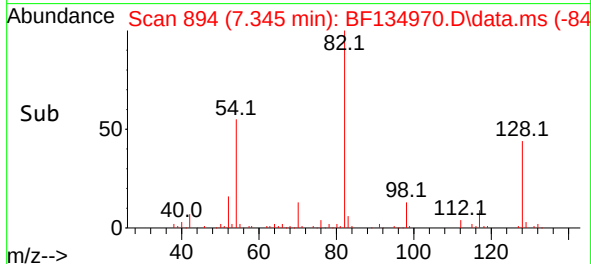
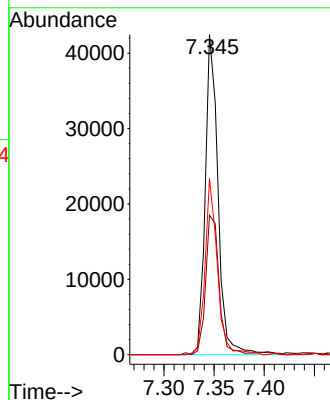
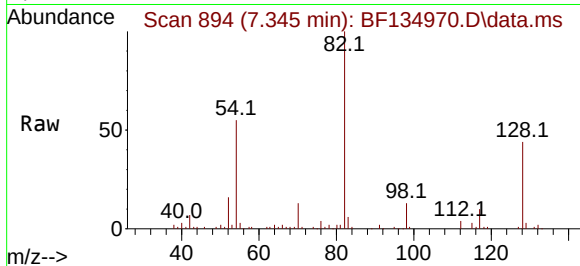
#23  
Nitrobenzene-d5  
Concen: 5.113 ng  
RT: 7.345 min Scan# 897  
Delta R.T. -0.018 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00

Instrument :  
BNA\_F  
ClientSampleId :  
NEVINS-SB04-Z45-46DL

Tgt Ion: 82 Resp: 3793  
Ion Ratio Lower Upper  
82 100  
128 43.6 36.6 54.8  
54 55.0 42.6 63.8

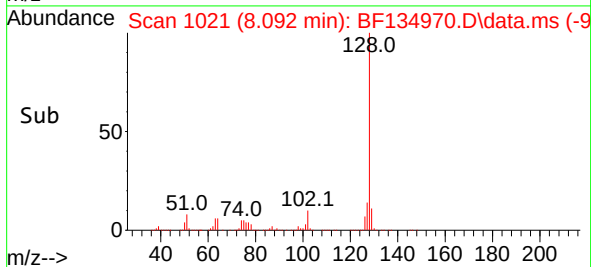
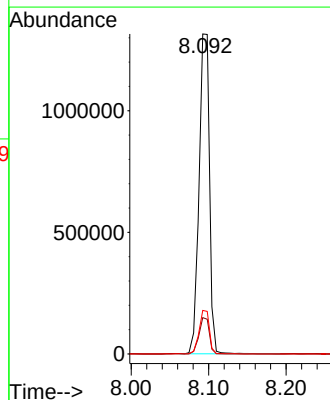
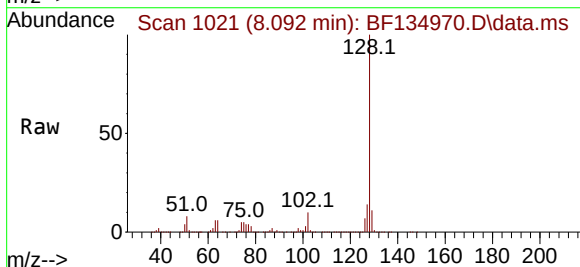
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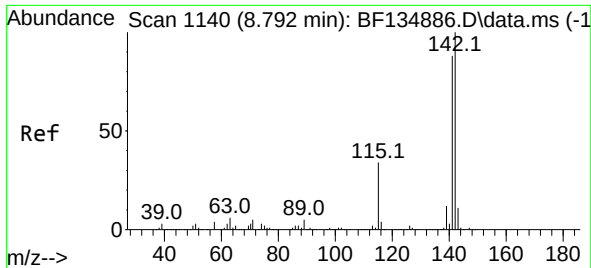
Reviewed By :Yogesh Patel 08/29/2023  
Supervised By :mohammad ahmed 08/29/2023



#31  
Naphthalene  
Concen: 60.215 ng  
RT: 8.092 min Scan# 1021  
Delta R.T. -0.006 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00

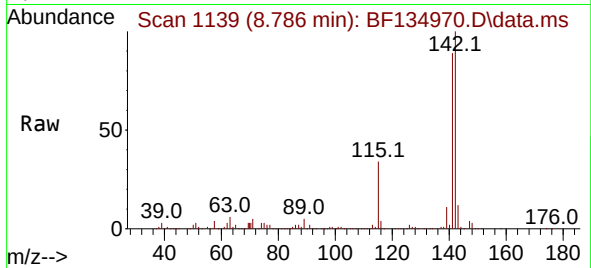
Tgt Ion:128 Resp: 1229323  
Ion Ratio Lower Upper  
128 100  
129 11.4 9.0 13.4  
127 13.6 10.6 16.0





#37  
2-Methylnaphthalene  
Concen: 10.302 ng  
RT: 8.786 min Scan# 1139  
Delta R.T. -0.006 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00

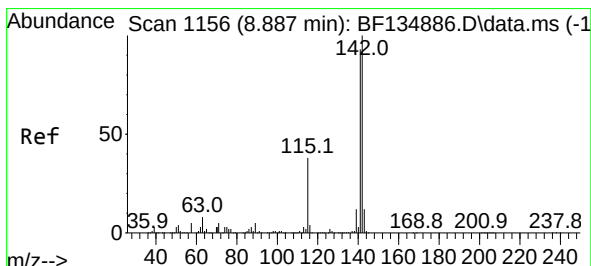
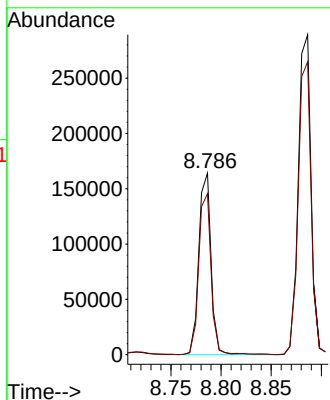
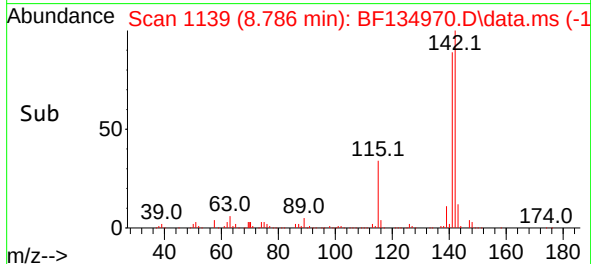
Instrument :  
BNA\_F  
ClientSampleId :  
NEVINS-SB04-Z45-46DL



Tgt Ion:142 Resp: 140254  
Ion Ratio Lower Upper  
142 100  
141 88.6 70.2 105.2

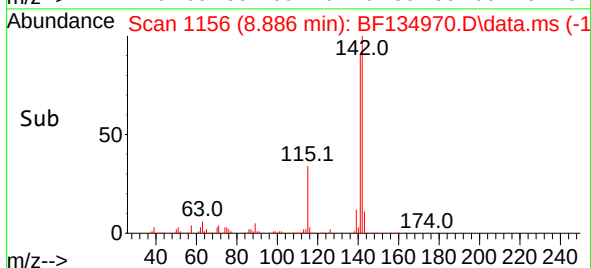
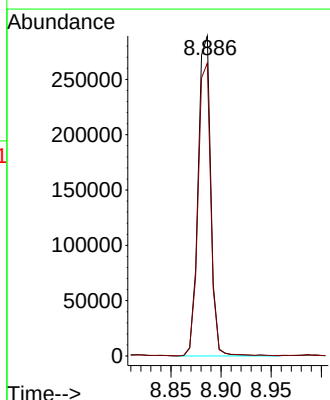
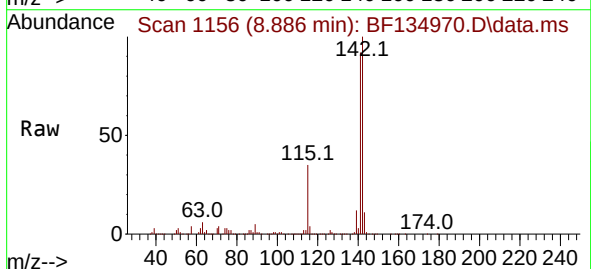
Manual Integrations  
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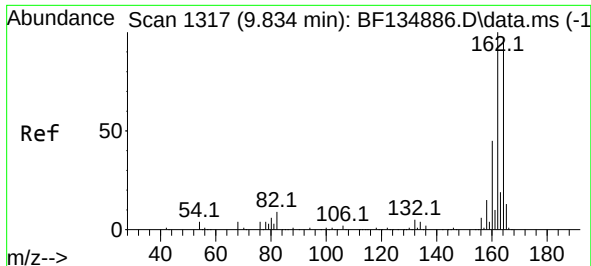
Reviewed By :Yogesh Patel 08/29/2023  
Supervised By :mohammad ahmed 08/29/2023



#38  
1-Methylnaphthalene  
Concen: 20.123 ng  
RT: 8.886 min Scan# 1156  
Delta R.T. -0.000 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00

Tgt Ion:142 Resp: 256187  
Ion Ratio Lower Upper  
142 100  
141 91.5 74.1 111.1





#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.827 min Scan# 11

Delta R.T. -0.006 min

Lab File: BF134970.D

Acq: 28 Aug 2023 16:00

Instrument :

BNA\_F

ClientSampleId :

NEVINS-SB04-Z45-46DL

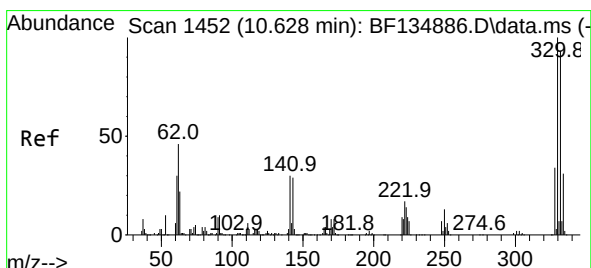
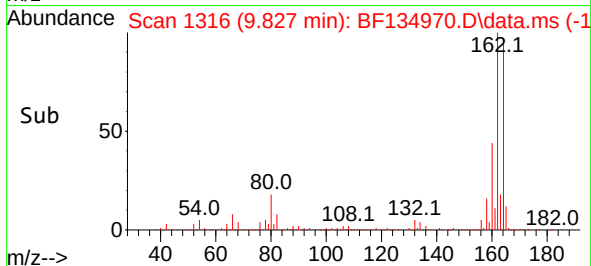
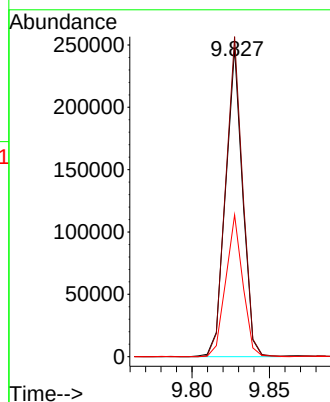
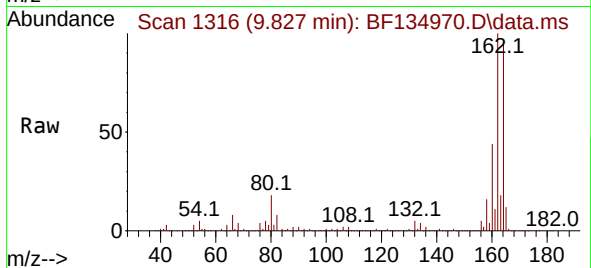
|             |                  |
|-------------|------------------|
| Tgt Ion:164 | Resp: 18935      |
| Ion Ratio   | Lower Upper      |
| 164         | 100              |
| 162         | 103.6 82.6 123.8 |
| 160         | 45.9 37.0 55.4   |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/29/2023

Supervised By :mohammad ahmed 08/29/2023



#42

2,4,6-Tribromophenol

Concen: 5.051 ng

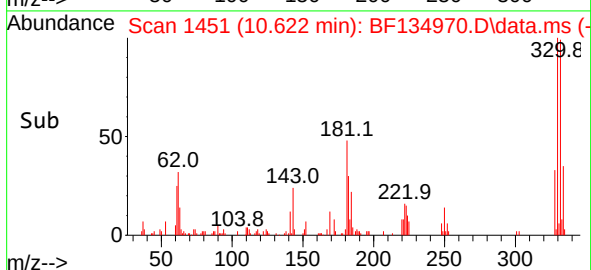
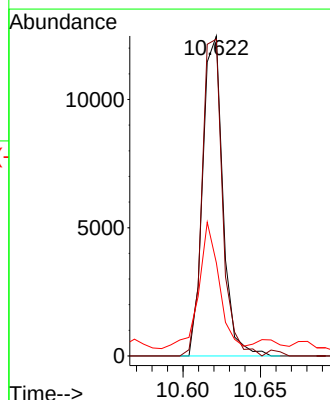
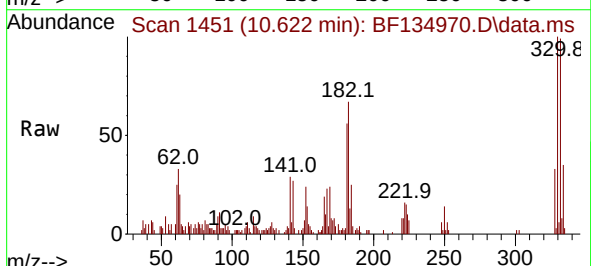
RT: 10.622 min Scan# 1451

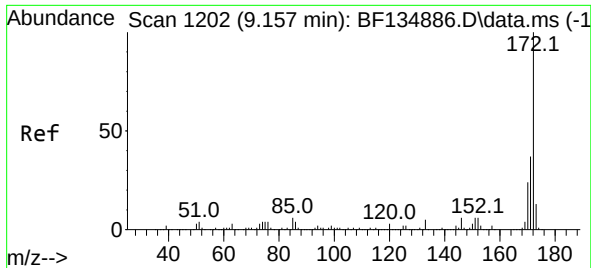
Delta R.T. -0.006 min

Lab File: BF134970.D

Acq: 28 Aug 2023 16:00

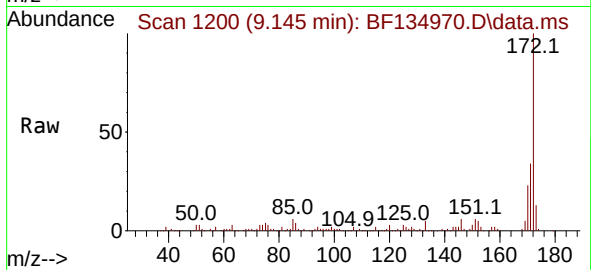
|             |                  |
|-------------|------------------|
| Tgt Ion:330 | Resp: 11264      |
| Ion Ratio   | Lower Upper      |
| 330         | 100              |
| 332         | 100.2 76.3 114.5 |
| 141         | 39.7 23.4 35.2#  |





#45  
2-Fluorobiphenyl  
Concen: 6.205 ng  
RT: 9.145 min Scan# 11  
Delta R.T. -0.012 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00

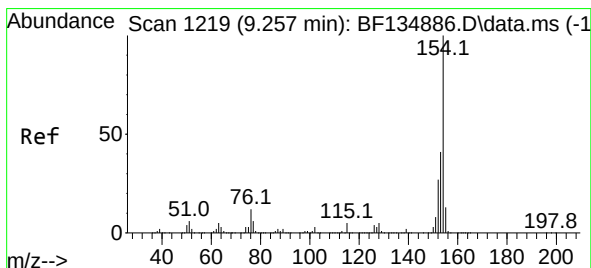
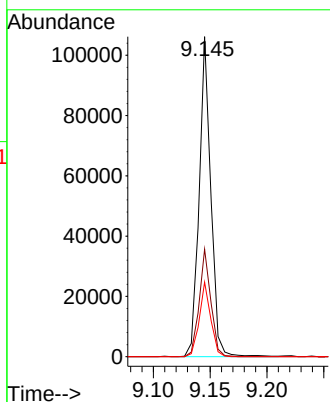
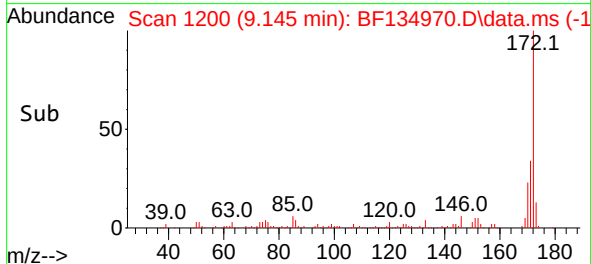
Instrument :  
BNA\_F  
ClientSampleId :  
NEVINS-SB04-Z45-46DL



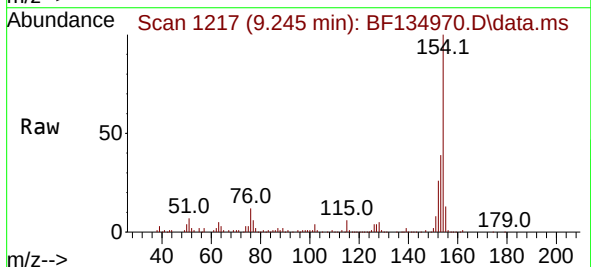
Tgt Ion:172 Resp: 7600  
Ion Ratio Lower Upper  
172 100  
171 33.6 29.4 44.0  
170 23.3 19.6 29.4

Manual Integrations  
APPROVED

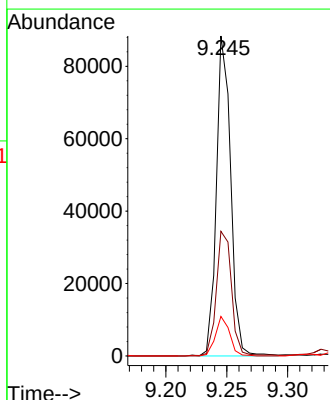
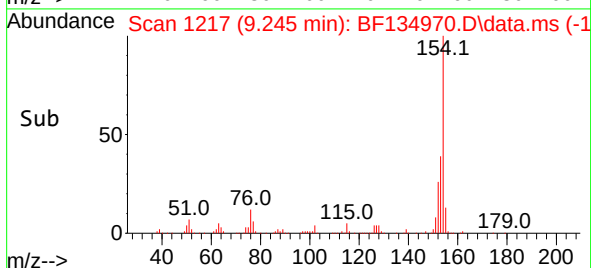
Reviewed By :Yogesh Patel 08/29/2023  
Supervised By :mohammad ahmed 08/29/2023



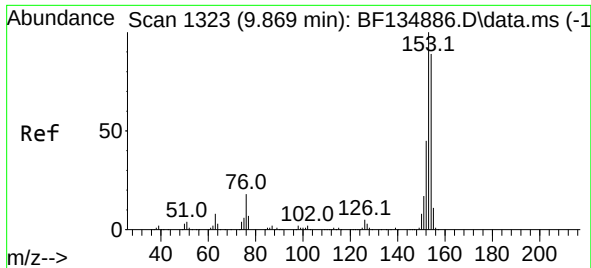
#46  
1,1'-Biphenyl  
Concen: 4.849 ng  
RT: 9.245 min Scan# 1217  
Delta R.T. -0.012 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00



Tgt Ion:154 Resp: 72490  
Ion Ratio Lower Upper  
154 100  
153 38.9 21.3 61.3  
76 12.4 0.0 31.8

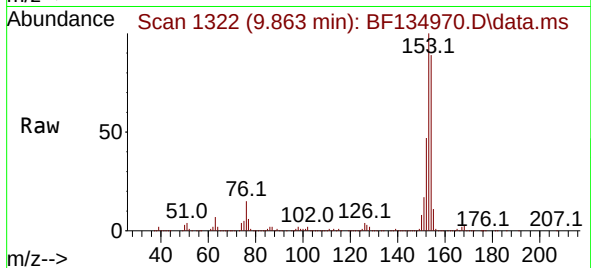






#52  
Acenaphthene  
Concen: 21.292 ng  
RT: 9.863 min Scan# 11  
Delta R.T. -0.006 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00

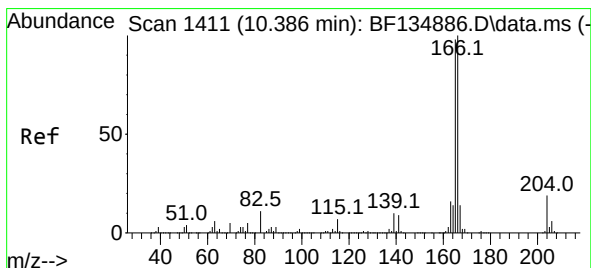
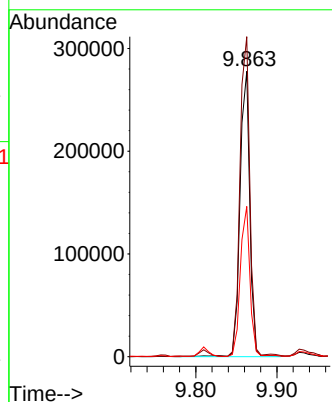
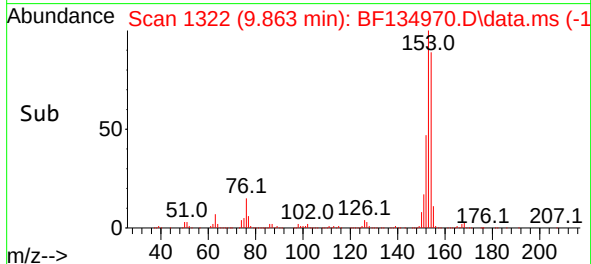
Instrument :  
BNA\_F  
ClientSampleId :  
NEVINS-SB04-Z45-46DL



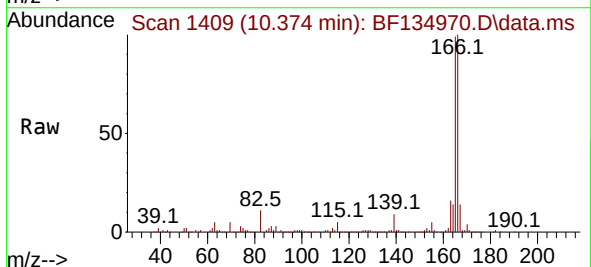
Tgt Ion:154 Resp: 23061  
Ion Ratio Lower Upper  
154 100  
153 112.2 89.6 134.4  
152 52.7 40.5 60.7

Manual Integrations  
APPROVED

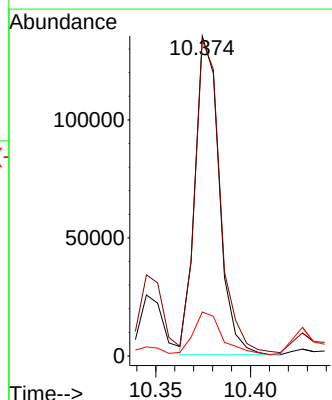
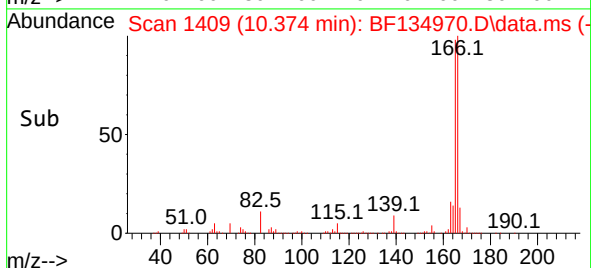
Reviewed By :Yogesh Patel 08/29/2023  
Supervised By :mohammad ahmed 08/29/2023

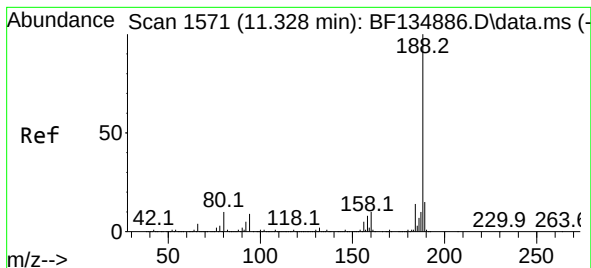


#58  
Fluorene  
Concen: 10.018 ng  
RT: 10.374 min Scan# 1409  
Delta R.T. -0.012 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00



Tgt Ion:166 Resp: 119815  
Ion Ratio Lower Upper  
166 100  
165 98.8 78.5 117.7  
167 13.8 11.0 16.6





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.321 min Scan# 11

Delta R.T. -0.006 min

Lab File: BF134970.D

Acq: 28 Aug 2023 16:00

Instrument :

BNA\_F

ClientSampleId :

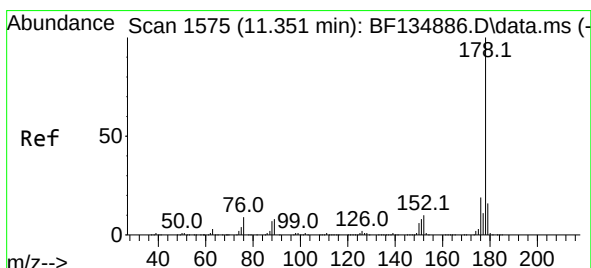
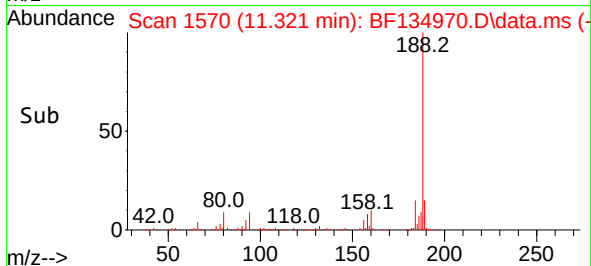
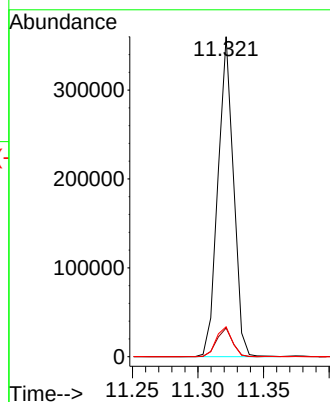
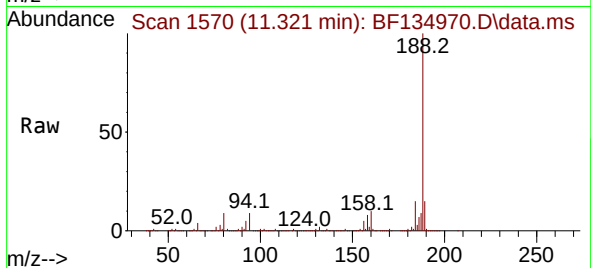
NEVINS-SB04-Z45-46DL

|             |             |
|-------------|-------------|
| Tgt Ion:188 | Resp: 29672 |
| Ion Ratio   | Lower Upper |
| 188 100     |             |
| 94 9.0      | 7.5 11.3    |
| 80 9.4      | 7.8 11.6    |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/29/2023  
Supervised By :mohammad ahmed 08/29/2023



#71

Phenanthrene

Concen: 34.972 ng

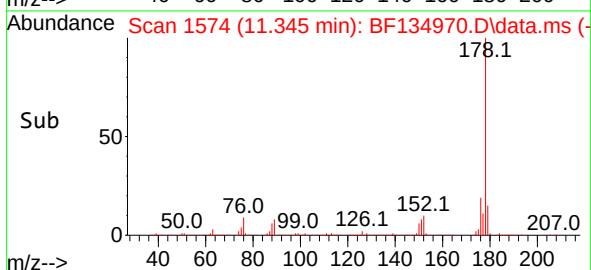
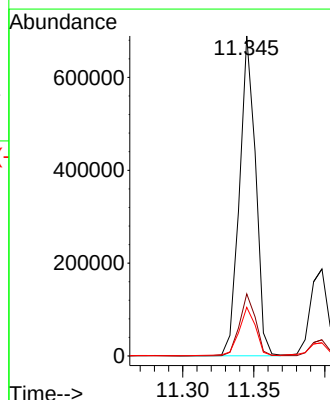
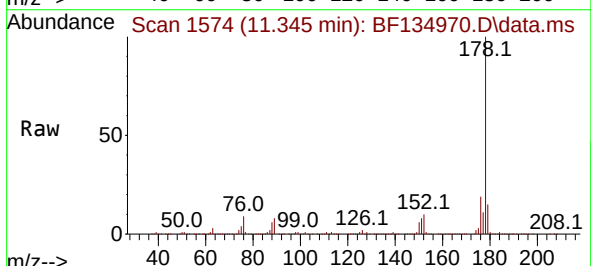
RT: 11.345 min Scan# 1574

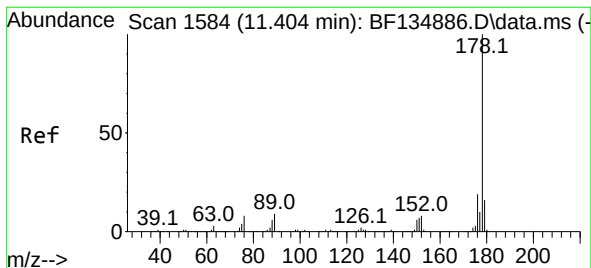
Delta R.T. -0.006 min

Lab File: BF134970.D

Acq: 28 Aug 2023 16:00

|             |              |
|-------------|--------------|
| Tgt Ion:178 | Resp: 543777 |
| Ion Ratio   | Lower Upper  |
| 178 100     |              |
| 176 19.4    | 15.5 23.3    |
| 179 15.2    | 12.6 19.0    |





#72

Anthracene

Concen: 9.901 ng

RT: 11.398 min Scan# 1584

Delta R.T. -0.006 min

Lab File: BF134970.D

Acq: 28 Aug 2023 16:00

Instrument :

BNA\_F

ClientSampleId :

NEVINS-SB04-Z45-46DL

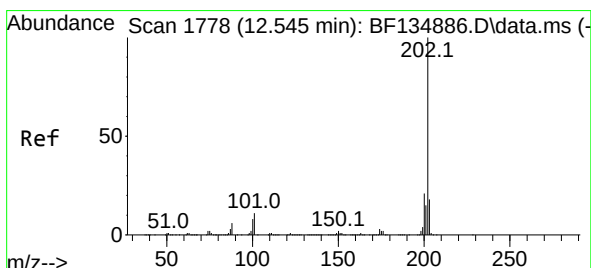
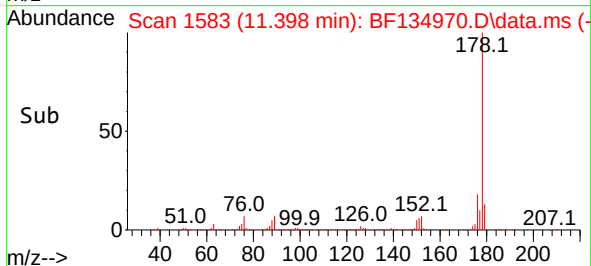
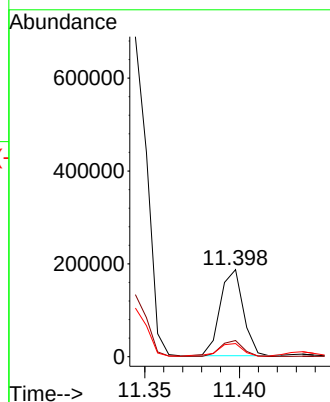
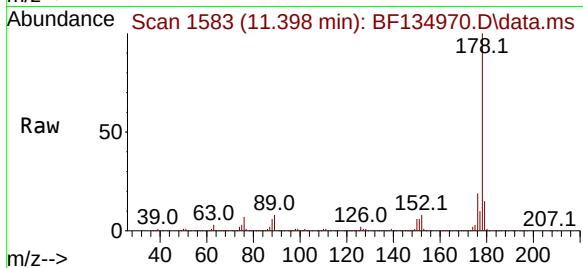
Tgt Ion:178 Resp: 157734  
 Ion Ratio Lower Upper  
 178 100  
 176 18.6 15.0 22.6  
 179 15.1 12.5 18.7

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/29/2023

Supervised By :mohammad ahmed 08/29/2023



#75

Fluoranthene

Concen: 14.519 ng

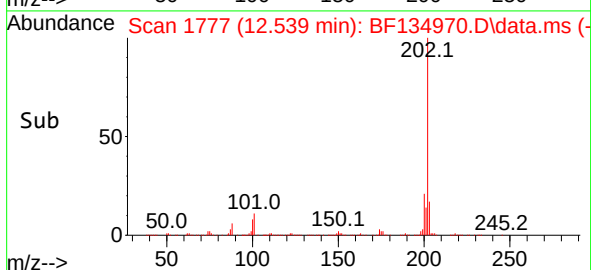
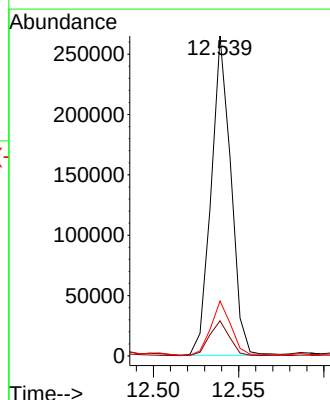
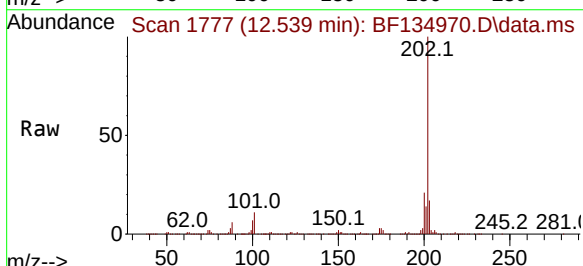
RT: 12.539 min Scan# 1777

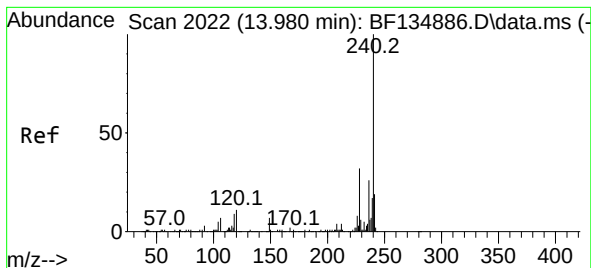
Delta R.T. -0.006 min

Lab File: BF134970.D

Acq: 28 Aug 2023 16:00

Tgt Ion:202 Resp: 213909  
 Ion Ratio Lower Upper  
 202 100  
 101 11.0 0.0 30.5  
 203 17.2 0.0 37.8





#76

Chrysene-d12

Concen: 20.000 ng

RT: 13.974 min Scan# 2022

Delta R.T. -0.006 min

Lab File: BF134970.D

Acq: 28 Aug 2023 16:00

Instrument :

BNA\_F

ClientSampleId :

NEVINS-SB04-Z45-46DL

Tgt Ion:240 Resp: 240909

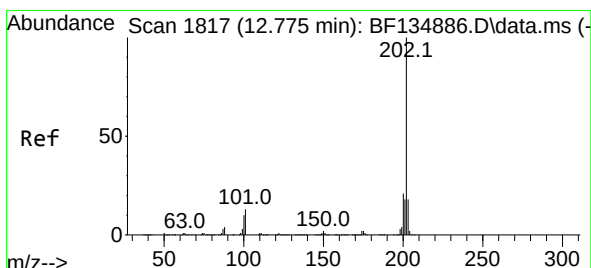
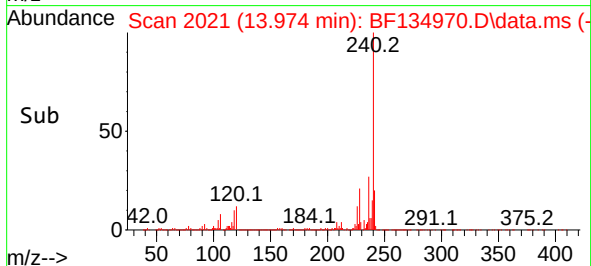
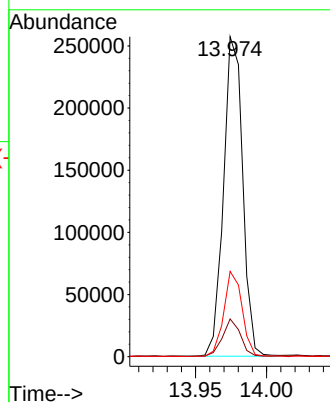
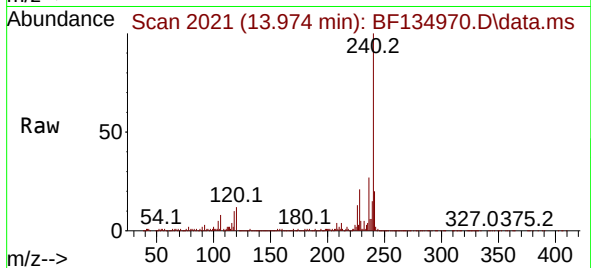
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 240 | 100   |       |       |
| 120 | 11.8  | 8.6   | 12.8  |
| 236 | 26.6  | 20.6  | 31.0  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/29/2023

Supervised By :mohammad ahmed 08/29/2023



#78

Pyrene

Concen: 12.932 ng

RT: 12.768 min Scan# 1816

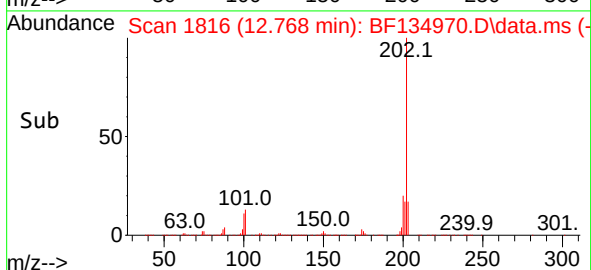
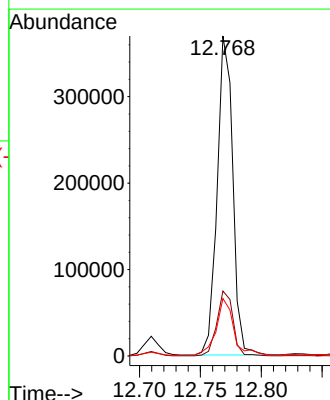
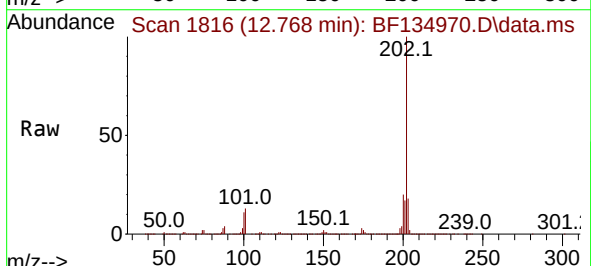
Delta R.T. -0.006 min

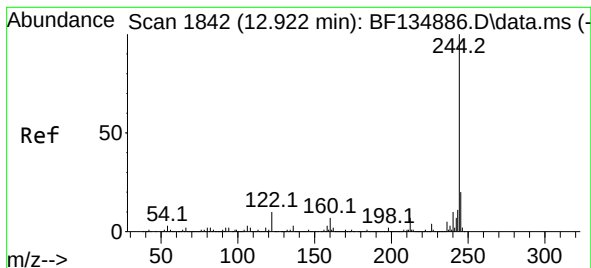
Lab File: BF134970.D

Acq: 28 Aug 2023 16:00

Tgt Ion:202 Resp: 330315

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 202 | 100   |       |       |
| 200 | 20.3  | 17.1  | 25.7  |
| 203 | 18.0  | 14.2  | 21.2  |





#79

Terphenyl-d14

Concen: 3.767 ng

RT: 12.915 min Scan# 1841

Delta R.T. -0.007 min

Lab File: BF134970.D

Acq: 28 Aug 2023 16:00

Instrument :

BNA\_F

ClientSampleId :

NEVINS-SB04-Z45-46DL

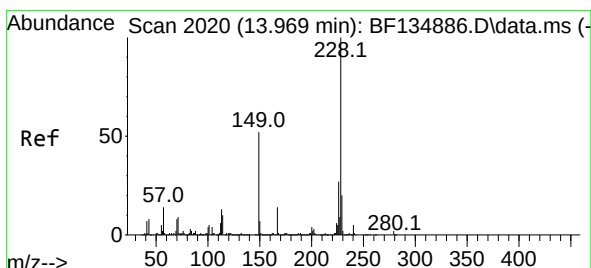
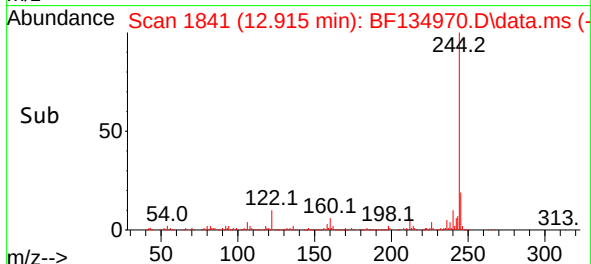
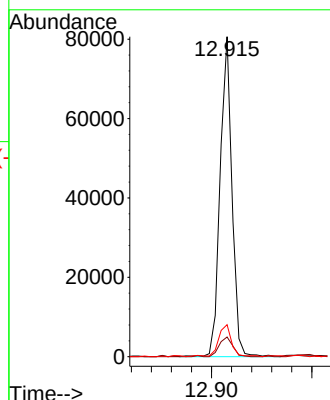
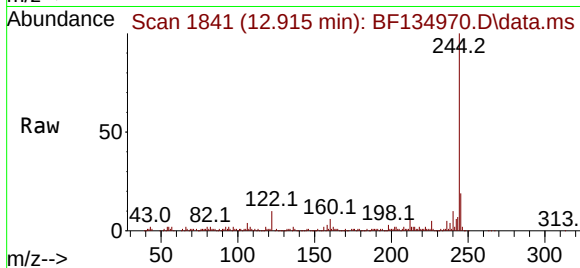
Tgt Ion:244 Resp: 6598

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 244 | 100   |       |       |
| 212 | 6.1   | 5.4   | 8.0   |
| 122 | 10.0  | 8.2   | 12.4  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/29/2023  
Supervised By :mohammad ahmed 08/29/2023



#81

Benzo(a)anthracene

Concen: 7.670 ng m

RT: 13.968 min Scan# 2020

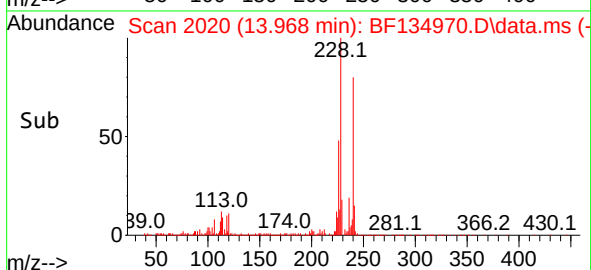
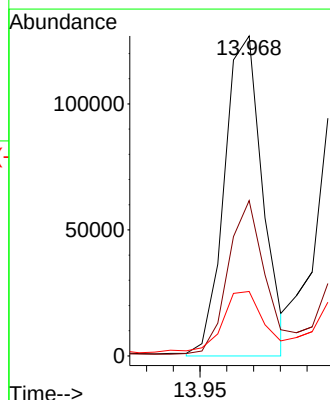
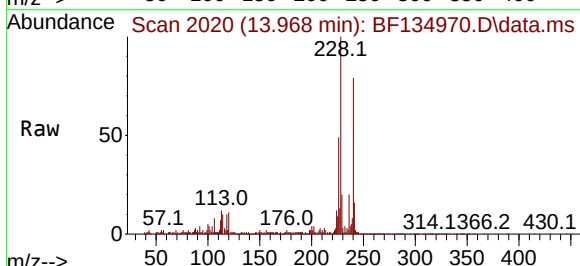
Delta R.T. -0.000 min

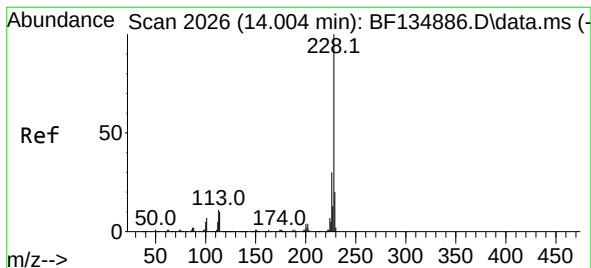
Lab File: BF134970.D

Acq: 28 Aug 2023 16:00

Tgt Ion:228 Resp: 126075

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 48.5  | 21.8  | 32.6  |
| 229 | 20.1  | 15.6  | 23.4  |





#83

Chrysene

Concen: 6.877 ng

RT: 14.004 min Scan# 2026

Delta R.T. -0.000 min

Lab File: BF134970.D

Acq: 28 Aug 2023 16:00

Instrument :

BNA\_F

ClientSampleId :

NEVINS-SB04-Z45-46DL

Tgt Ion:228 Resp: 111520

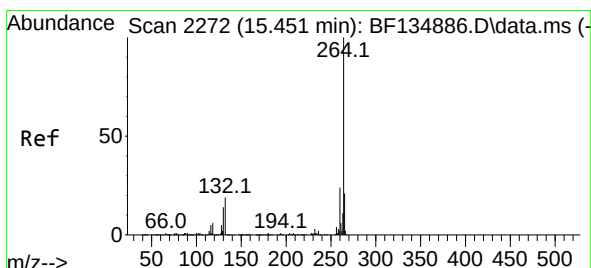
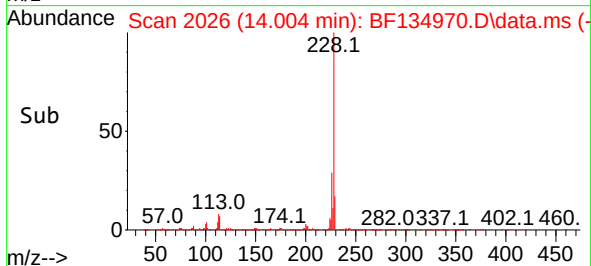
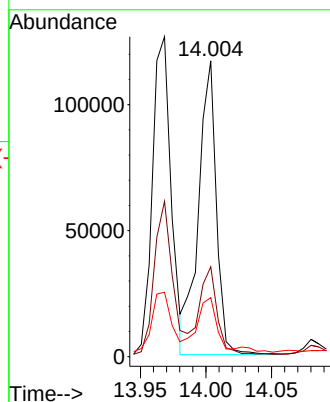
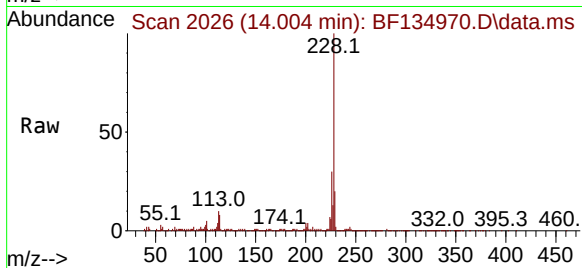
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 30.4  | 24.2  | 36.2  |
| 229 | 20.0  | 16.0  | 24.0  |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 08/29/2023

Supervised By :mohammad ahmed 08/29/2023



#86

Perylene-d12

Concen: 20.000 ng

RT: 15.451 min Scan# 2272

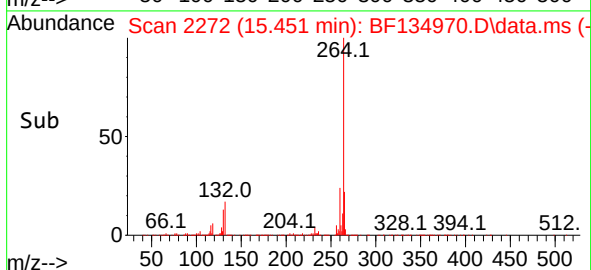
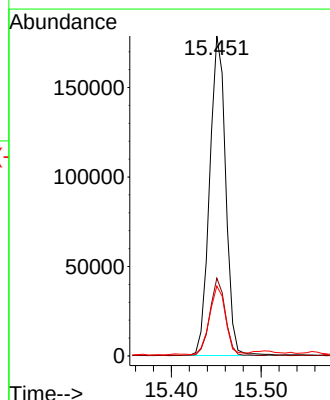
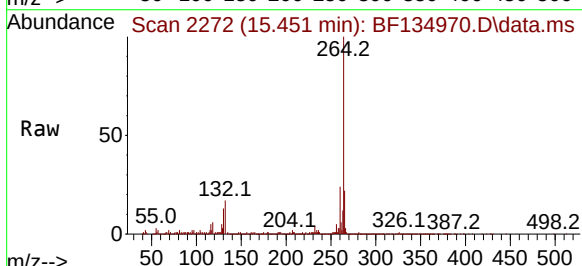
Delta R.T. -0.000 min

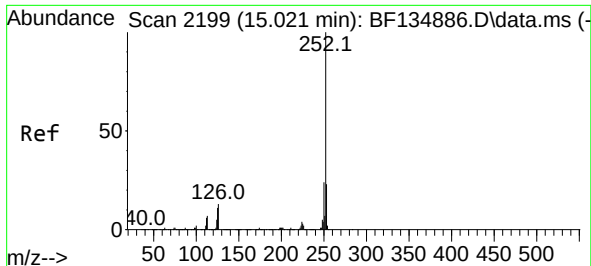
Lab File: BF134970.D

Acq: 28 Aug 2023 16:00

Tgt Ion:264 Resp: 221793

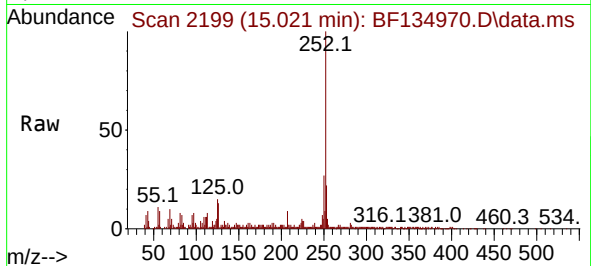
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 24.3  | 19.0  | 28.6  |
| 265 | 21.9  | 17.1  | 25.7  |





#88  
Benzo(b)fluoranthene  
Concen: 5.647 ng m  
RT: 15.021 min Scan# 2199  
Delta R.T. -0.000 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00

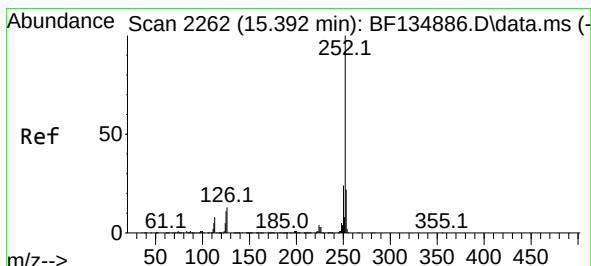
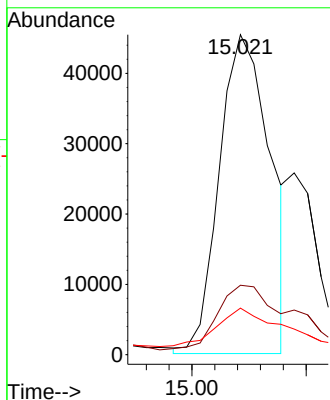
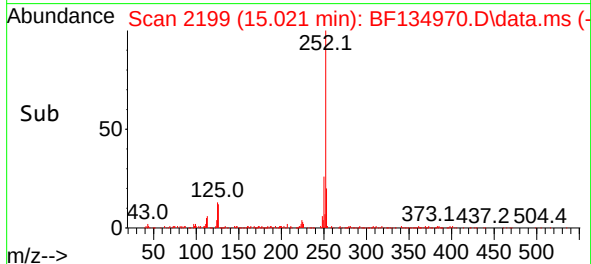
Instrument : BNA\_F  
ClientSampleId : NEVINS-SB04-Z45-46DL



Tgt Ion:252 Resp: 70660  
Ion Ratio Lower Upper  
252 100  
253 21.7 18.1 27.1  
125 14.6 8.4 12.6

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 08/29/2023  
Supervised By :mohammad ahmed 08/29/2023



#90  
Benzo(a)pyrene  
Concen: 6.490 ng  
RT: 15.386 min Scan# 2261  
Delta R.T. -0.006 min  
Lab File: BF134970.D  
Acq: 28 Aug 2023 16:00

Tgt Ion:252 Resp: 81077  
Ion Ratio Lower Upper  
252 100  
253 21.7 17.6 26.4  
125 11.8 8.4 12.6

