

Data Path : Z:\svoasrv\HPCHEM1\BNA\_M\Data\BM040325\  
 Data File : BM049809.D  
 Acq On : 03 Apr 2025 17:14  
 Operator : RC/JU  
 Sample : Q1698-07  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 B-10

Quant Time: Apr 03 18:51:51 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_M\Methods\8270-BM031325.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Mar 13 14:55:34 2025  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By :Rahul  
 Chavli

04/04/2025  
 Supervised By :Jagrut  
 Upadhyay

| Compound                    | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-----------------------------|--------|------|----------|---------|-------|----------|
| -----                       |        |      |          |         |       |          |
| Internal Standards          |        |      |          |         |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 7.786  | 152  | 325331   | 20.000  | ng    | -0.02    |
| 21) Naphthalene-d8          | 10.580 | 136  | 1134201  | 20.000  | ng    | -0.02    |
| 39) Acenaphthene-d10        | 14.427 | 164  | 729737   | 20.000  | ng    | -0.02    |
| 64) Phenanthrene-d10        | 17.168 | 188  | 1449581  | 20.000  | ng    | -0.02    |
| 76) Chrysene-d12            | 21.403 | 240  | 1521361  | 20.000  | ng    | -0.02    |
| 86) Perylene-d12            | 24.403 | 264  | 1553148  | 20.000  | ng    | -0.04    |
| System Monitoring Compounds |        |      |          |         |       |          |
| 5) 2-Fluorophenol           | 5.369  | 112  | 1830101  | 94.918  | ng    | -0.02    |
| 7) Phenol-d6                | 6.957  | 99   | 2406176  | 99.443  | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 8.939  | 82   | 1458793  | 66.035  | ng    | -0.02    |
| 42) 2,4,6-Tribromophenol    | 15.915 | 330  | 931398   | 109.304 | ng    | -0.02    |
| 45) 2-Fluorobiphenyl        | 13.051 | 172  | 3539574  | 60.746  | ng    | -0.02    |
| 79) Terphenyl-d14           | 19.792 | 244  | 5747969  | 63.667  | ng    | -0.02    |
| Target Compounds            |        |      |          |         |       |          |
|                             |        |      |          |         |       | Qvalue   |
| 49) Acenaphthylene          | 14.145 | 152  | 303149   | 4.954   | ng    | 99       |
| 58) Fluorene                | 15.474 | 166  | 131580   | 2.416   | ng    | 98       |
| 71) Phenanthrene            | 17.209 | 178  | 3207601  | 39.850  | ng    | 100      |
| 72) Anthracene              | 17.298 | 178  | 433091   | 5.556   | ng    | 99       |
| 73) Carbazole               | 17.568 | 167  | 144787   | 2.051   | ng    | 98       |
| 75) Fluoranthene            | 19.227 | 202  | 4796426  | 51.758  | ng    | 99       |
| 78) Pyrene                  | 19.586 | 202  | 4358681  | 41.007  | ng    | 99       |
| 81) Benzo(a)anthracene      | 21.386 | 228  | 1810981  | 17.822  | ng    | 97       |
| 83) Chrysene                | 21.444 | 228  | 1780044m | 18.479  | ng    |          |
| 87) Indeno(1,2,3-cd)pyrene  | 27.779 | 276  | 958233   | 8.572   | ng    | 98       |
| 88) Benzo(b)fluoranthene    | 23.462 | 252  | 2095453  | 20.031  | ng    | 99       |
| 89) Benzo(k)fluoranthene    | 23.515 | 252  | 772455m  | 7.504   | ng    |          |
| 90) Benzo(a)pyrene          | 24.262 | 252  | 1464351  | 16.665  | ng    | 97       |
| 91) Dibenzo(a,h)anthracene  | 27.826 | 278  | 244475   | 2.625   | ng    | # 94     |
| 92) Benzo(g,h,i)perylene    | 28.832 | 276  | 932851   | 9.943   | ng    | 99       |
| -----                       |        |      |          |         |       |          |

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_M\Data\BM040325\  
Data File : BM049809.D  
Acq On : 03 Apr 2025 17:14  
Operator : RC/JU  
Sample : Q1698-07  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
B-10

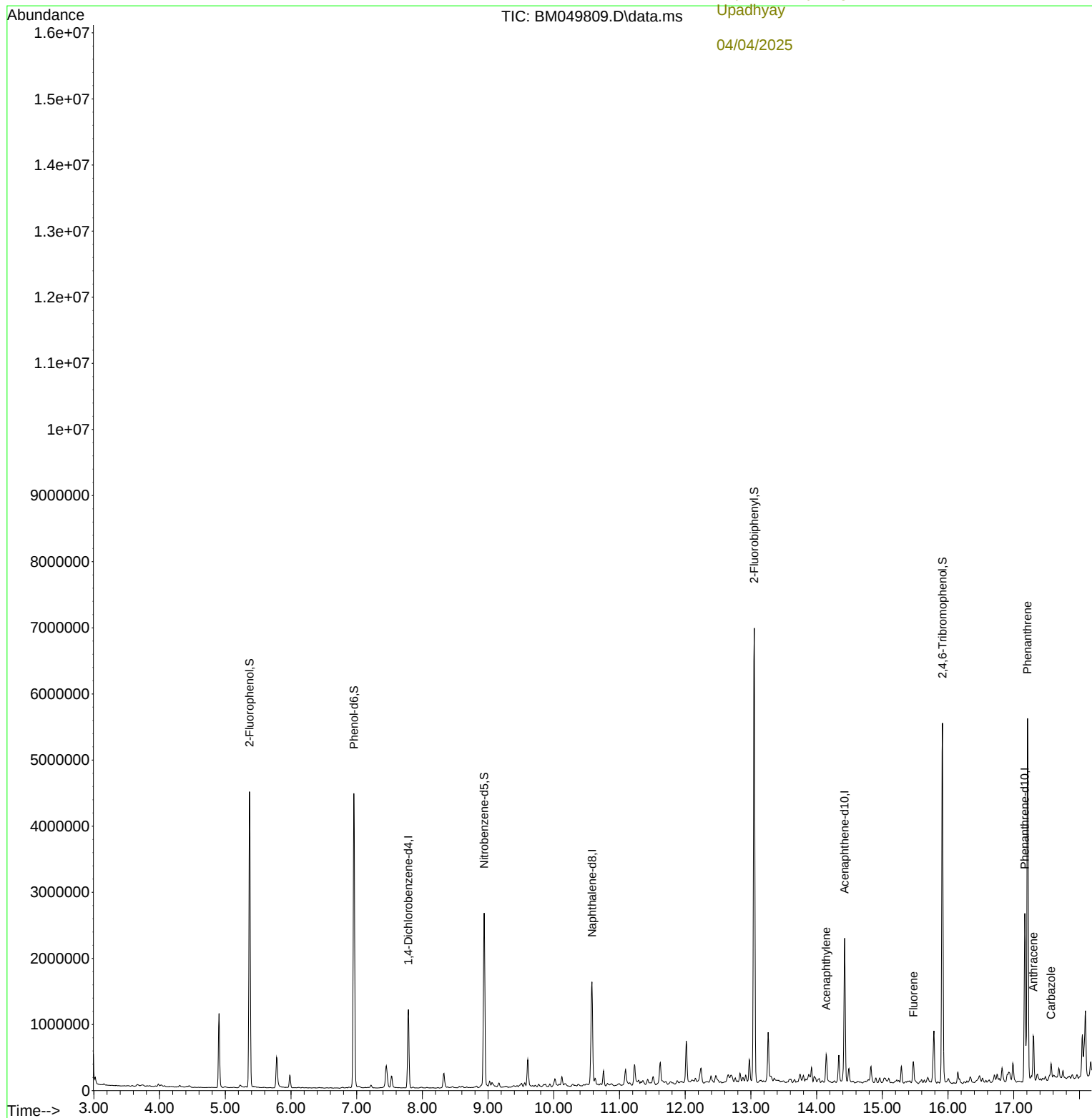
Quant Time: Apr 03 18:51:51 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_M\Methods\8270-BM031325.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Mar 13 14:55:34 2025  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Rahul  
Chavli

04/04/2025  
Supervised By :Jagrut  
Upadhyay

04/04/2025



Data Path : Z:\svoasrv\HPCHEM1\BNA\_M\Data\BM040325\  
Data File : BM049809.D  
Acq On : 03 Apr 2025 17:14  
Operator : RC/JU  
Sample : Q1698-07  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

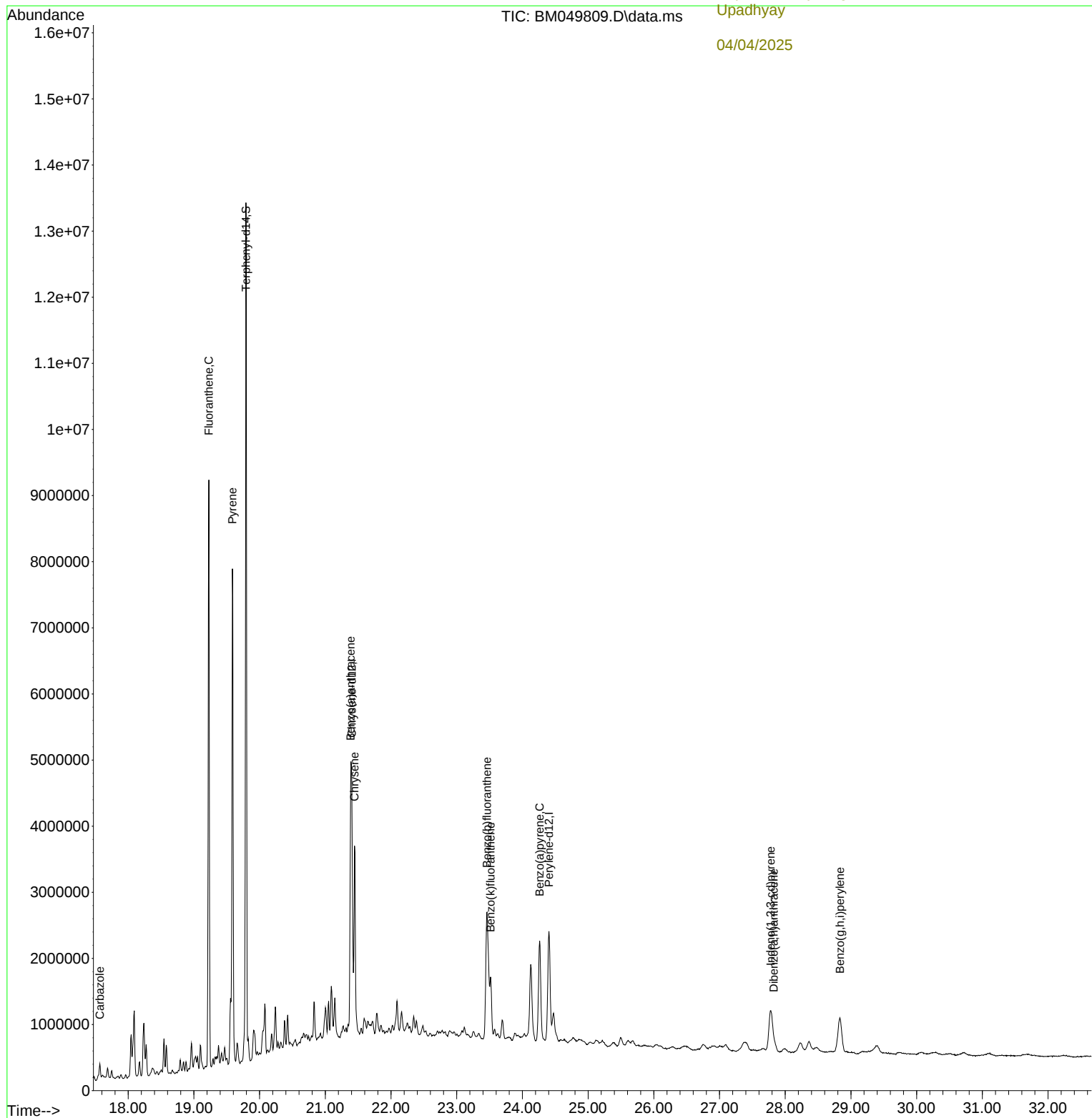
Instrument :  
BNA\_M  
ClientSampleId :  
B-10

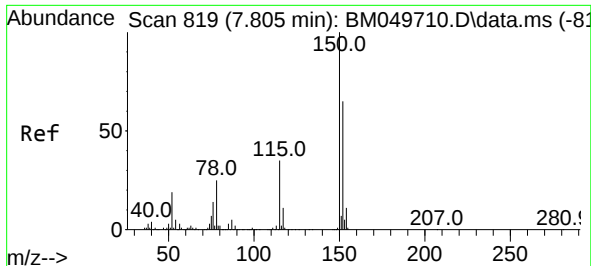
Manual Integrations  
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Upadhyay

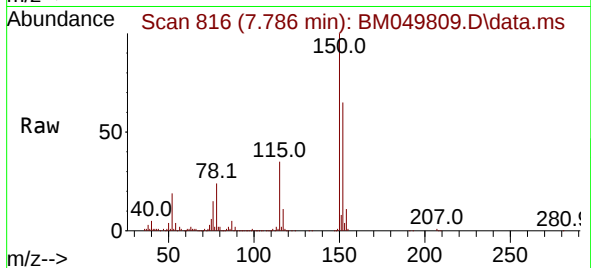
04/04/2025





#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 7.786 min Scan# 819  
Delta R.T. -0.019 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_M  
ClientSampleId :  
B-10



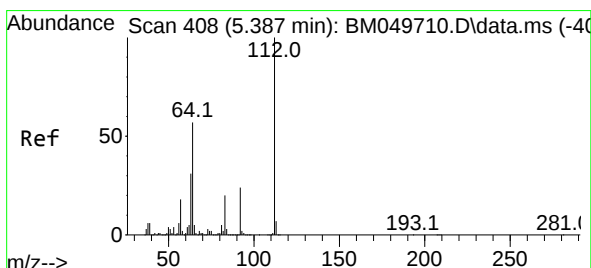
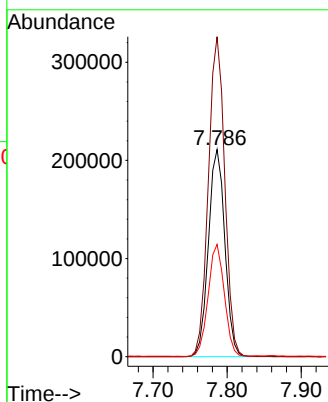
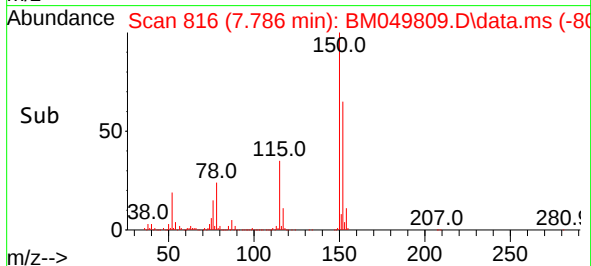
Tgt Ion:152 Resp: 32533  
Ion Ratio Lower Upper  
152 100  
150 154.4 123.8 185.8  
115 54.2 43.0 64.6

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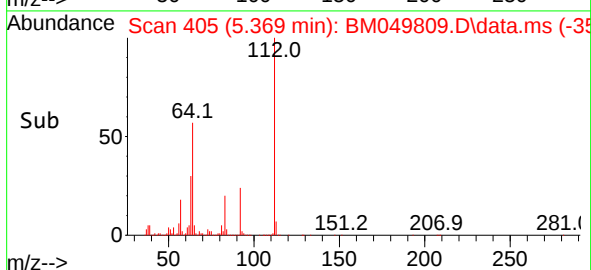
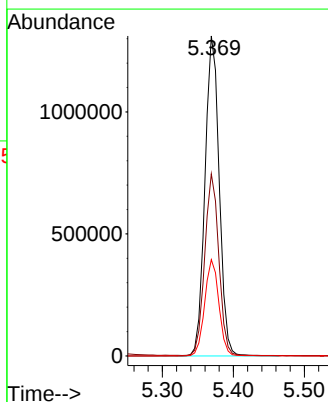
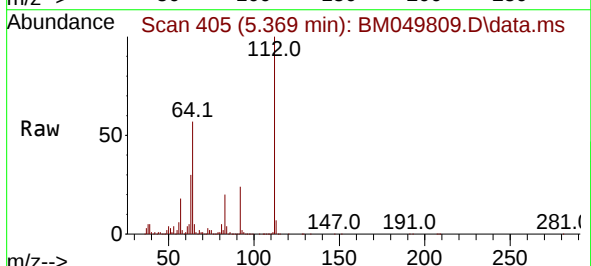
04/04/2025  
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Upadhyay

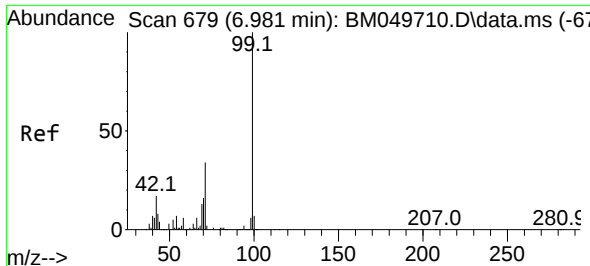
04/04/2025



#5  
2-Fluorophenol  
Concen: 94.918 ng  
RT: 5.369 min Scan# 405  
Delta R.T. -0.018 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

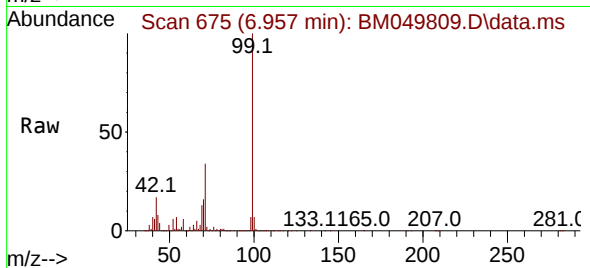
Tgt Ion:112 Resp: 1830101  
Ion Ratio Lower Upper  
112 100  
64 56.9 45.3 67.9  
63 30.1 24.4 36.6





#7  
Phenol-d6  
Concen: 99.443 ng  
RT: 6.957 min Scan# 61  
Delta R.T. -0.024 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_M  
ClientSampleId :  
B-10



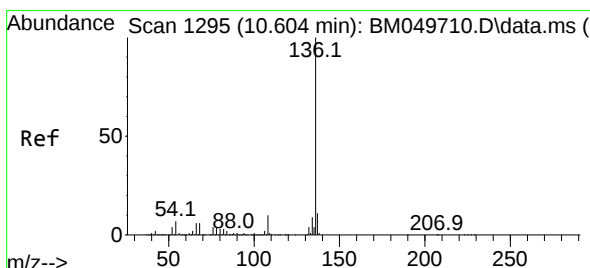
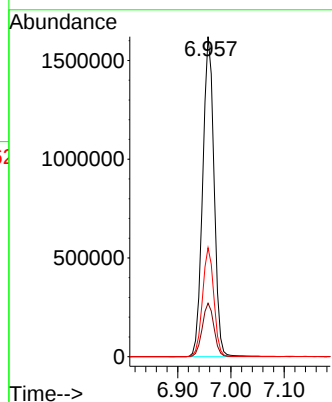
Tgt Ion: 99 Resp: 2406170  
Ion Ratio Lower Upper  
99 100  
42 16.7 13.6 20.4  
71 34.1 27.0 40.6

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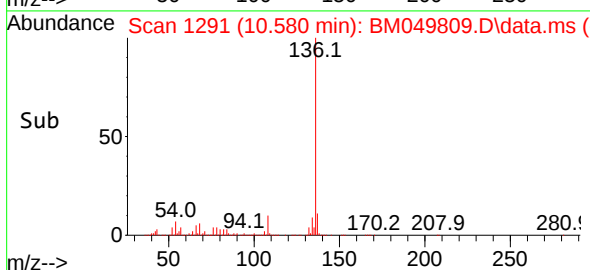
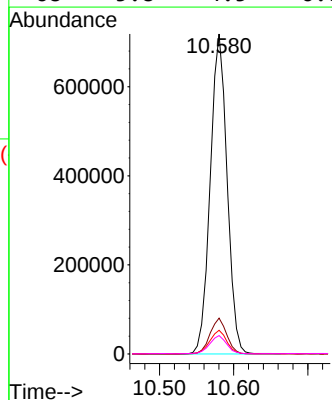
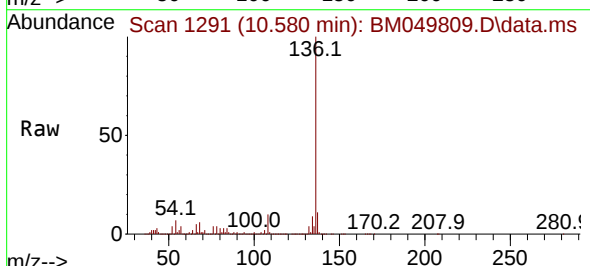
04/04/2025  
Supervised By :Jagrut  
Upadhyay

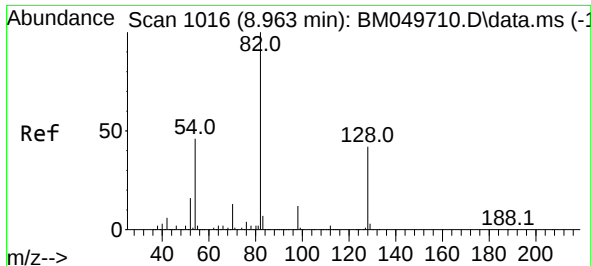
04/04/2025



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.580 min Scan# 1291  
Delta R.T. -0.024 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

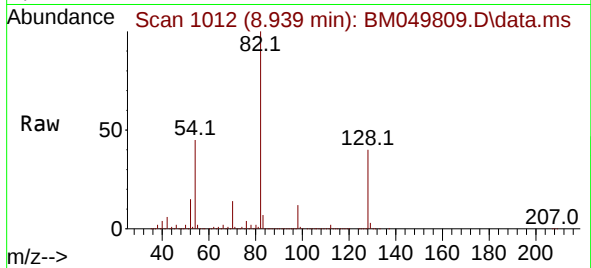
Tgt Ion:136 Resp: 1134201  
Ion Ratio Lower Upper  
136 100  
137 11.2 8.6 12.8  
54 7.4 5.8 8.8  
68 5.8 4.5 6.7





#23  
Nitrobenzene-d5  
Concen: 66.035 ng  
RT: 8.939 min Scan# 1016  
Delta R.T. -0.024 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_M  
ClientSampleId :  
B-10



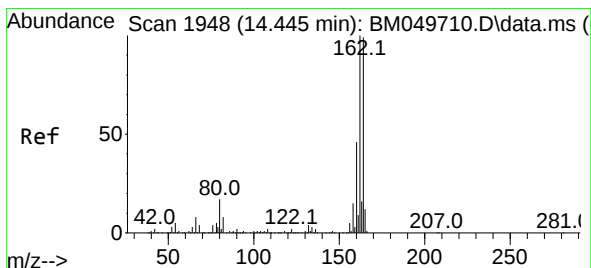
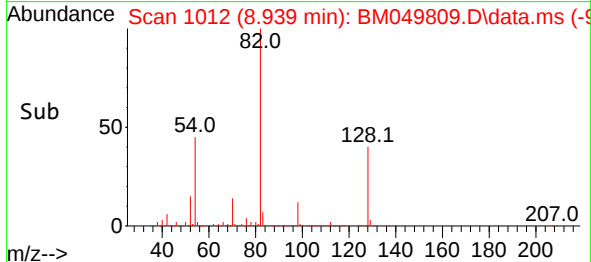
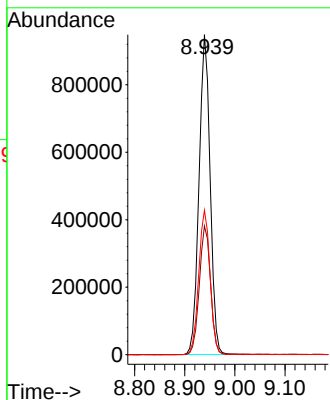
Tgt Ion: 82 Resp: 145879  
Ion Ratio Lower Upper  
82 100  
128 40.2 33.4 50.0  
54 45.2 36.4 54.6

Manual Integrations  
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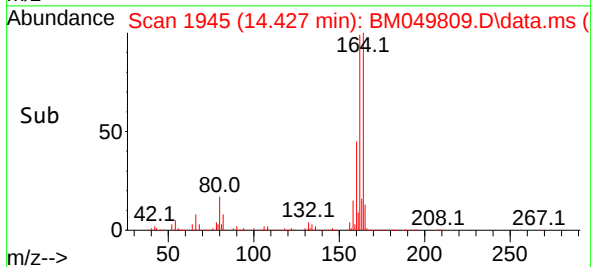
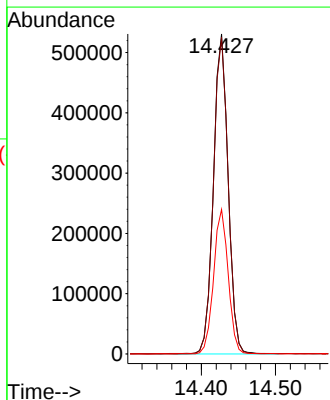
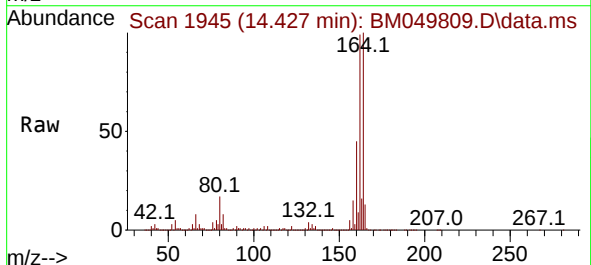
04/04/2025  
Supervised By :Jagrut  
Upadhyay

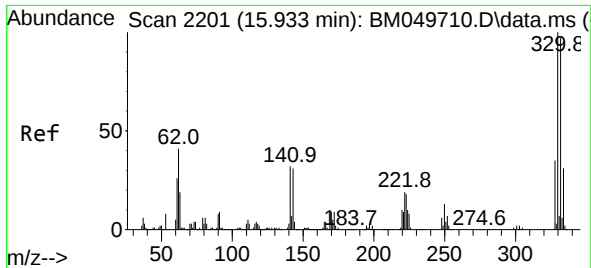
04/04/2025



#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.427 min Scan# 1945  
Delta R.T. -0.018 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

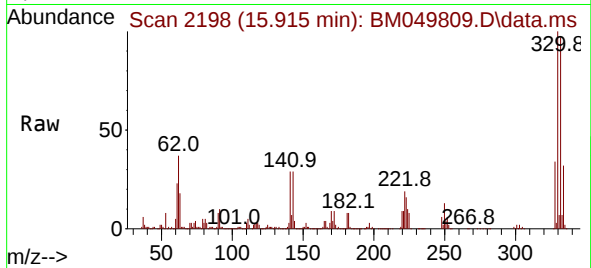
Tgt Ion:164 Resp: 729737  
Ion Ratio Lower Upper  
164 100  
162 98.9 80.5 120.7  
160 45.2 36.9 55.3





#42  
2,4,6-Tribromophenol  
Concen: 109.304 ng  
RT: 15.915 min Scan# 2198  
Delta R.T. -0.018 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_M  
ClientSampleId :  
B-10



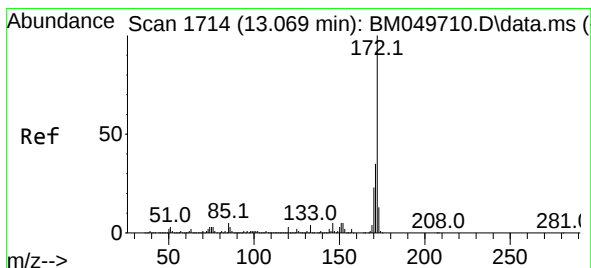
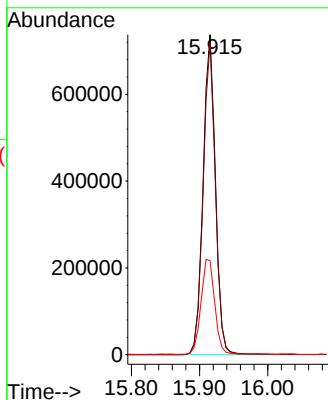
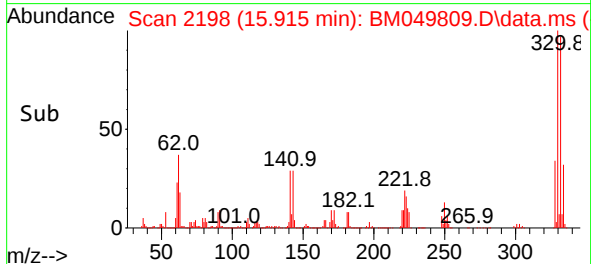
Tgt Ion:330 Resp: 931398  
Ion Ratio Lower Upper  
330 100  
332 96.4 77.0 115.4  
141 32.9 27.8 41.6

Manual Integrations  
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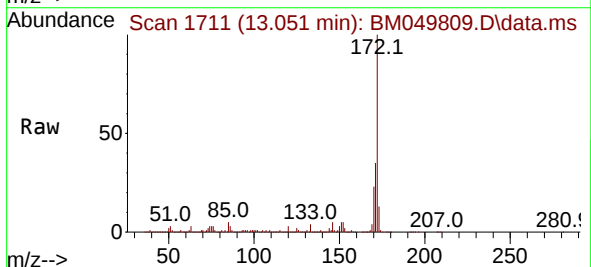
Reviewed By :Rahul  
Chavli

04/04/2025  
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Upadhyay

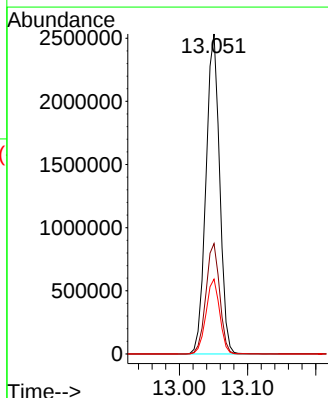
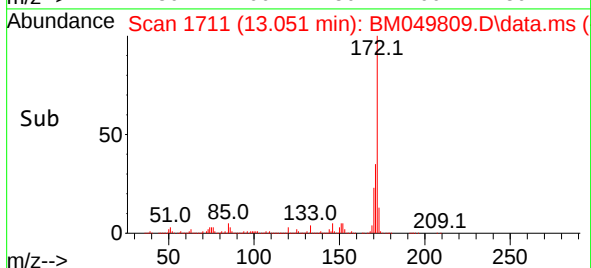
04/04/2025

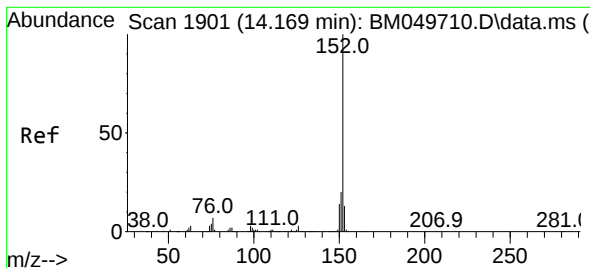


#45  
2-Fluorobiphenyl  
Concen: 60.746 ng  
RT: 13.051 min Scan# 1711  
Delta R.T. -0.018 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14



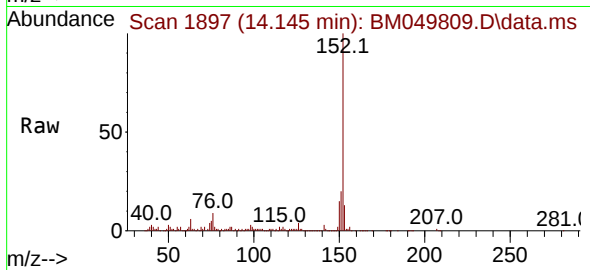
Tgt Ion:172 Resp: 3539574  
Ion Ratio Lower Upper  
172 100  
171 34.5 27.9 41.9  
170 23.4 18.6 28.0





#49  
Acenaphthylene  
Concen: 4.954 ng  
RT: 14.145 min Scan# 1897  
Delta R.T. -0.024 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_M  
ClientSampleId :  
B-10



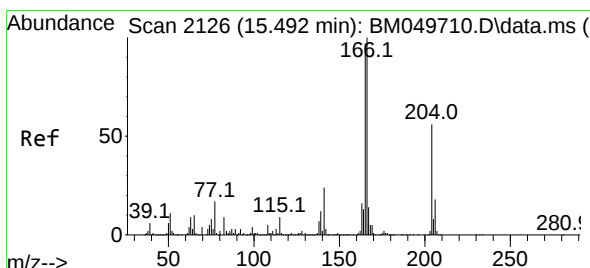
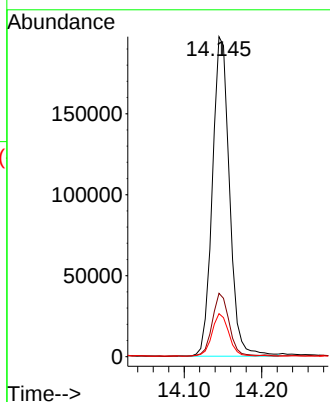
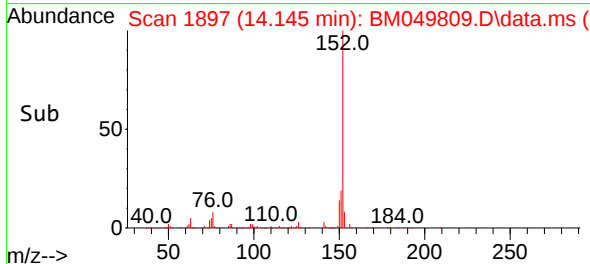
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Ion Ratio Lower Upper  
152 100  
151 19.8 15.8 23.8  
153 13.4 10.2 15.4

Manual Integrations  
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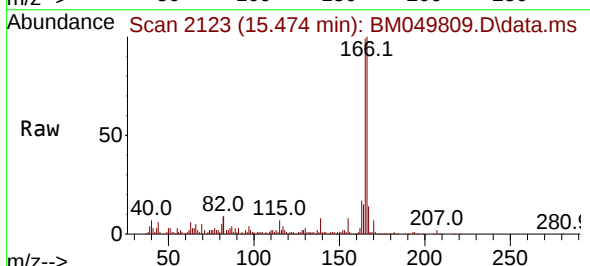
Reviewed By :Rahul  
Chavli

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Upadhyay

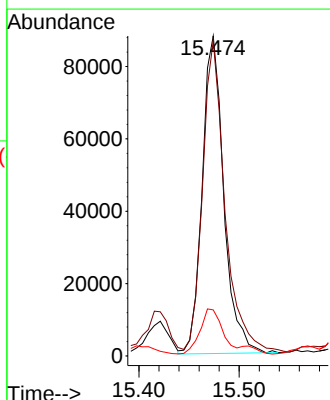
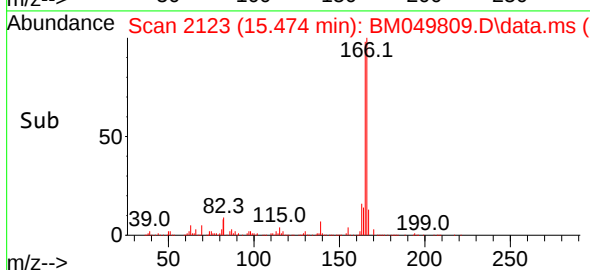
04/04/2025

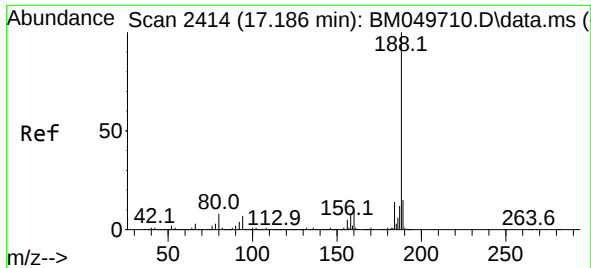


#58  
Fluorene  
Concen: 2.416 ng  
RT: 15.474 min Scan# 2123  
Delta R.T. -0.018 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14



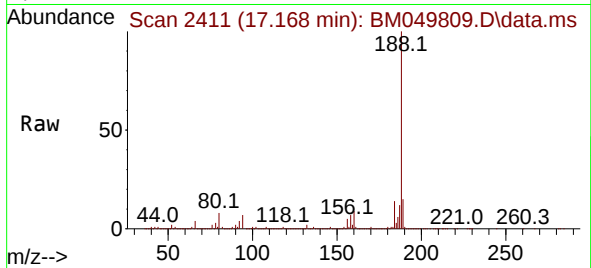
Tgt Ion:166 Resp: 131580  
Ion Ratio Lower Upper  
166 100  
165 98.5 77.5 116.3  
167 14.4 10.9 16.3





#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 17.168 min Scan# 2414  
Delta R.T. -0.018 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_M  
ClientSampleId :  
B-10



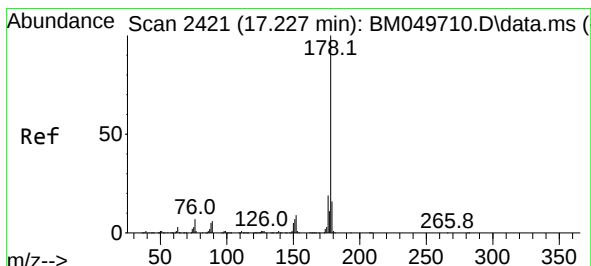
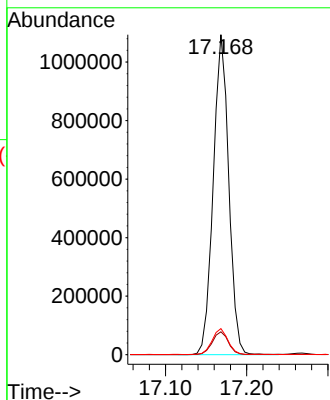
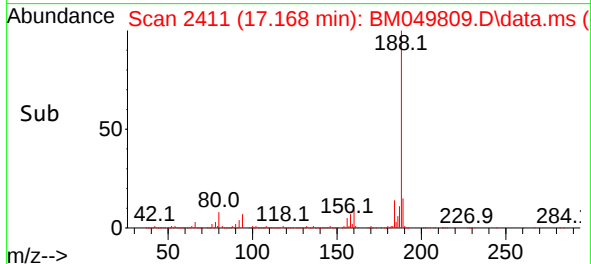
Tgt Ion:188 Resp: 144958  
Ion Ratio Lower Upper  
188 100  
94 7.1 5.8 8.6  
80 8.1 6.3 9.5

Manual Integrations  
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Chavli

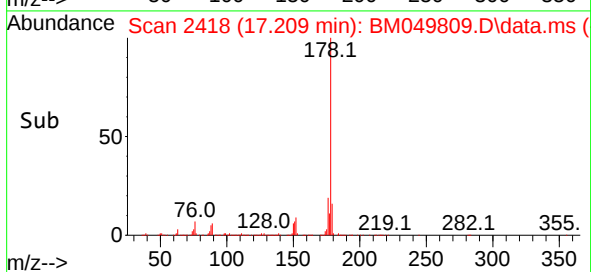
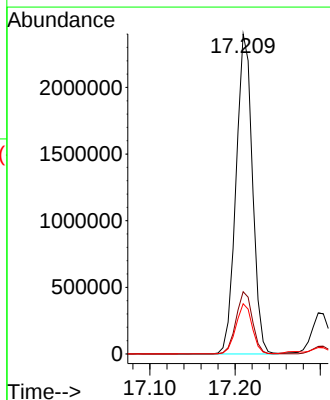
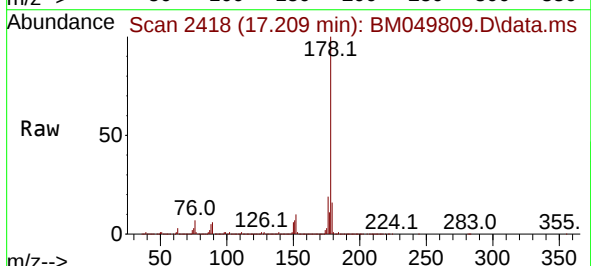
04/04/2025  
Supervised By :Jagrut  
Upadhyay

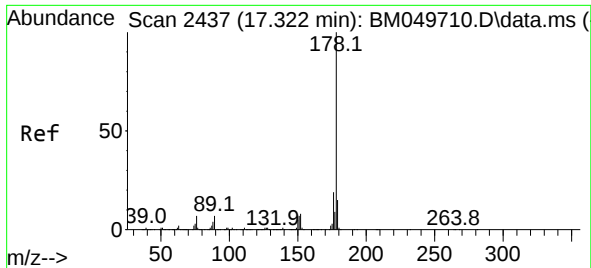
04/04/2025



#71  
Phenanthrene  
Concen: 39.850 ng  
RT: 17.209 min Scan# 2418  
Delta R.T. -0.018 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

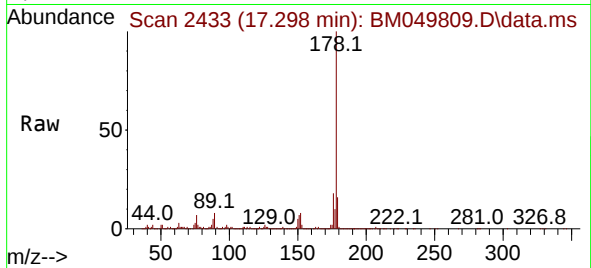
Tgt Ion:178 Resp: 3207601  
Ion Ratio Lower Upper  
178 100  
176 19.4 15.5 23.3  
179 15.7 12.5 18.7





#72  
 Anthracene  
 Concen: 5.556 ng  
 RT: 17.298 min Scan# 2437  
 Delta R.T. -0.024 min  
 Lab File: BM049809.D  
 Acq: 03 Apr 2025 17:14

Instrument :  
 BNA\_M  
 ClientSampleId :  
 B-10



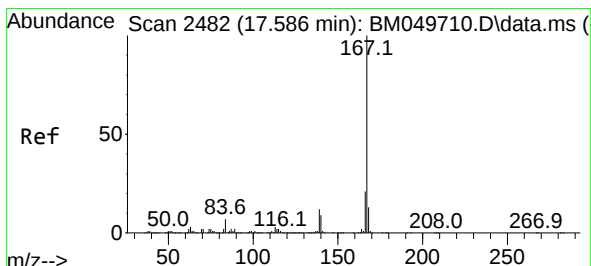
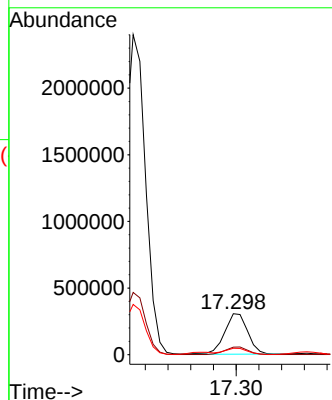
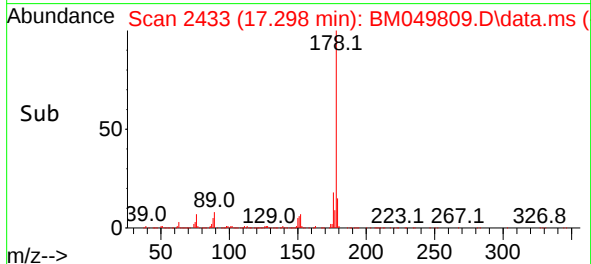
Tgt Ion:178 Resp: 433091  
 Ion Ratio Lower Upper  
 178 100  
 176 18.5 15.1 22.7  
 179 15.8 12.4 18.6

Manual Integrations  
 APPROVED

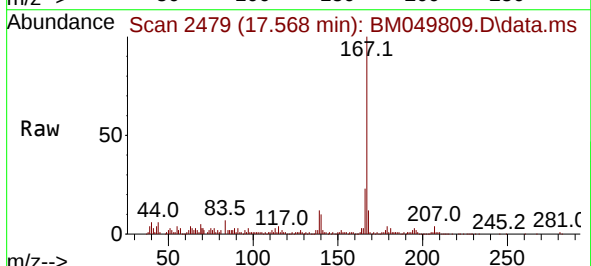
Reviewed By :Rahul  
 Chavli

04/04/2025  
 Supervised By :Jagrut  
 Upadhyay

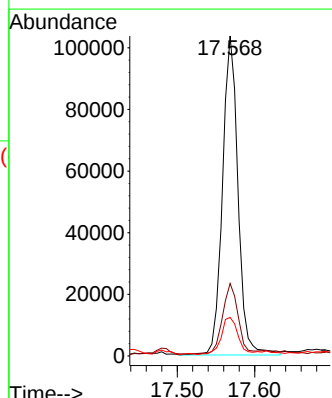
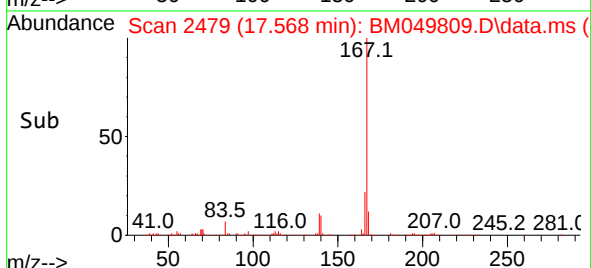
04/04/2025

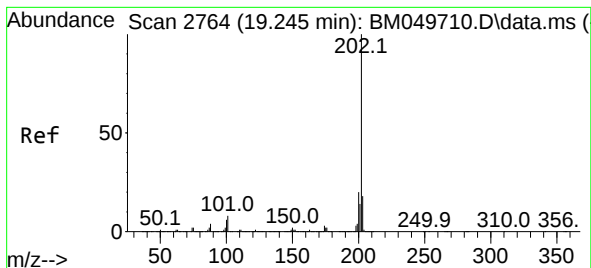


#73  
 Carbazole  
 Concen: 2.051 ng  
 RT: 17.568 min Scan# 2479  
 Delta R.T. -0.018 min  
 Lab File: BM049809.D  
 Acq: 03 Apr 2025 17:14



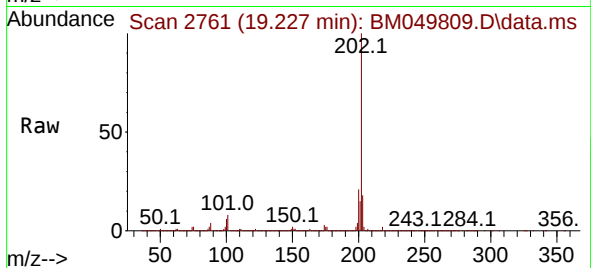
Tgt Ion:167 Resp: 144787  
 Ion Ratio Lower Upper  
 167 100  
 166 22.6 17.0 25.6  
 139 12.1 9.4 14.2





#75  
Fluoranthene  
Concen: 51.758 ng  
RT: 19.227 min Scan# 21  
Delta R.T. -0.018 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_M  
ClientSampleId :  
B-10



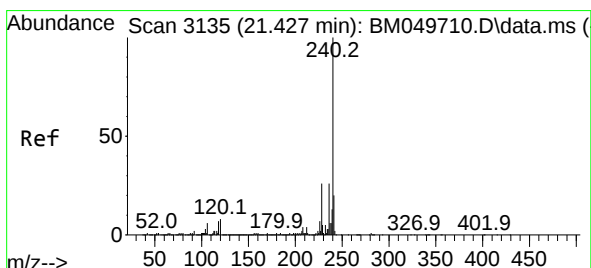
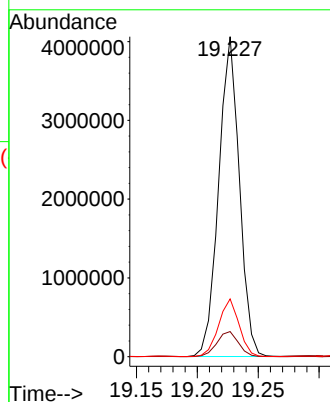
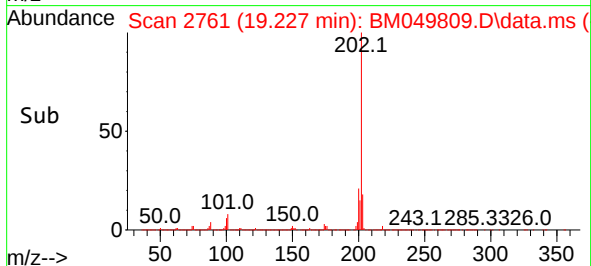
Tgt Ion:202 Resp: 4796420  
Ion Ratio Lower Upper  
202 100  
101 7.9 0.0 27.8  
203 18.0 0.0 37.6

Manual Integrations  
APPROVED

Reviewed By :Rahul  
Chavli

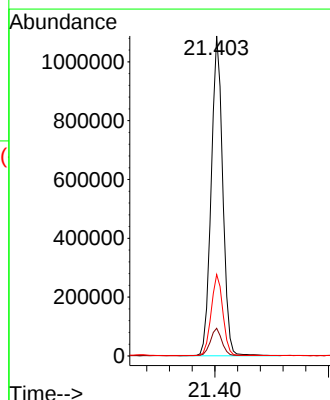
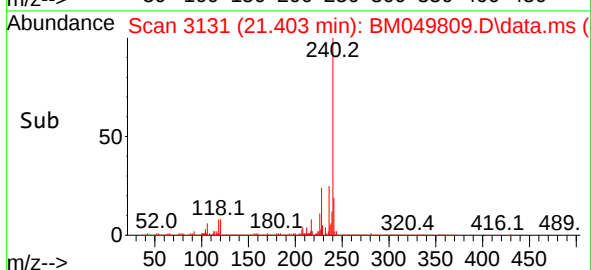
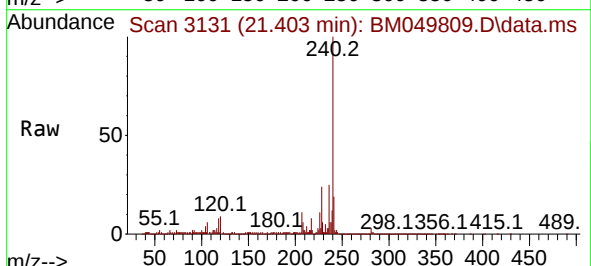
04/04/2025  
Supervised By :Jagrut  
Upadhyay

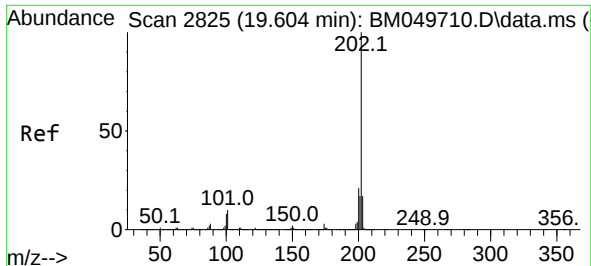
04/04/2025



#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.403 min Scan# 3131  
Delta R.T. -0.024 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

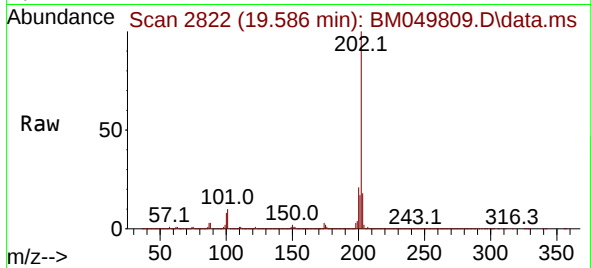
Tgt Ion:240 Resp: 1521361  
Ion Ratio Lower Upper  
240 100  
120 8.6 6.5 9.7  
236 25.5 20.7 31.1





#78  
Pyrene  
Concen: 41.007 ng  
RT: 19.586 min Scan# 2822  
Delta R.T. -0.018 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_M  
ClientSampleId :  
B-10



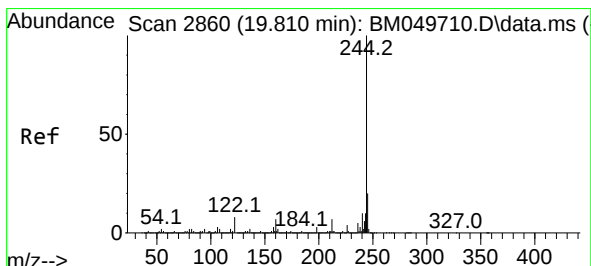
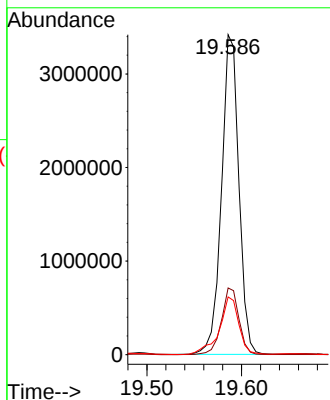
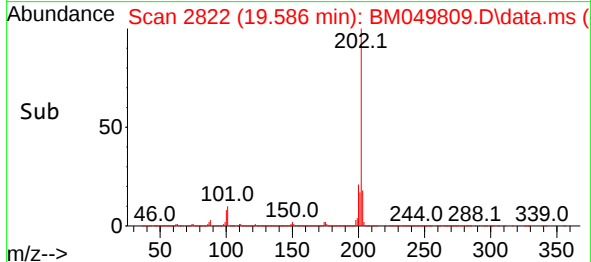
Tgt Ion:202 Resp: 435868  
Ion Ratio Lower Upper  
202 100  
200 20.9 17.0 25.4  
203 18.1 14.0 21.0

Manual Integrations  
APPROVED

Reviewed By :Rahul  
Chavli

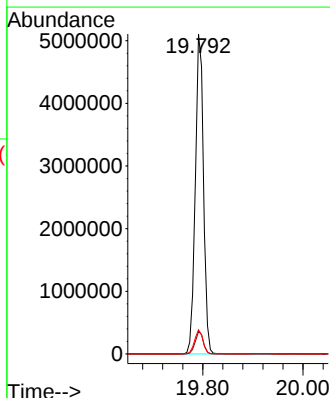
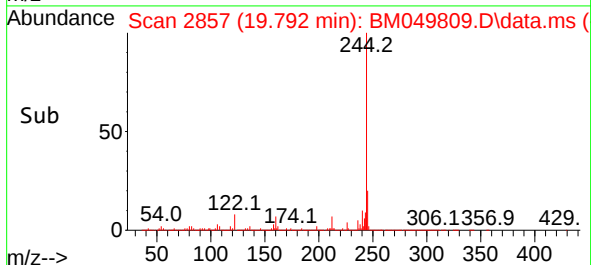
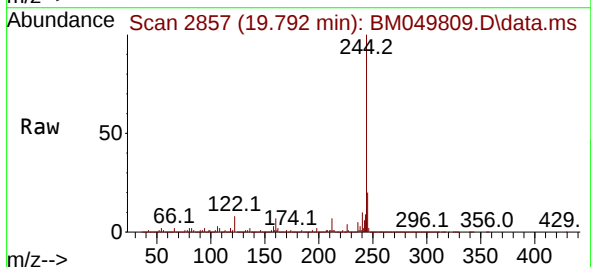
04/04/2025  
Supervised By :Jagrut  
Upadhyay

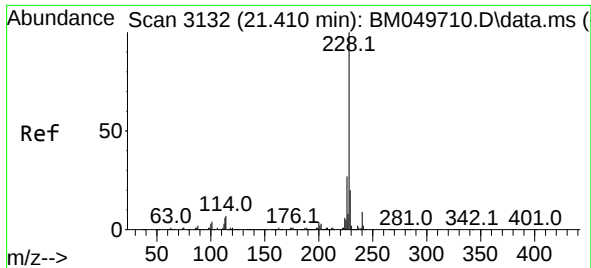
04/04/2025



#79  
Terphenyl-d14  
Concen: 63.667 ng  
RT: 19.792 min Scan# 2857  
Delta R.T. -0.018 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

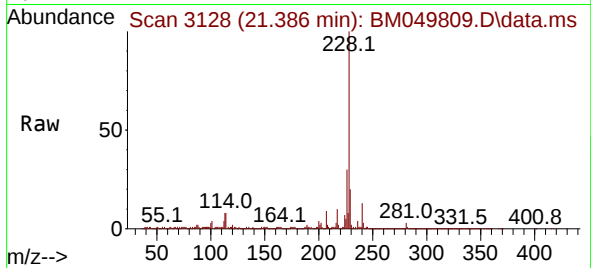
Tgt Ion:244 Resp: 5747969  
Ion Ratio Lower Upper  
244 100  
212 7.0 5.8 8.6  
122 7.6 6.0 9.0





#81  
Benzo(a)anthracene  
Concen: 17.822 ng  
RT: 21.386 min Scan# 3132  
Delta R.T. -0.024 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_M  
ClientSampleId :  
B-10



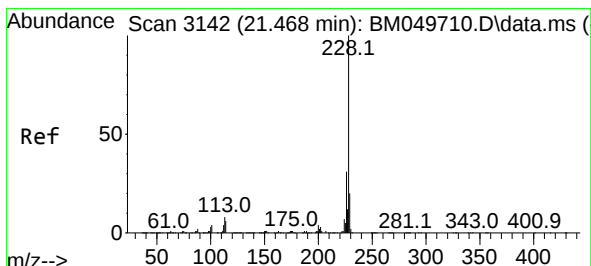
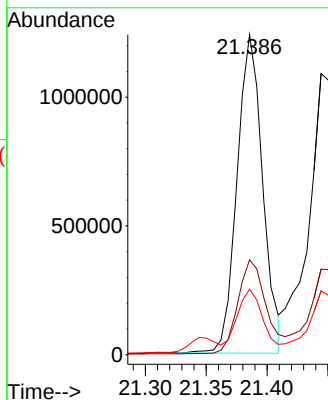
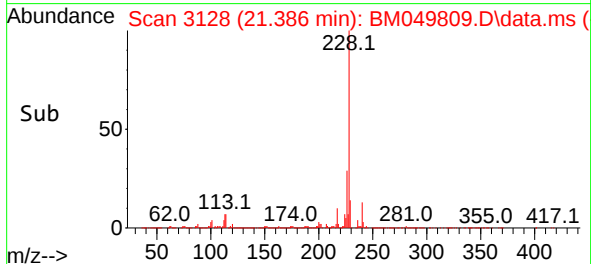
Tgt Ion:228 Resp: 181098  
Ion Ratio Lower Upper  
228 100  
226 29.7 22.0 33.0  
229 20.5 15.8 23.8

Manual Integrations  
APPROVED

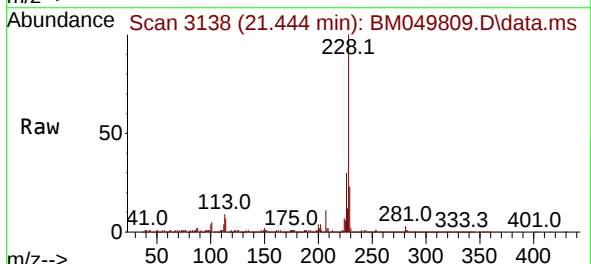
Reviewed By :Rahul  
Chavli

04/04/2025  
Supervised By :Jagrut  
Upadhyay

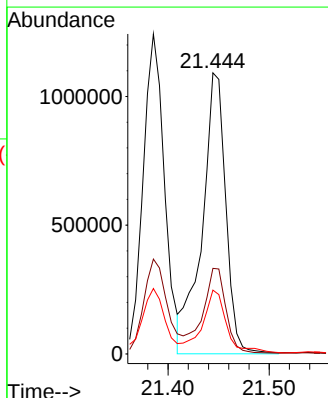
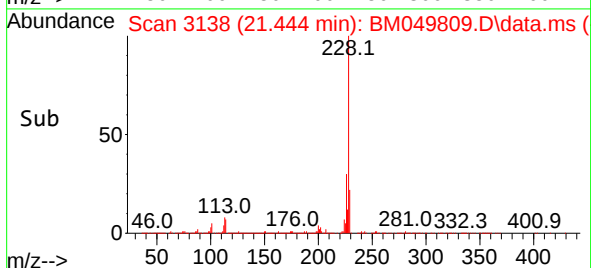
04/04/2025

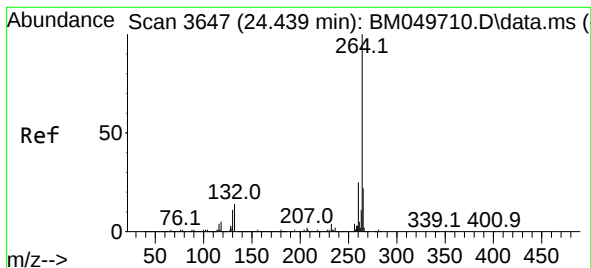


#83  
Chrysene  
Concen: 18.479 ng m  
RT: 21.444 min Scan# 3138  
Delta R.T. -0.024 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14



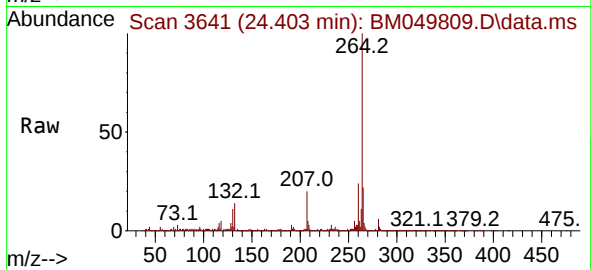
Tgt Ion:228 Resp: 1780044  
Ion Ratio Lower Upper  
228 100  
226 30.5 24.5 36.7  
229 22.7 15.8 23.6





#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 24.403 min Scan# 30  
Delta R.T. -0.036 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_M  
ClientSampleId :  
B-10



Tgt Ion:264 Resp: 155314  

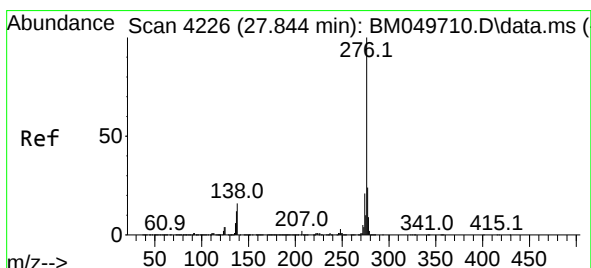
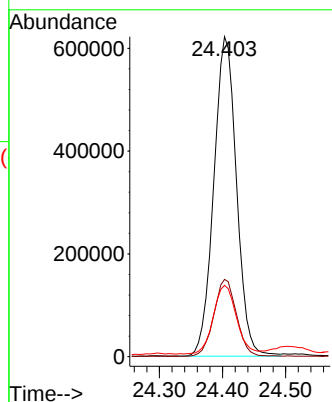
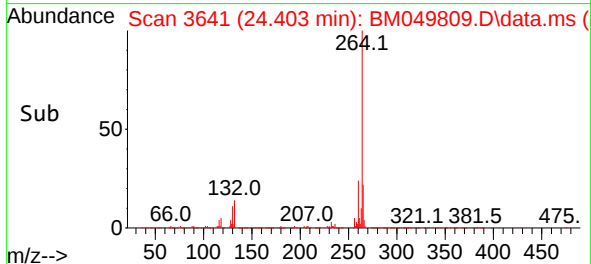
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 24.2  | 19.6  | 29.4  |
| 265 | 22.3  | 18.2  | 27.2  |

Manual Integrations  
APPROVED

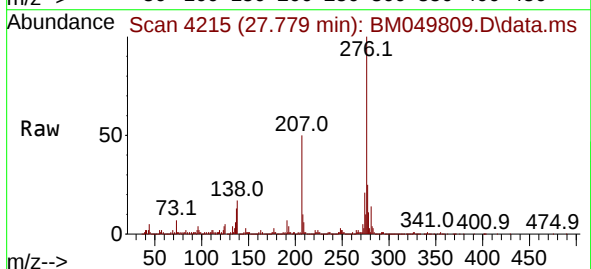
Reviewed By :Rahul  
Chavli

04/04/2025  
Supervised By :Jagrut  
Upadhyay

04/04/2025

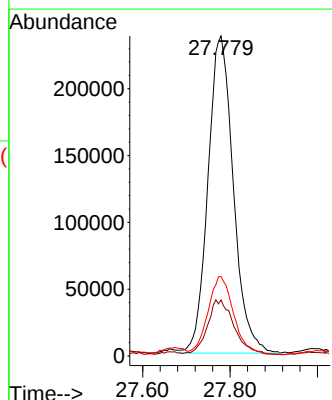
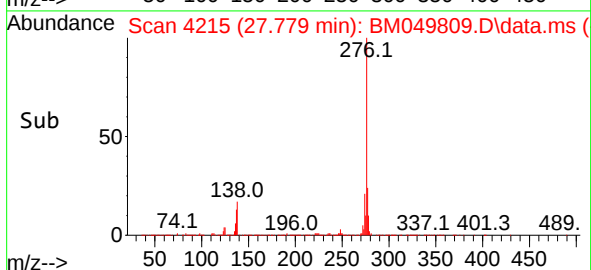


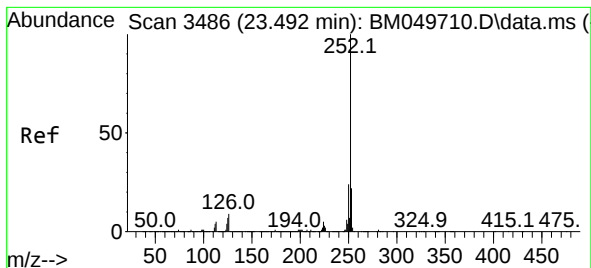
#87  
Indeno(1,2,3-cd)pyrene  
Concen: 8.572 ng  
RT: 27.779 min Scan# 4215  
Delta R.T. -0.065 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14



Tgt Ion:276 Resp: 958233  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 276 | 100   |       |       |
| 138 | 18.3  | 16.3  | 24.5  |
| 277 | 24.7  | 19.9  | 29.9  |





#88

Benzo(b)fluoranthene

Concen: 20.031 ng

RT: 23.462 min Scan# 3486

Delta R.T. -0.030 min

Lab File: BM049809.D

Acq: 03 Apr 2025 17:14

Instrument :

BNA\_M

ClientSampleId :

B-10

Tgt Ion:252 Resp: 209545

Ion Ratio Lower Upper

252 100

253 22.1 17.4 26.0

125 8.5 5.9 8.9

Manual Integrations

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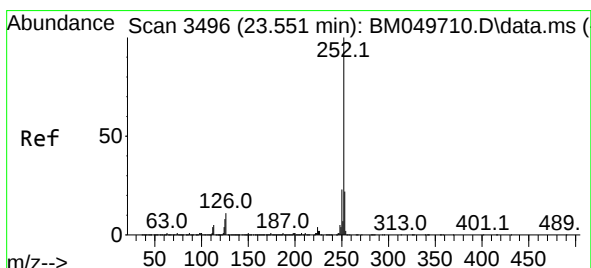
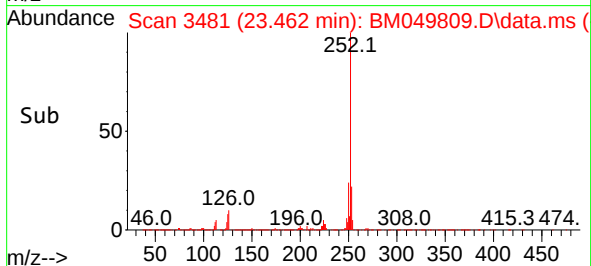
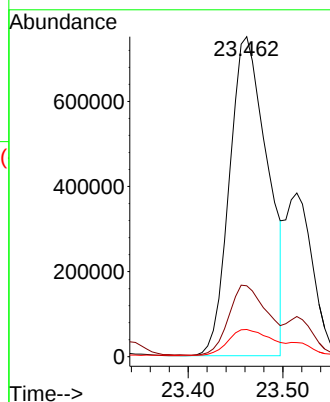
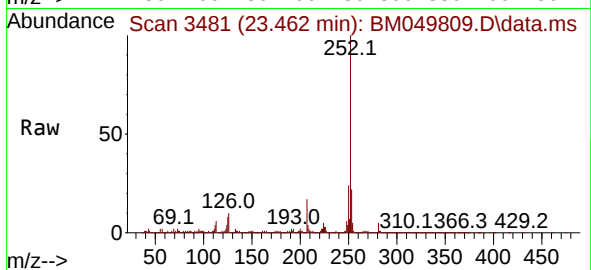
Reviewed By :Rahul

Chavli

04/04/2025

Supervised By :Jagrut  
Upadhyay

04/04/2025



#89

Benzo(k)fluoranthene

Concen: 7.504 ng m

RT: 23.515 min Scan# 3490

Delta R.T. -0.036 min

Lab File: BM049809.D

Acq: 03 Apr 2025 17:14

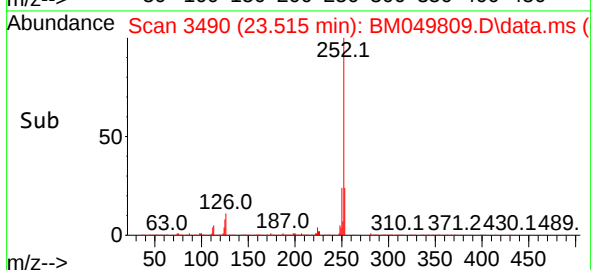
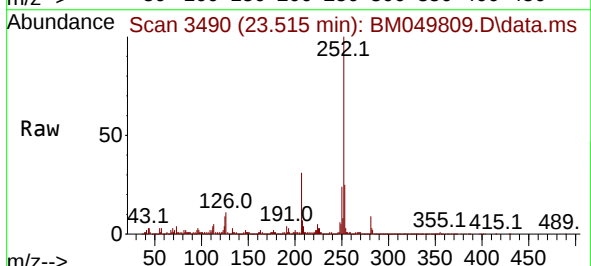
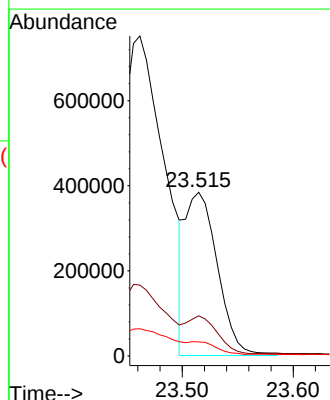
Tgt Ion:252 Resp: 772455

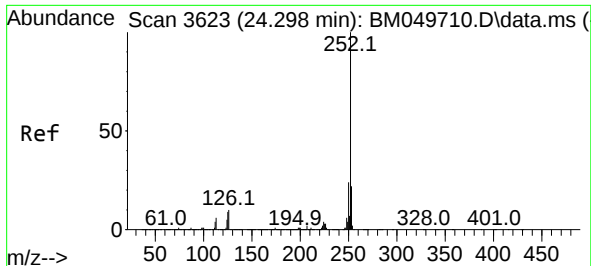
Ion Ratio Lower Upper

252 100

253 24.5 17.3 25.9

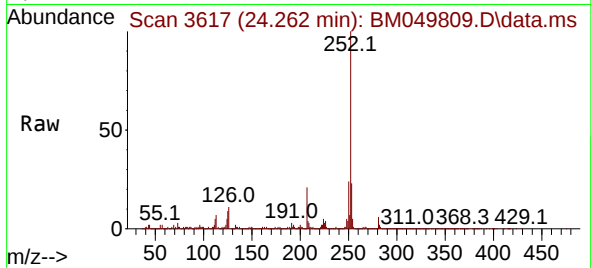
125 8.6 6.2 9.2





#90  
Benzo(a)pyrene  
Concen: 16.665 ng  
RT: 24.262 min Scan# 30  
Delta R.T. -0.036 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_M  
ClientSampleId :  
B-10



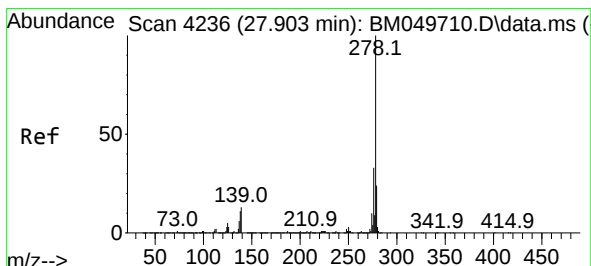
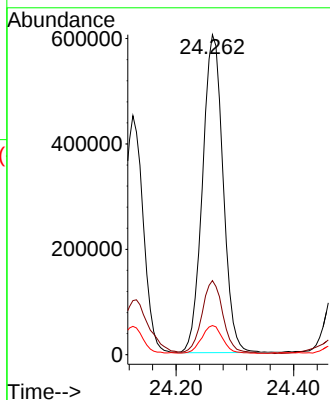
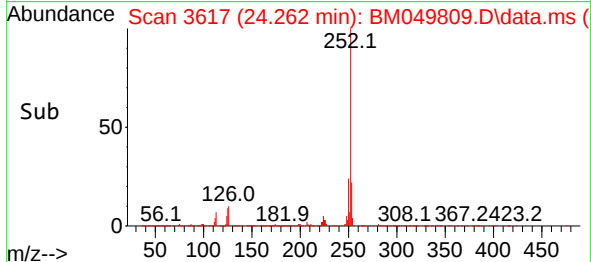
Tgt Ion:252 Resp: 146435  
Ion Ratio Lower Upper  
252 100  
253 23.1 17.2 25.8  
125 9.1 7.0 10.6

Manual Integrations  
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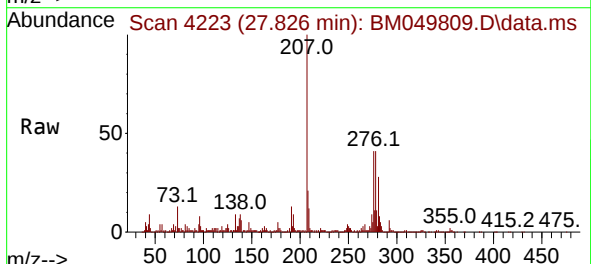
Reviewed By :Rahul  
Chavli

04/04/2025  
Supervised By :Jagrut  
Upadhyay

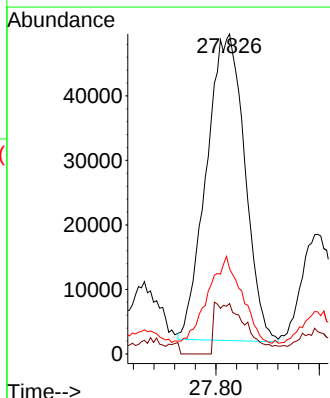
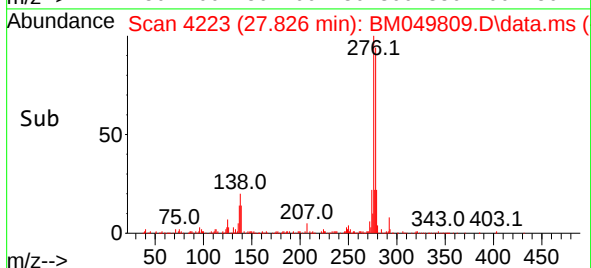
04/04/2025

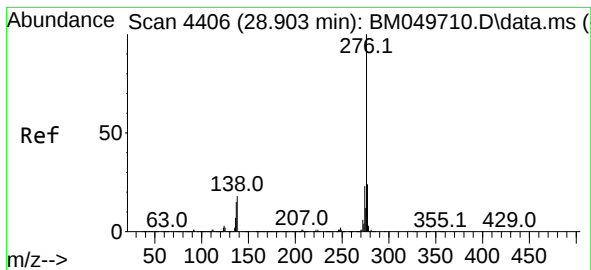


#91  
Dibenzo(a,h)anthracene  
Concen: 2.625 ng  
RT: 27.826 min Scan# 4223  
Delta R.T. -0.077 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14



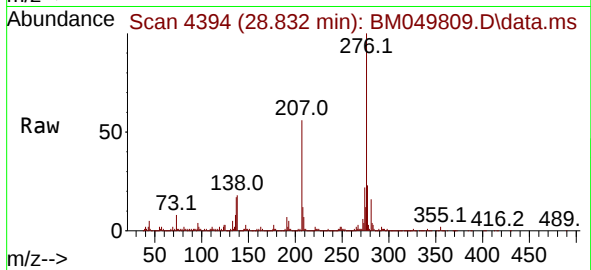
Tgt Ion:278 Resp: 244475  
Ion Ratio Lower Upper  
278 100  
139 15.8 10.1 15.1#  
279 26.6 19.1 28.7





#92  
Benzo(g,h,i)perylene  
Concen: 9.943 ng  
RT: 28.832 min Scan# 41  
Delta R.T. -0.071 min  
Lab File: BM049809.D  
Acq: 03 Apr 2025 17:14

Instrument :  
BNA\_M  
ClientSampleId :  
B-10



Tgt Ion:276 Resp: 93285  
Ion Ratio Lower Upper  
276 100  
277 23.1 18.8 28.2  
138 17.6 14.0 21.0

Manual Integrations  
APPROVED

Reviewed By :Rahul  
Chavli

04/04/2025  
Supervised By :Jagrut  
Upadhyay

04/04/2025

