

Data Path : Z:\svoasrv\HPCHEM1\BNA\_M\Data\BM121721\  
 Data File : BM033503.D  
 Acq On : 17 Dec 2021 13:09  
 Operator : CG/JU  
 Sample : M5089-02  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 MS-1

Manual Integrations  
 APPROVED

Reviewed By : Christian Giraldo 12/18/2021  
 Supervised By : Jagrut Upadhyay 12/20/2021

Quant Time: Dec 17 13:42:02 2021  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_M\Methods\8270-BM121621.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Dec 16 17:10:15 2021  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-------------------------------|--------|------|----------|---------|-------|----------|
| -----                         |        |      |          |         |       |          |
| Internal Standards            |        |      |          |         |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.931  | 152  | 51600    | 20.000  | ng    | -0.01    |
| 21) Naphthalene-d8            | 10.748 | 136  | 211040   | 20.000  | ng    | 0.00     |
| 39) Acenaphthene-d10          | 14.583 | 164  | 139377   | 20.000  | ng    | 0.00     |
| 64) Phenanthrene-d10          | 17.330 | 188  | 276129   | 20.000  | ng    | # 0.00   |
| 76) Chrysene-d12              | 21.506 | 240  | 167844   | 20.000  | ng    | 0.00     |
| 86) Perylene-d12              | 23.924 | 264  | 154826   | 20.000  | ng    | -0.01    |
|                               |        |      |          |         |       |          |
| System Monitoring Compounds   |        |      |          |         |       |          |
| 5) 2-Fluorophenol             | 5.502  | 112  | 419723   | 140.358 | ng    | 0.00     |
| 7) Phenol-d6                  | 7.107  | 99   | 572956   | 142.773 | ng    | 0.00     |
| 23) Nitrobenzene-d5           | 9.107  | 82   | 442960   | 90.124  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol      | 16.071 | 330  | 207895   | 132.600 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl          | 13.207 | 172  | 894286   | 88.757  | ng    | 0.00     |
| 79) Terphenyl-d14             | 19.954 | 244  | 1118027  | 104.868 | ng    | 0.00     |
|                               |        |      |          |         |       |          |
| Target Compounds              |        |      |          |         |       | Qvalue   |
| 10) Phenol                    | 7.131  | 94   | 9693     | 2.391   | ng    | # 61     |
| 35) Caprolactam               | 11.719 | 113  | 2557     | 4.095   | ng    | # 74     |
| 74) Di-n-butylphthalate       | 18.295 | 149  | 50664    | 2.747   | ng    | # 97     |
| 75) Fluoranthene              | 19.383 | 202  | 136473   | 7.720   | ng    | 97       |
| 78) Pyrene                    | 19.748 | 202  | 461207   | 34.826  | ng    | 99       |
| 81) Benzo(a)anthracene        | 21.495 | 228  | 217872   | 19.367  | ng    | 95       |
| 83) Chrysene                  | 21.548 | 228  | 241638   | 22.309  | ng    | 99       |
| 84) Bis(2-ethylhexyl)phtha... | 21.418 | 149  | 628126   | 72.306  | ng    | 99       |
| 87) Indeno(1,2,3-cd)pyrene    | 26.430 | 276  | 121057m  | 16.959  | ng    |          |
| 88) Benzo(b)fluoranthene      | 23.195 | 252  | 256891m  | 25.875  | ng    |          |
| 89) Benzo(k)fluoranthene      | 23.224 | 252  | 76216m   | 7.590   | ng    |          |
| 90) Benzo(a)pyrene            | 23.818 | 252  | 287005   | 38.630  | ng    | 98       |
| 91) Dibenzo(a,h)anthracene    | 26.441 | 278  | 43373    | 8.101   | ng    | # 91     |
| 92) Benzo(g,h,i)perylene      | 27.206 | 276  | 148224   | 21.528  | ng    | 97       |
| -----                         |        |      |          |         |       |          |

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

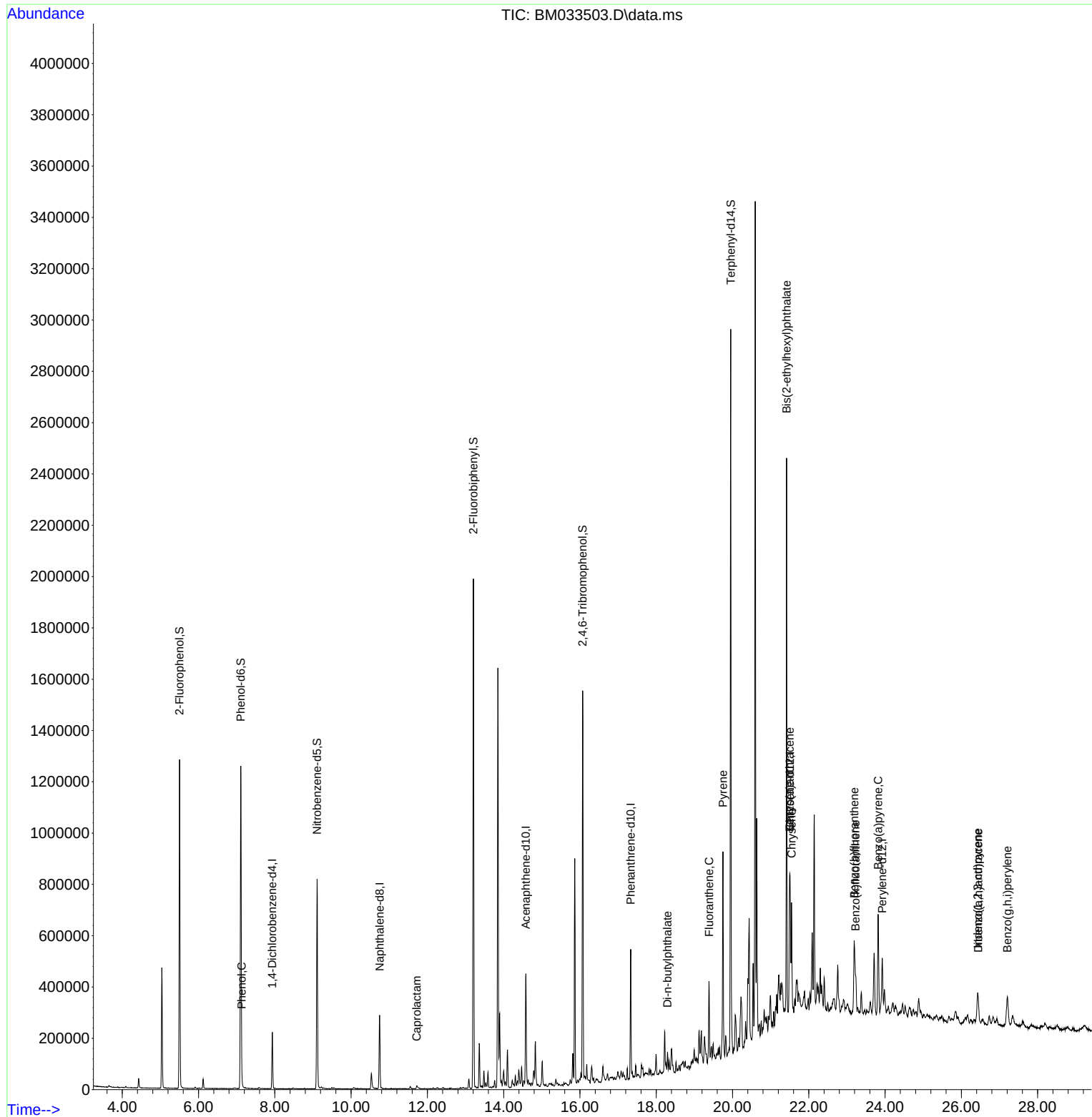
Data Path : Z:\svoasrv\HPCHEM1\BNA\_M\Data\BM121721\  
Data File : BM033503.D  
Acq On : 17 Dec 2021 13:09  
Operator : CG/JU  
Sample : M5089-02  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

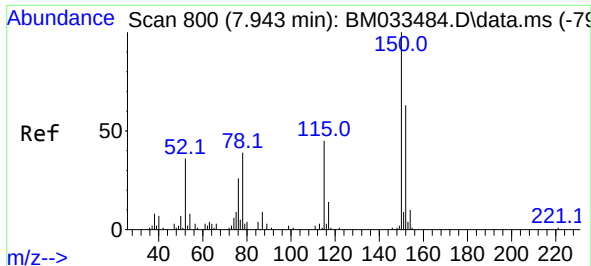
Instrument :  
BNA\_M  
ClientSampleId :  
MS-1

Quant Time: Dec 17 13:42:02 2021  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_M\Methods\8270-BM121621.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Dec 16 17:10:15 2021  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Christian Giraldo 12/18/2021  
Supervised By : Jagrut Upadhyay 12/20/2021





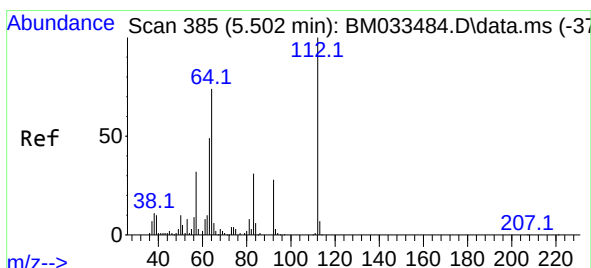
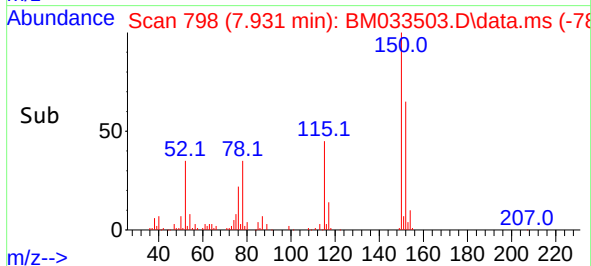
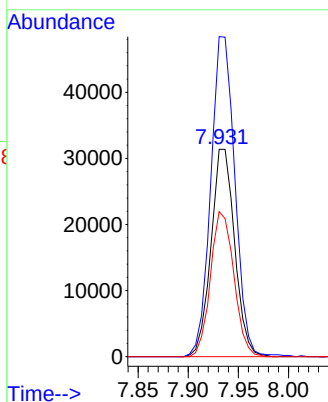
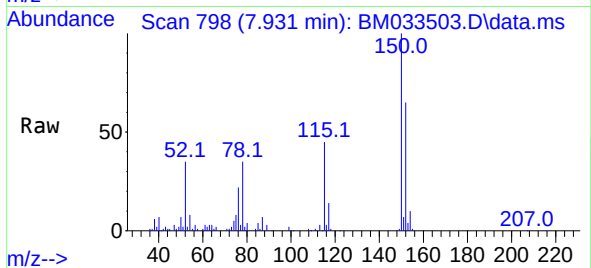
#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 7.931 min Scan# 798  
Delta R.T. -0.012 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

Instrument :  
BNA\_M  
ClientSampleId :  
MS-1

Tgt Ion:152 Resp: 51600  
Ion Ratio Lower Upper  
152 100  
150 154.3 128.9 193.3  
115 70.0 53.0 79.6

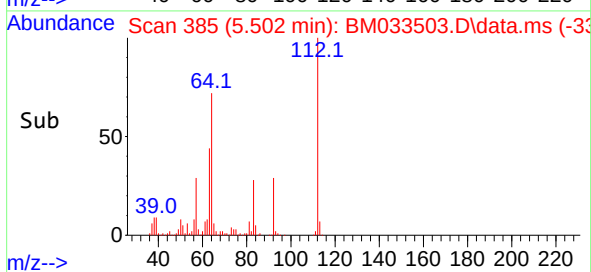
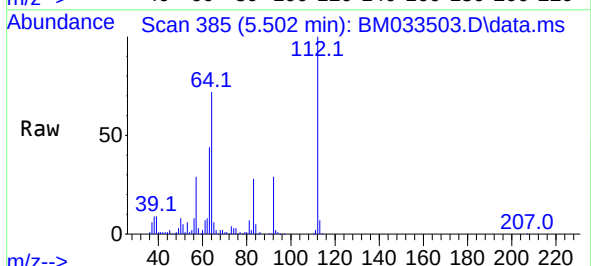
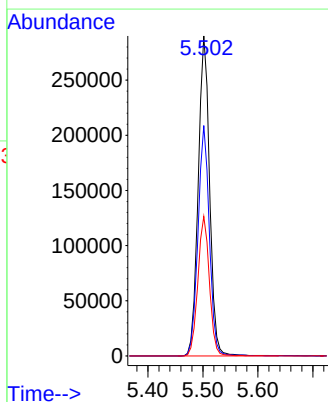
Manual Integrations  
APPROVED

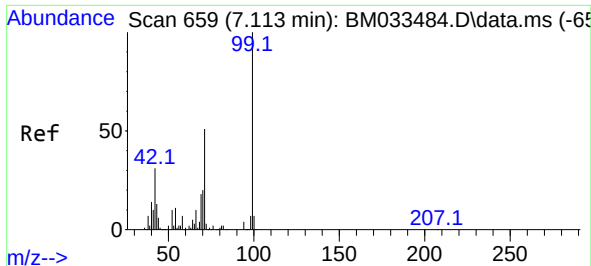
Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021



#5  
2-Fluorophenol  
Concen: 140.358 ng  
RT: 5.502 min Scan# 385  
Delta R.T. -0.000 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

Tgt Ion:112 Resp: 419723  
Ion Ratio Lower Upper  
112 100  
64 72.0 55.5 83.3  
63 43.6 31.3 46.9





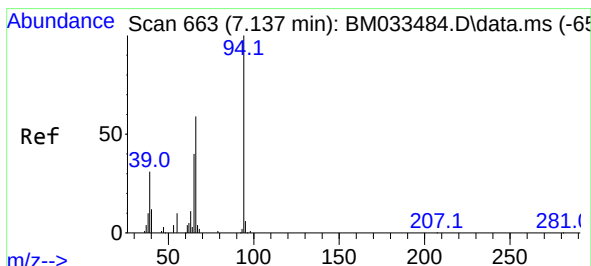
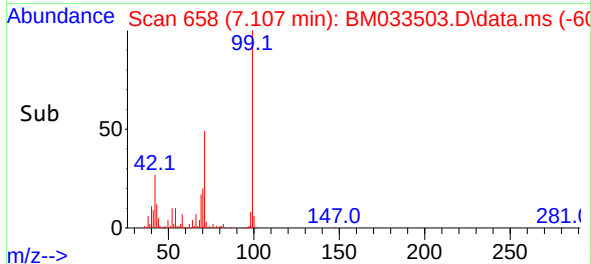
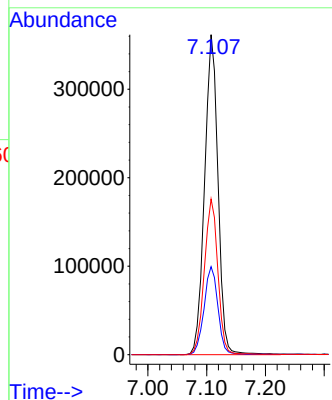
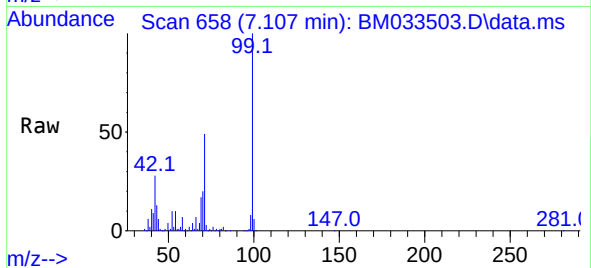
#7  
Phenol-d6  
Concen: 142.773 ng  
RT: 7.107 min Scan# 61  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

Instrument :  
BNA\_M  
ClientSampleId :  
MS-1

Tgt Ion: 99 Resp: 572950  
Ion Ratio Lower Upper  
99 100  
42 27.5 20.3 30.5  
71 48.7 34.5 51.7

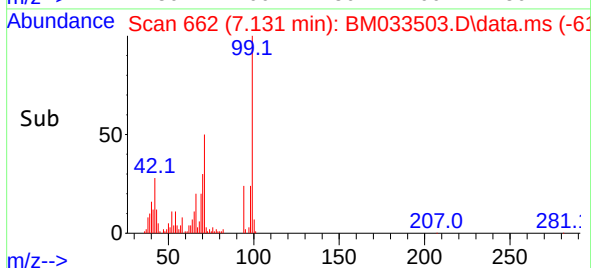
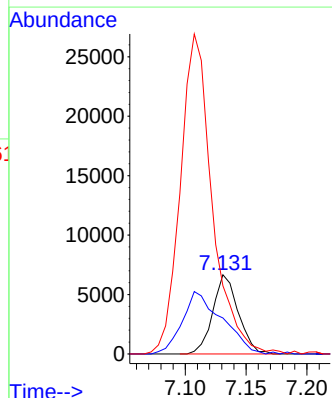
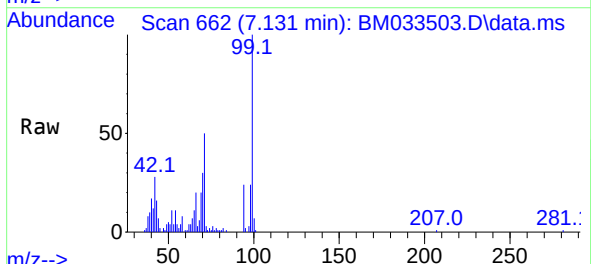
Manual Integrations  
APPROVED

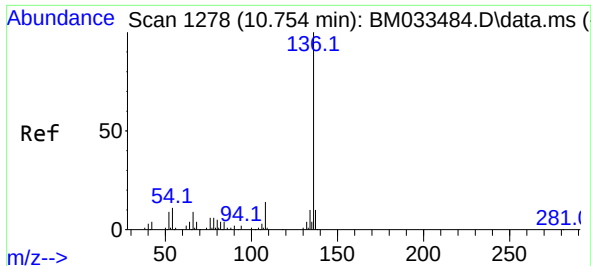
Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021



#10  
Phenol  
Concen: 2.391 ng  
RT: 7.131 min Scan# 662  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

Tgt Ion: 94 Resp: 9693  
Ion Ratio Lower Upper  
94 100  
65 45.4 15.5 55.5  
66 86.1 28.5 68.5#





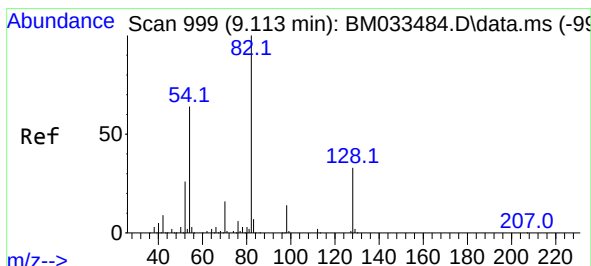
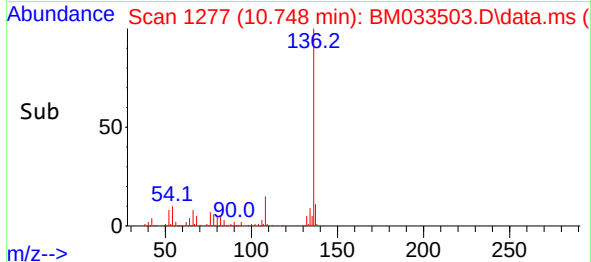
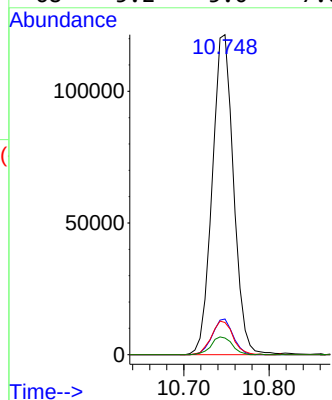
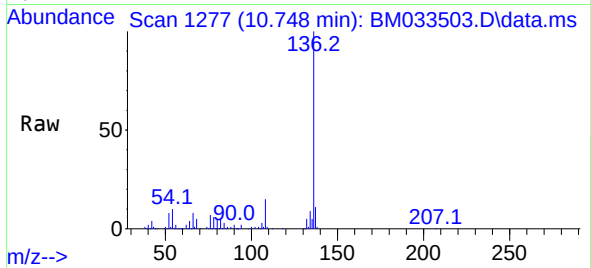
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.748 min Scan# 11  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

Instrument :  
BNA\_M  
ClientSampleId :  
MS-1

Tgt Ion:136 Resp: 211040  
Ion Ratio Lower Upper  
136 100  
137 11.2 8.6 13.0  
54 10.0 8.3 12.5  
68 5.2 5.0 7.6

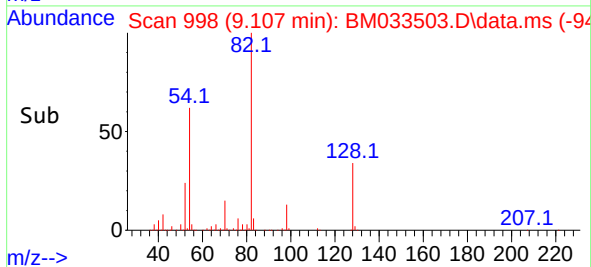
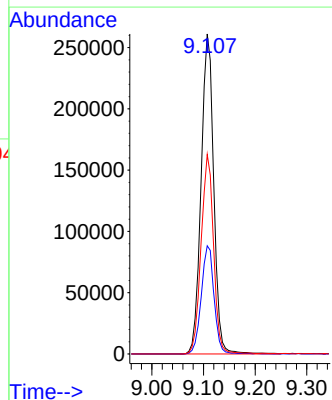
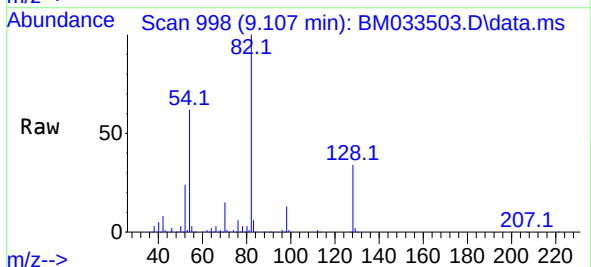
Manual Integrations  
APPROVED

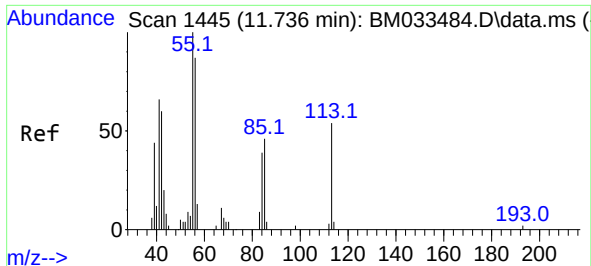
Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021



#23  
Nitrobenzene-d5  
Concen: 90.124 ng  
RT: 9.107 min Scan# 998  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

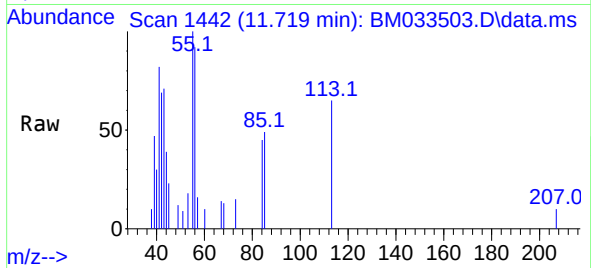
Tgt Ion: 82 Resp: 442960  
Ion Ratio Lower Upper  
82 100  
128 33.8 28.1 42.1  
54 62.3 46.1 69.1





#35  
Caprolactam  
Concen: 4.095 ng  
RT: 11.719 min Scan# 1445  
Delta R.T. -0.017 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

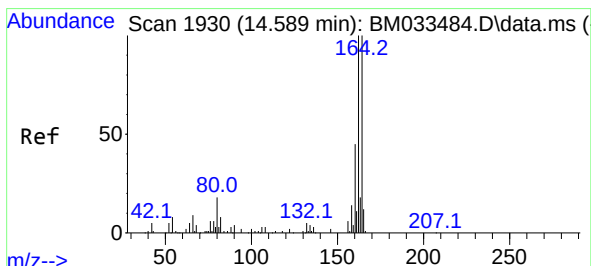
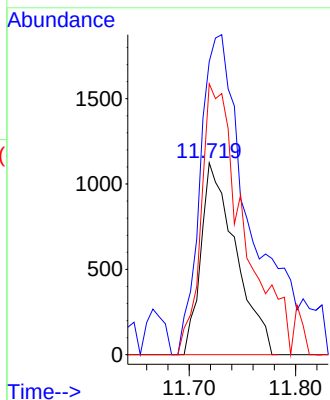
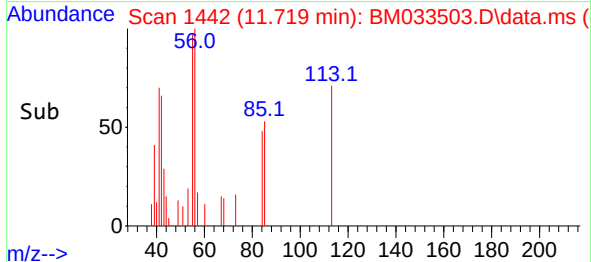
Instrument :  
BNA\_M  
ClientSampleId :  
MS-1



Tgt Ion:113 Resp: 255  
Ion Ratio Lower Upper  
113 100  
55 152.8 183.6 223.6  
56 141.2 143.7 183.7

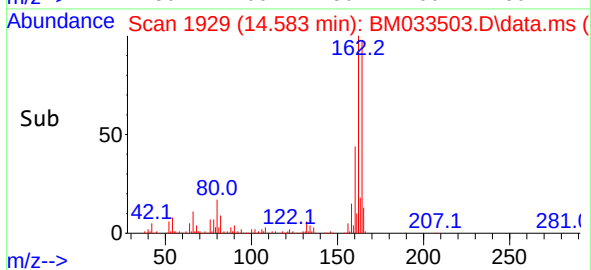
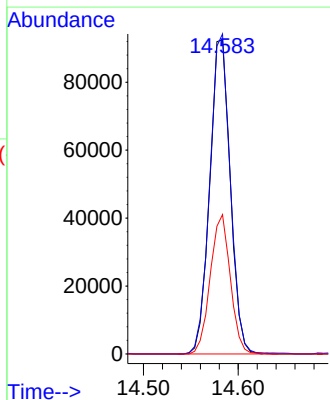
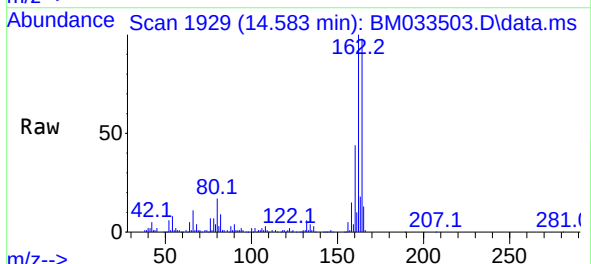
Manual Integrations  
APPROVED

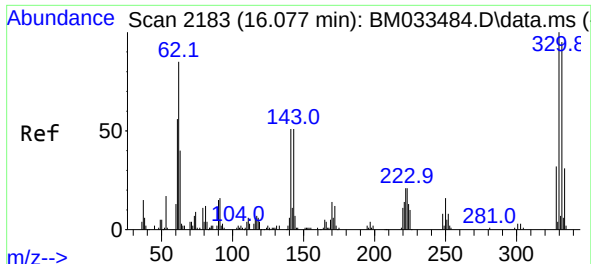
Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021



#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.583 min Scan# 1929  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

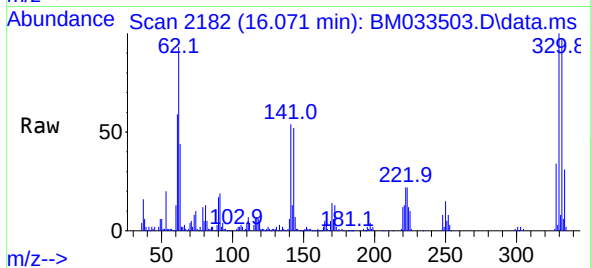
Tgt Ion:164 Resp: 139377  
Ion Ratio Lower Upper  
164 100  
162 101.9 79.7 119.5  
160 44.4 34.2 51.4





#42  
2,4,6-Tribromophenol  
Concen: 132.600 ng  
RT: 16.071 min Scan# 2183  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

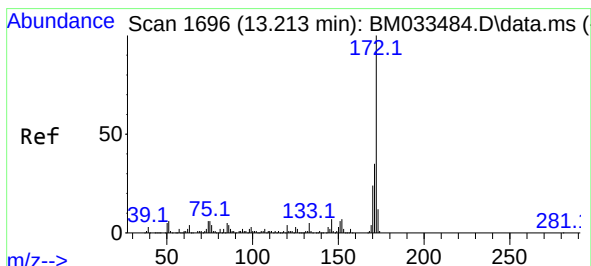
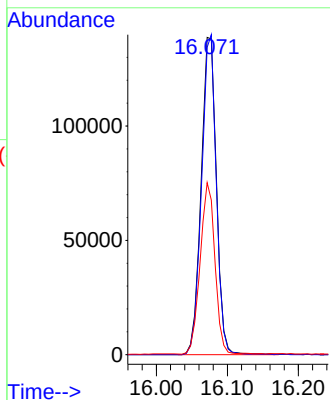
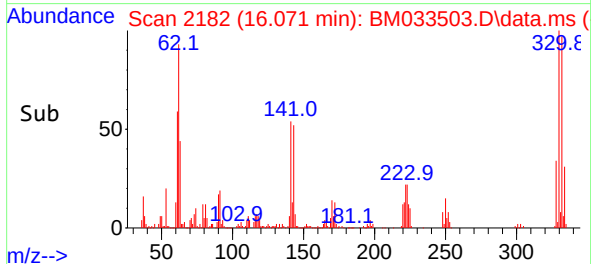
Instrument :  
BNA\_M  
ClientSampleId :  
MS-1



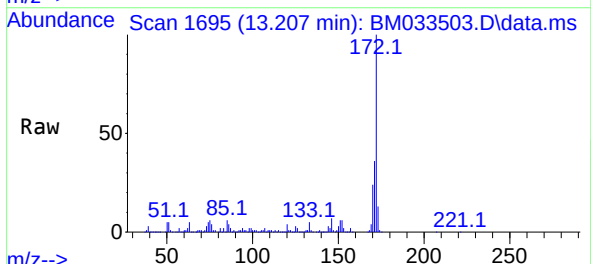
Tgt Ion:330 Resp: 20789  
Ion Ratio Lower Upper  
330 100  
332 96.6 76.5 114.7  
141 52.3 35.9 53.9

Manual Integrations  
APPROVED

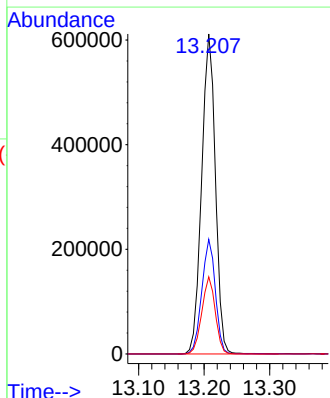
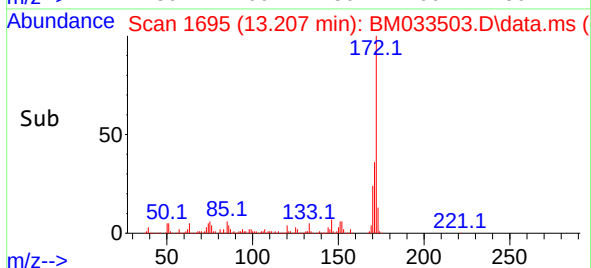
Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021

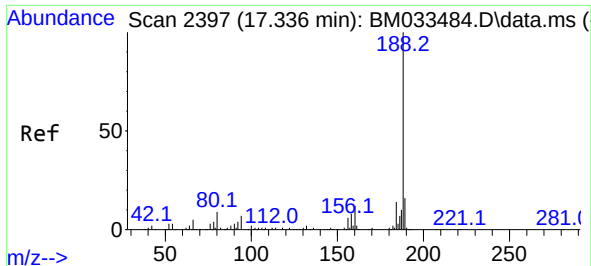


#45  
2-Fluorobiphenyl  
Concen: 88.757 ng  
RT: 13.207 min Scan# 1695  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09



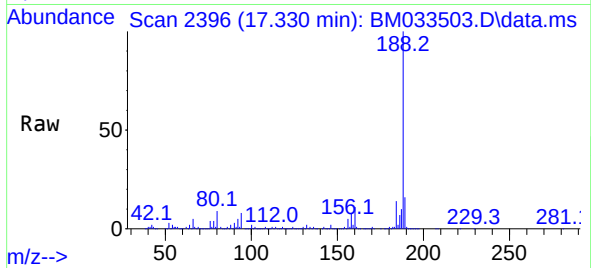
Tgt Ion:172 Resp: 894286  
Ion Ratio Lower Upper  
172 100  
171 35.8 27.2 40.8  
170 24.1 18.7 28.1





#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 17.330 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

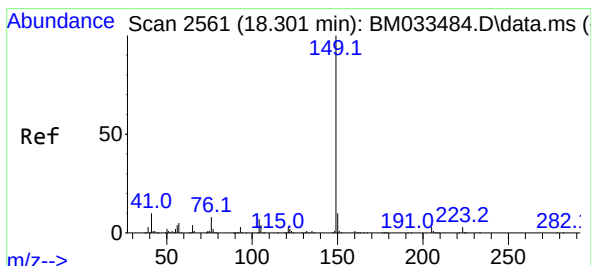
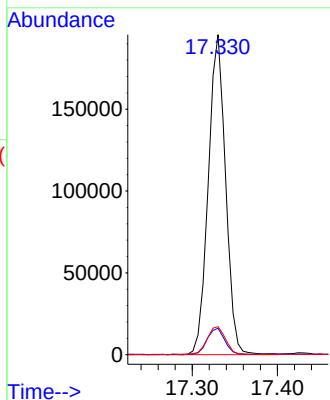
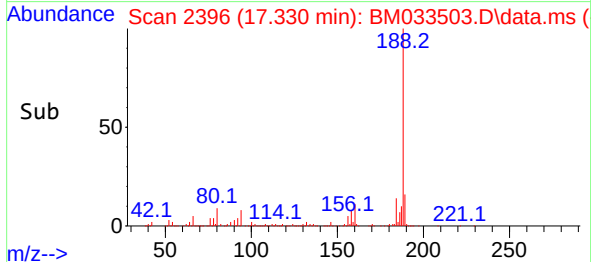
Instrument :  
BNA\_M  
ClientSampleId :  
MS-1



Tgt Ion:188 Resp: 276129  
Ion Ratio Lower Upper  
188 100  
94 8.3 7.5 11.3  
80 8.8 8.9 13.3

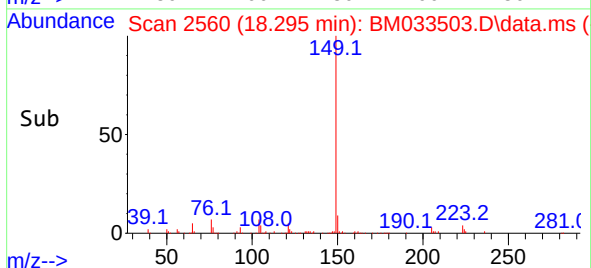
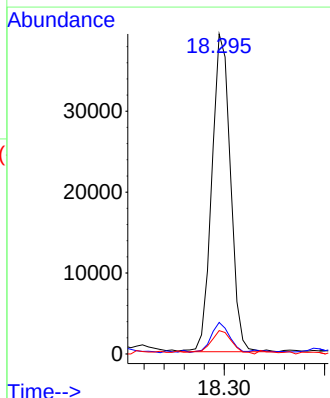
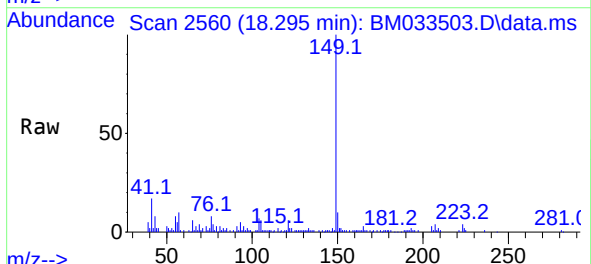
Manual Integrations  
APPROVED

Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021

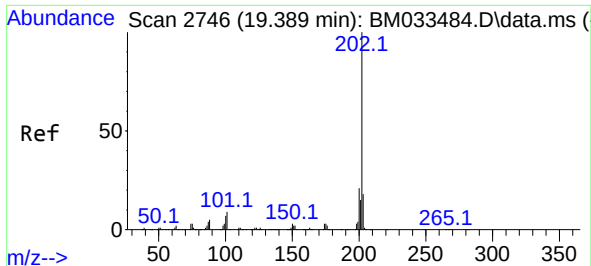


#74  
Di-n-butylphthalate  
Concen: 2.747 ng  
RT: 18.295 min Scan# 2560  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

Tgt Ion:149 Resp: 50664  
Ion Ratio Lower Upper  
149 100  
150 9.8 7.3 10.9  
104 7.3 4.6 6.8

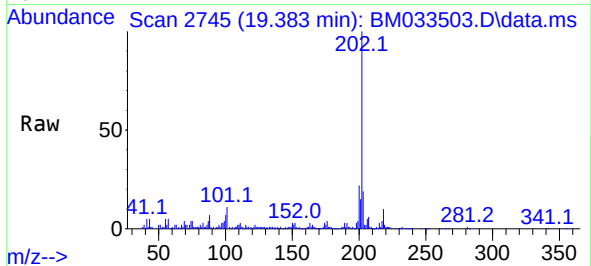






#75  
Fluoranthene  
Concen: 7.720 ng  
RT: 19.383 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

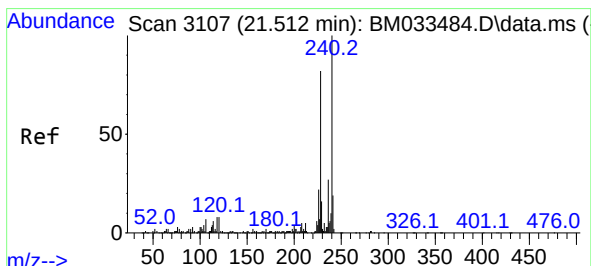
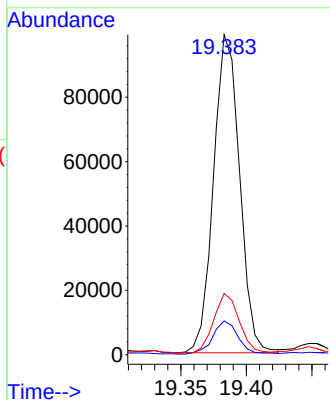
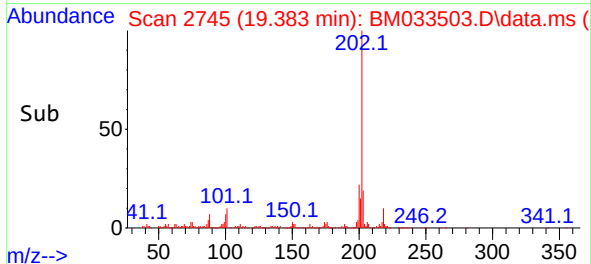
Instrument :  
BNA\_M  
ClientSampleId :  
MS-1



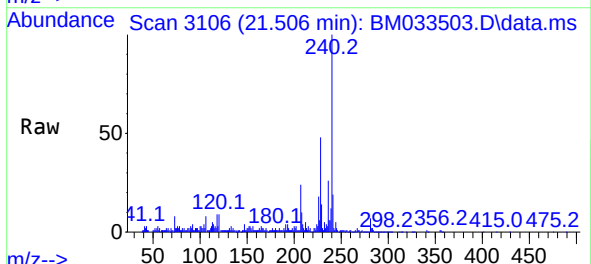
Tgt Ion:202 Resp: 13647  
Ion Ratio Lower Upper  
202 100  
101 10.5 0.0 30.8  
203 19.2 0.0 37.2

Manual Integrations  
APPROVED

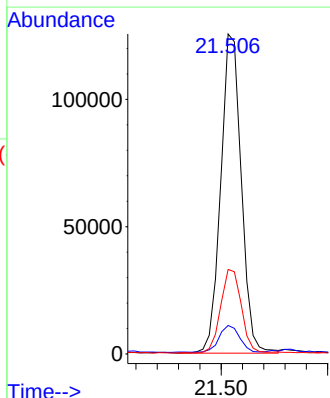
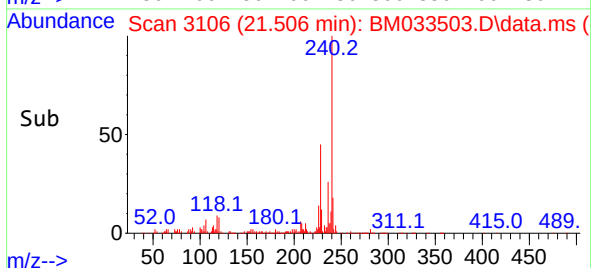
Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021

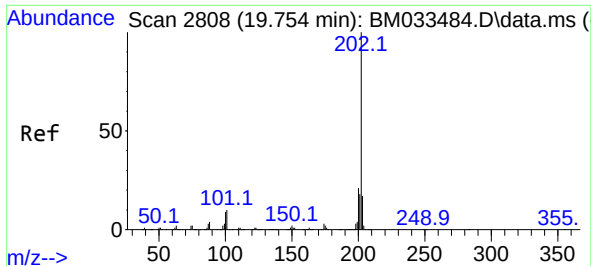


#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.506 min Scan# 3106  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09



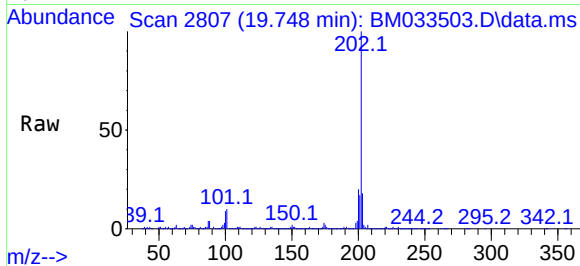
Tgt Ion:240 Resp: 167844  
Ion Ratio Lower Upper  
240 100  
120 8.9 7.8 11.6  
236 26.4 20.3 30.5





#78  
Pyrene  
Concen: 34.826 ng  
RT: 19.748 min Scan# 2807  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

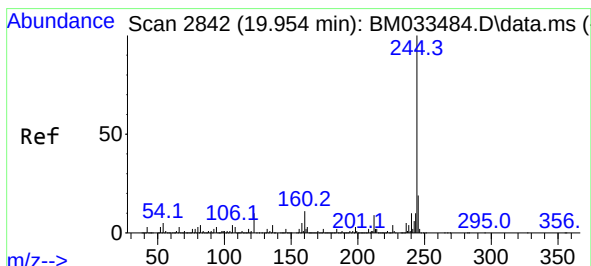
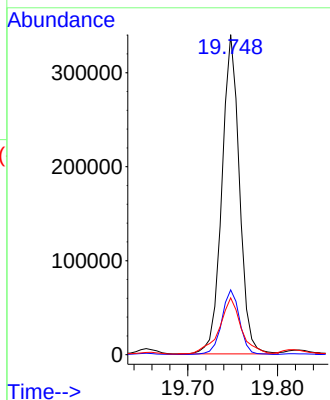
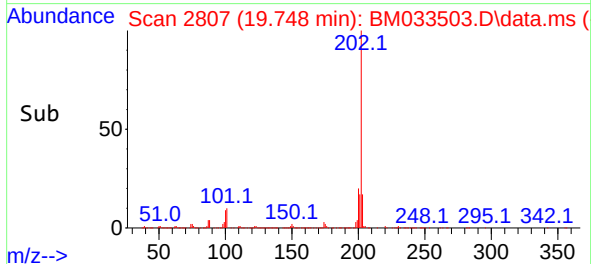
Instrument :  
BNA\_M  
ClientSampleId :  
MS-1



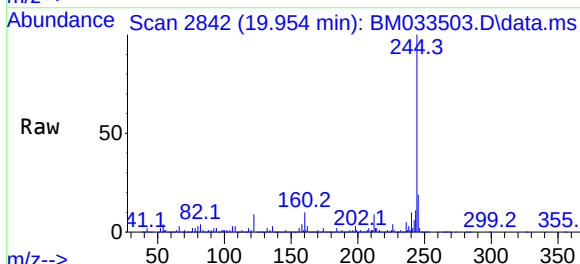
Tgt Ion:202 Resp: 461207  
Ion Ratio Lower Upper  
202 100  
200 20.2 16.4 24.6  
203 17.7 13.5 20.3

Manual Integrations  
APPROVED

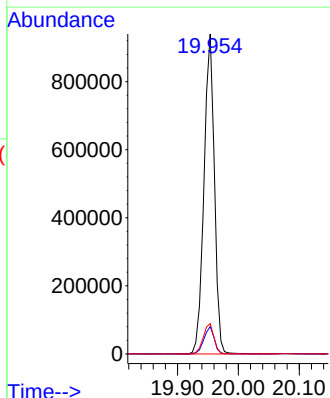
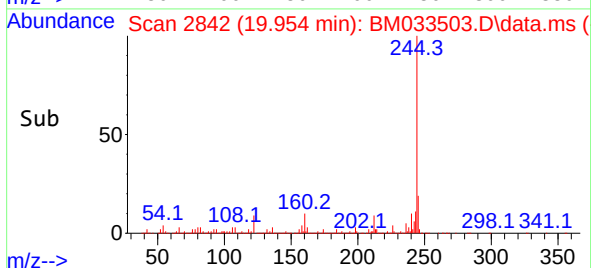
Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021

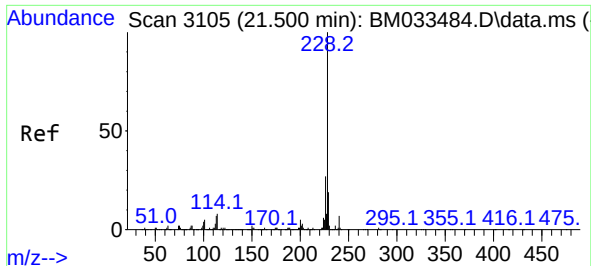


#79  
Terphenyl-d14  
Concen: 104.868 ng  
RT: 19.954 min Scan# 2842  
Delta R.T. -0.000 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09



Tgt Ion:244 Resp: 1118027  
Ion Ratio Lower Upper  
244 100  
212 8.6 5.9 8.9  
122 9.5 8.4 12.6





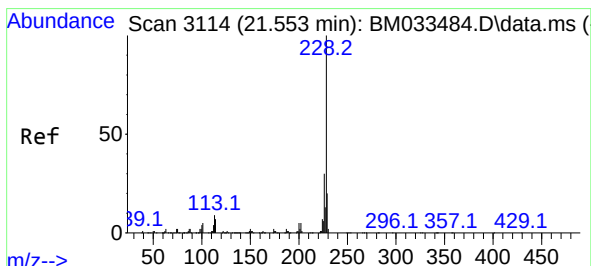
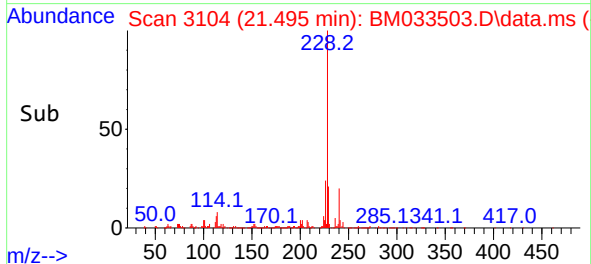
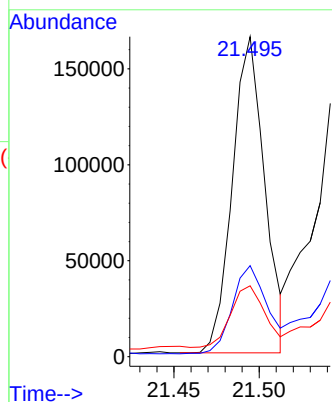
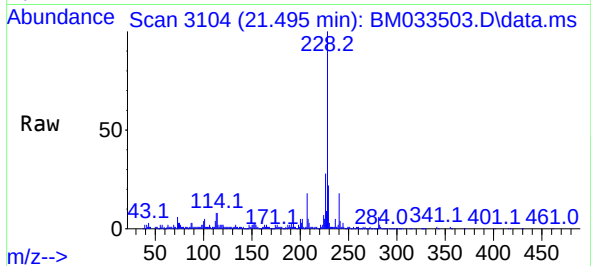
#81  
Benzo(a)anthracene  
Concen: 19.367 ng  
RT: 21.495 min Scan# 3104  
Delta R.T. -0.005 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

Instrument :  
BNA\_M  
ClientSampleId :  
MS-1

Tgt Ion:228 Resp: 21787  
Ion Ratio Lower Upper  
228 100  
226 28.5 21.0 31.6  
229 22.2 15.5 23.3

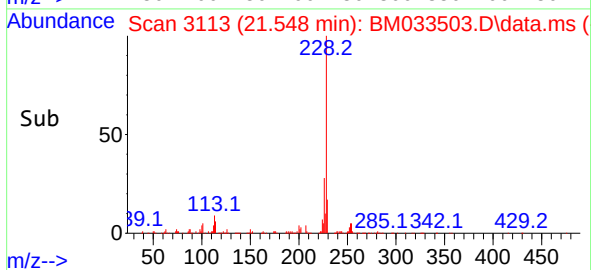
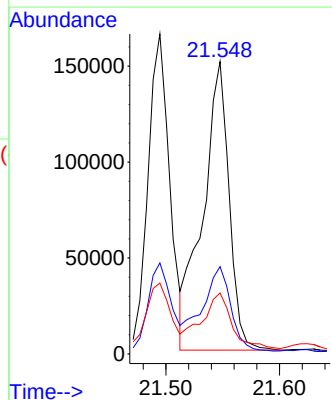
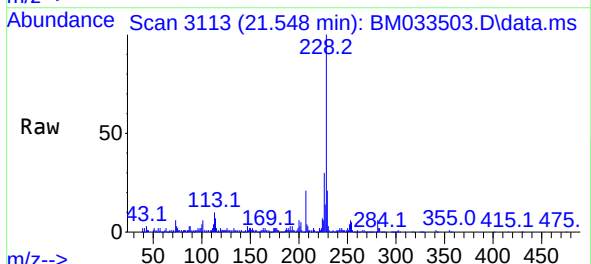
Manual Integrations  
APPROVED

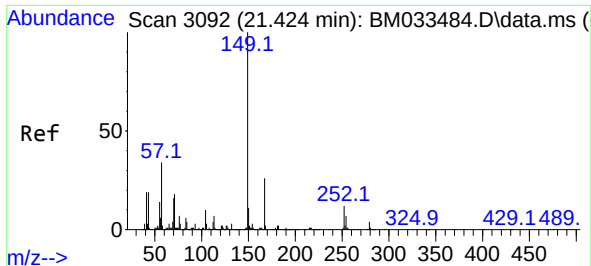
Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021



#83  
Chrysene  
Concen: 22.309 ng  
RT: 21.548 min Scan# 3113  
Delta R.T. -0.005 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

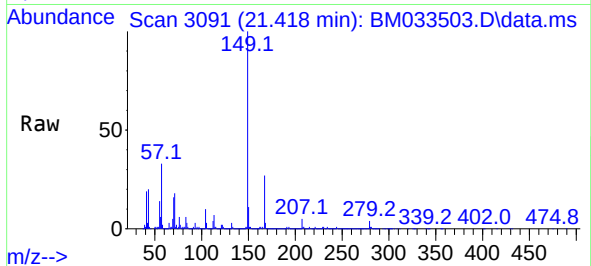
Tgt Ion:228 Resp: 241638  
Ion Ratio Lower Upper  
228 100  
226 29.9 23.8 35.8  
229 20.8 15.8 23.8





#84  
Bis(2-ethylhexyl)phthalate  
Concen: 72.306 ng  
RT: 21.418 min Scan# 3092  
Delta R.T. -0.006 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

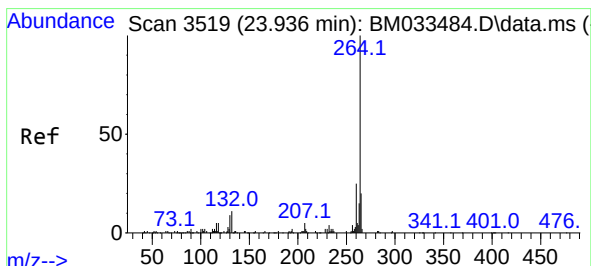
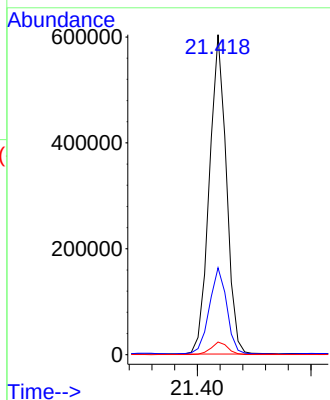
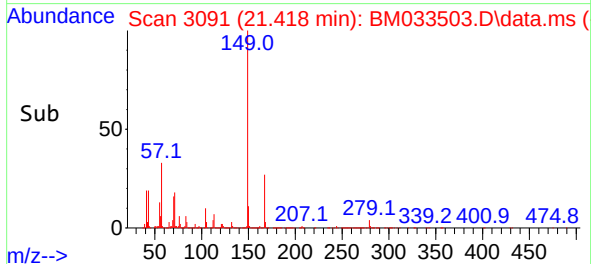
Instrument :  
BNA\_M  
ClientSampleId :  
MS-1



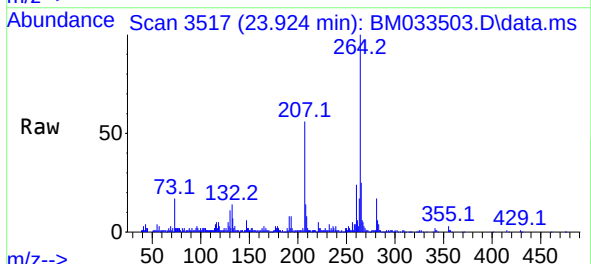
Tgt Ion:149 Resp: 628120  
Ion Ratio Lower Upper  
149 100  
167 27.2 21.4 32.0  
279 4.0 3.0 4.6

Manual Integrations  
APPROVED

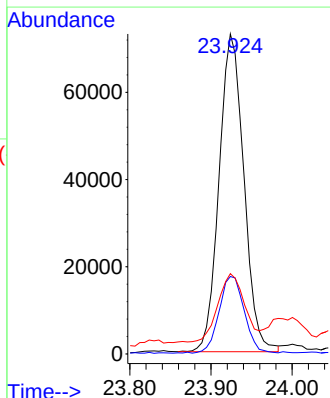
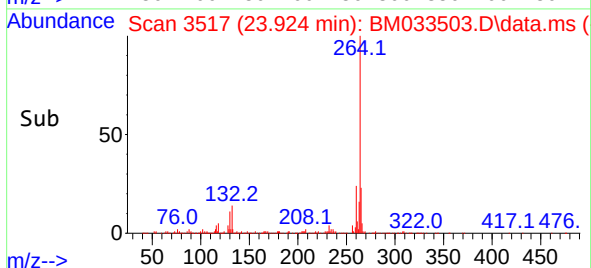
Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021

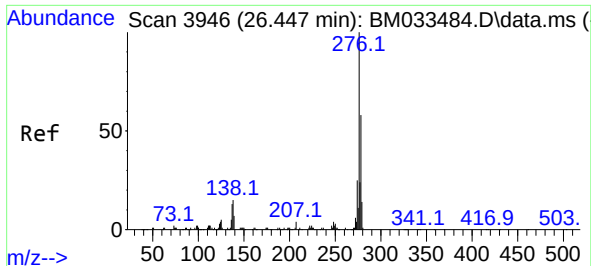


#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 23.924 min Scan# 3517  
Delta R.T. -0.012 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09



Tgt Ion:264 Resp: 154826  
Ion Ratio Lower Upper  
264 100  
260 24.2 17.7 26.5  
265 25.1 17.7 26.5





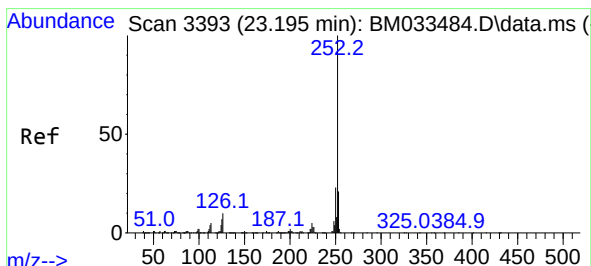
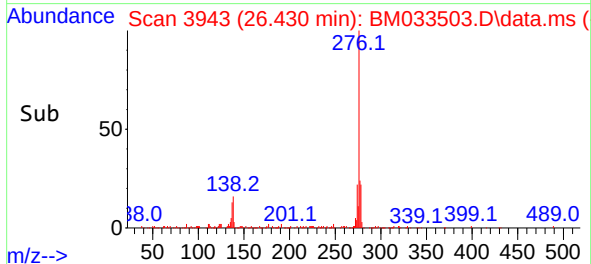
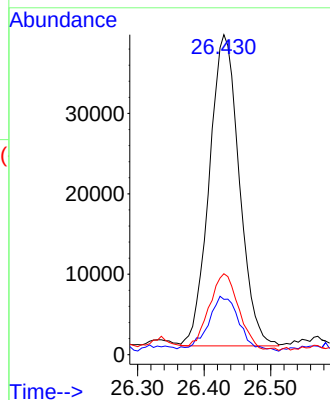
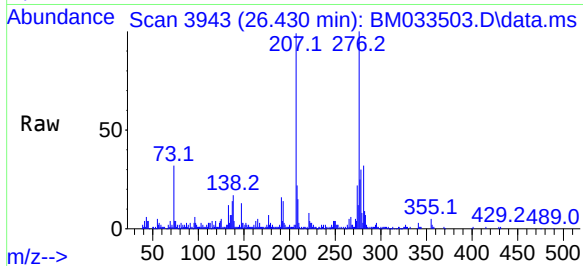
#87  
Indeno(1,2,3-cd)pyrene  
Concen: 16.959 ng m  
RT: 26.430 min Scan# 3943  
Delta R.T. -0.017 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

Instrument :  
BNA\_M  
ClientSampleId :  
MS-1

Tgt Ion:276 Resp: 12105  
Ion Ratio Lower Upper  
276 100  
138 1.1 18.7 28.1  
277 1.1 20.2 30.4

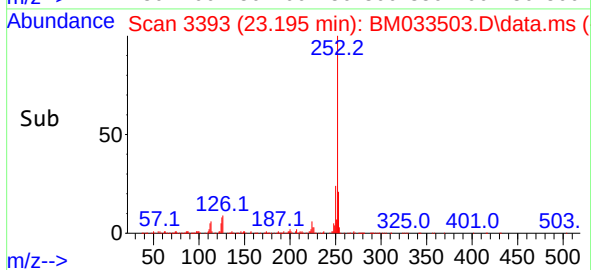
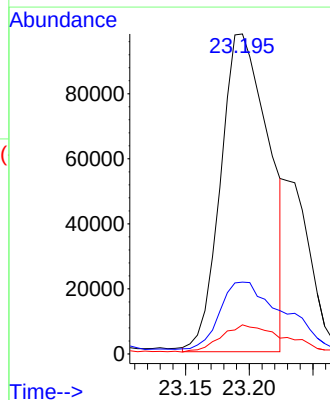
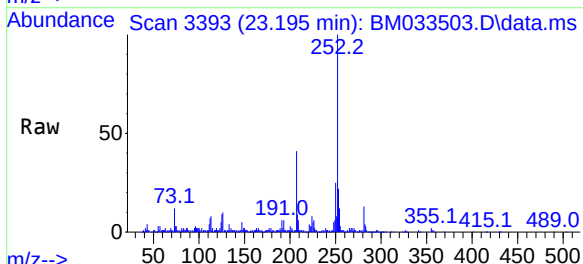
Manual Integrations  
APPROVED

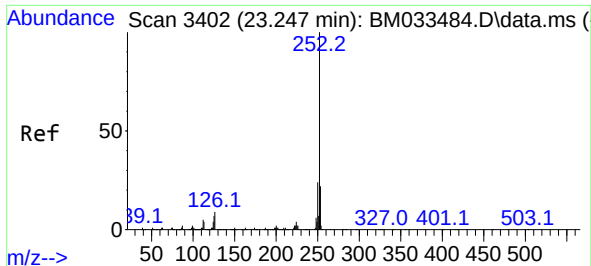
Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021



#88  
Benzo(b)fluoranthene  
Concen: 25.875 ng m  
RT: 23.195 min Scan# 3393  
Delta R.T. -0.000 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

Tgt Ion:252 Resp: 256891  
Ion Ratio Lower Upper  
252 100  
253 22.5 17.1 25.7  
125 9.1 7.4 11.2





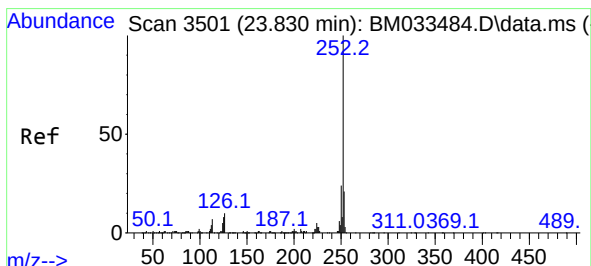
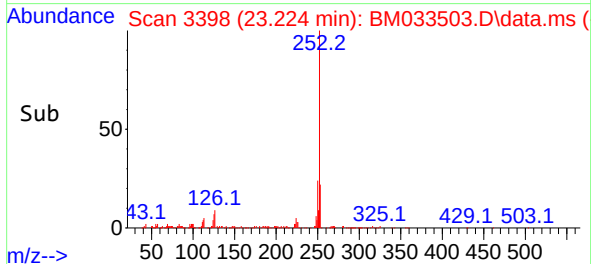
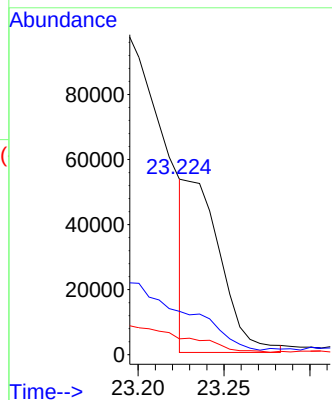
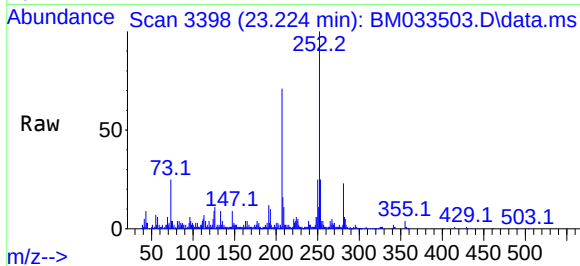
#89  
Benzo(k)fluoranthene  
Concen: 7.590 ng m  
RT: 23.224 min Scan# 31  
Delta R.T. -0.023 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

Instrument :  
BNA\_M  
ClientSampleId :  
MS-1

Tgt Ion:252 Resp: 76210  
Ion Ratio Lower Upper  
252 100  
253 24.7 17.8 26.8  
125 9.1 8.1 12.1

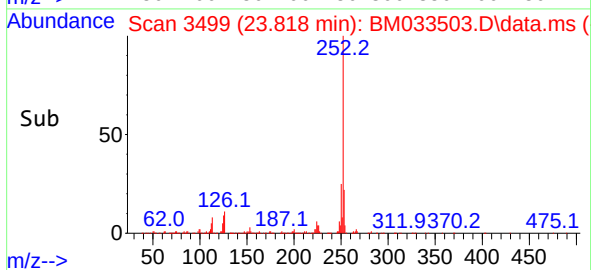
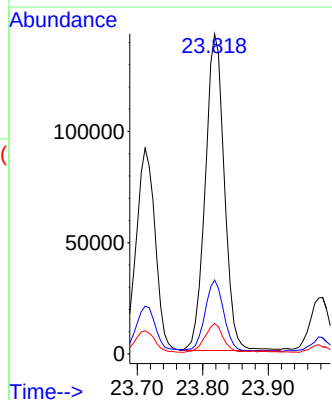
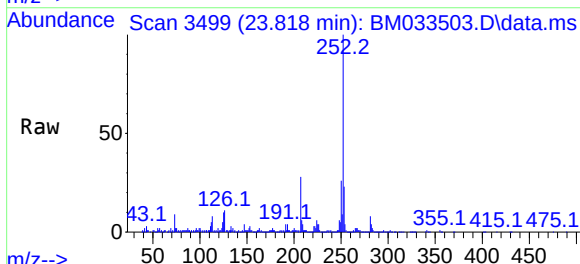
Manual Integrations  
APPROVED

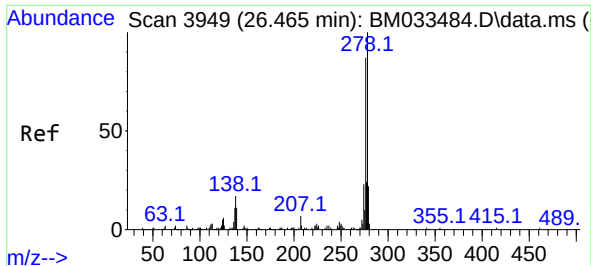
Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021



#90  
Benzo(a)pyrene  
Concen: 38.630 ng  
RT: 23.818 min Scan# 3499  
Delta R.T. -0.012 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

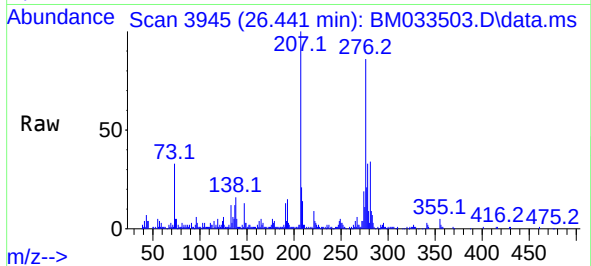
Tgt Ion:252 Resp: 287005  
Ion Ratio Lower Upper  
252 100  
253 23.1 17.5 26.3  
125 9.5 7.8 11.8





#91  
Dibenzo(a,h)anthracene  
Concen: 8.101 ng  
RT: 26.441 min Scan# 3945  
Delta R.T. -0.024 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09

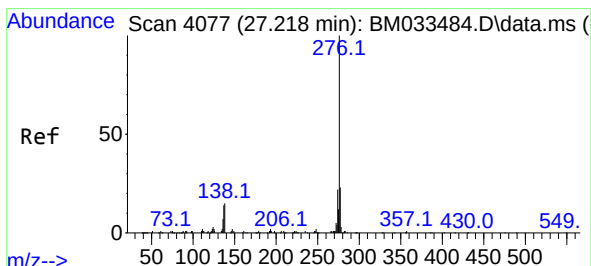
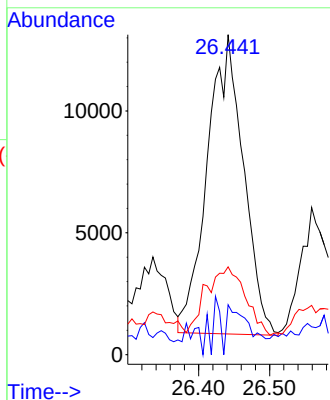
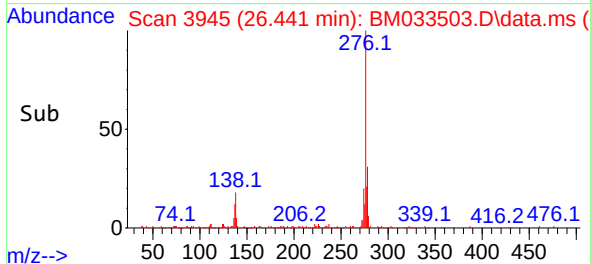
Instrument :  
BNA\_M  
ClientSampleId :  
MS-1



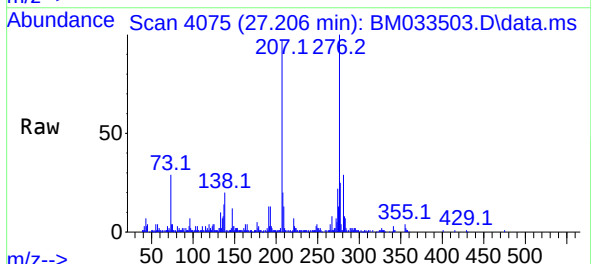
Tgt Ion:278 Resp: 4337  
Ion Ratio Lower Upper  
278 100  
139 15.6 10.9 16.3  
279 27.5 17.7 26.5

Manual Integrations  
APPROVED

Reviewed By :Christian Giraldo 12/18/2021  
Supervised By :Jagrut Upadhyay 12/20/2021



#92  
Benzo(g,h,i)perylene  
Concen: 21.528 ng  
RT: 27.206 min Scan# 4075  
Delta R.T. -0.012 min  
Lab File: BM033503.D  
Acq: 17 Dec 2021 13:09



Tgt Ion:276 Resp: 148224  
Ion Ratio Lower Upper  
276 100  
277 25.0 19.1 28.7  
138 19.8 14.8 22.2

