

Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP121823\  
 Data File : BP018915.D  
 Acq On : 18 Dec 2023 19:51  
 Operator : MA/JU  
 Sample : 05818-02  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 BGRG7

Quant Time: Dec 18 23:38:34 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_P\Methods\SFAM-EPA-BP120123.MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Dec 13 23:34:47 2023  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/19/2023  
 Supervised By :mohammad ahmed 12/20/2023

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 ahmed

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| Internal Standards            |        |      |          |        |        |          |
| 1) 1,4-Dichlorobenzene-d4     | 7.834  | 152  | 207109   | 20.000 | ng/u1  | 0.00     |
| 20) Naphthalene-d8            | 10.628 | 136  | 763494   | 20.000 | ng/u1  | 0.00     |
| 38) Acenaphthene-d10          | 14.463 | 164  | 485620   | 20.000 | ng/u1  | 0.00     |
| 64) Phenanthrene-d10          | 17.216 | 188  | 1128822  | 20.000 | ng/u1  | 0.00     |
| 79) Chrysene-d12              | 21.316 | 240  | 1024157  | 20.000 | ng/u1  | # 0.01   |
| 88) Perylene-d12              | 23.686 | 264  | 1335639  | 20.000 | ng/u1  | 0.02     |
| System Monitoring Compounds   |        |      |          |        |        |          |
| 3) 1,4-Dioxane-d8             | 3.258  | 96   | 18249    | 3.003  | ng/uL  | 0.00     |
| 4) Pyridine-d5                | 0.000  | 84   | 0d       | 0.000  | ng/u1  |          |
| 7) Phenol-d5                  | 7.005  | 99   | 301698   | 14.516 | ng/u1  | 0.00     |
| 9) Bis-(2-Chloroethyl)eth...  | 7.169  | 67   | 171742   | 13.942 | ng/u1  | 0.00     |
| 11) 2-Chlorophenol-d4         | 7.363  | 132  | 245600   | 15.144 | ng/u1  | 0.00     |
| 15) 4-Methylphenol-d8         | 8.546  | 113  | 226581   | 13.471 | ng/u1  | 0.00     |
| 21) Nitrobenzene-d5           | 8.993  | 128  | 114571   | 16.860 | ng/u1  | 0.00     |
| 24) 2-Nitrophenol-d4          | 9.710  | 143  | 122266   | 17.355 | ng/u1  | 0.00     |
| 28) 2,4-Dichlorophenol-d3     | 10.251 | 165  | 245308   | 17.028 | ng/u1  | 0.00     |
| 31) 4-Chloroaniline-d4        | 10.769 | 131  | 193688   | 10.288 | ng/u1  | 0.00     |
| 46) Dimethylphthalate-d6      | 13.881 | 166  | 714047   | 16.475 | ng/u1  | 0.00     |
| 49) Acenaphthylene-d8         | 14.157 | 160  | 858105   | 17.980 | ng/u1  | 0.00     |
| 54) 4-Nitrophenol-d4          | 14.681 | 143  | 58744    | 8.257  | ng/u1  | 0.01     |
| 60) Fluorene-d10              | 15.457 | 176  | 673312   | 18.507 | ng/u1  | 0.00     |
| 65) 4,6-Dinitro-2-methylph... | 15.586 | 200  | 17675    | 2.611  | ng/u1  | 0.00     |
| 73) Anthracene-d10            | 17.316 | 188  | 1106528  | 18.646 | ng/u1  | 0.00     |
| 81) Pyrene-d10                | 19.557 | 212  | 1276580  | 16.013 | ng/u1  | 0.00     |
| 92) Benzo(a)pyrene-d12        | 23.539 | 264  | 1347352  | 17.301 | ng/u1  | 0.02     |
| Target Compounds              |        |      |          |        |        |          |
|                               |        |      |          |        | Qvalue |          |
| 6) Benzaldehyde               | 6.975  | 77   | 11764    | 1.096  | ng/u1  | 93       |
| 8) Phenol                     | 7.034  | 94   | 38575    | 1.893  | ng/u1  | 95       |
| 16) Acetophenone              | 8.657  | 105  | 210773   | 8.408  | ng/u1  | 98       |
| 30) Naphthalene               | 10.675 | 128  | 60386    | 1.304  | ng/u1  | 98       |
| 50) Acenaphthylene            | 14.187 | 152  | 345110   | 6.432  | ng/u1  | 99       |
| 52) Acenaphthene              | 14.528 | 153  | 66546    | 1.876  | ng/u1  | 99       |
| 56) Dibenzofuran              | 14.863 | 168  | 85006    | 1.724  | ng/u1  | 99       |
| 61) Fluorene                  | 15.510 | 166  | 88825    | 2.277  | ng/u1  | 95       |
| 72) Phenanthrene              | 17.257 | 178  | 3049866  | 44.735 | ng/u1  | 100      |
| 74) Anthracene                | 17.351 | 178  | 947752   | 13.869 | ng/u1  | 99       |
| 77) Carbazole                 | 17.622 | 167  | 281661   | 5.171  | ng/u1  | 98       |
| 80) Fluoranthene              | 19.233 | 202  | 8452412m | 89.695 | ng/u1  |          |
| 82) Pyrene                    | 19.592 | 202  | 9492142  | 99.848 | ng/u1# | 90       |
| 85) Benzo(a)anthracene        | 21.298 | 228  | 6882472  | 82.792 | ng/u1  | 96       |
| 87) Chrysene                  | 21.351 | 228  | 6895626  | 90.077 | ng/u1  | 96       |
| 90) Benzo(b)fluoranthene      | 22.974 | 252  | 9742532  | 98.931 | ng/u1  | 97       |
| 91) Benzo(k)fluoranthene      | 23.015 | 252  | 3271869m | 34.338 | ng/u1  |          |
| 93) Benzo(a)pyrene            | 23.592 | 252  | 7638837m | 84.893 | ng/u1  |          |
| 94) Indeno(1,2,3-cd)pyrene    | 26.174 | 276  | 5708533  | 53.098 | ng/u1# | 92       |
| 95) Dibenzo(a,h)anthracene    | 26.180 | 278  | 1687906  | 18.873 | ng/u1# | 80       |
| 96) Benzo(g,h,i)perylene      | 26.927 | 276  | 2035484  | 23.526 | ng/u1# | 94       |

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

**Instrument :**

BNA\_P

**ClientSampleId :**

BGRG7

**Manual Integrations**

**APPROVED**

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ahmed

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Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP121823\  
 Data File : BP018915.D  
 Acq On : 18 Dec 2023 19:51  
 Operator : MA/JU  
 Sample : 05818-02  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_P  
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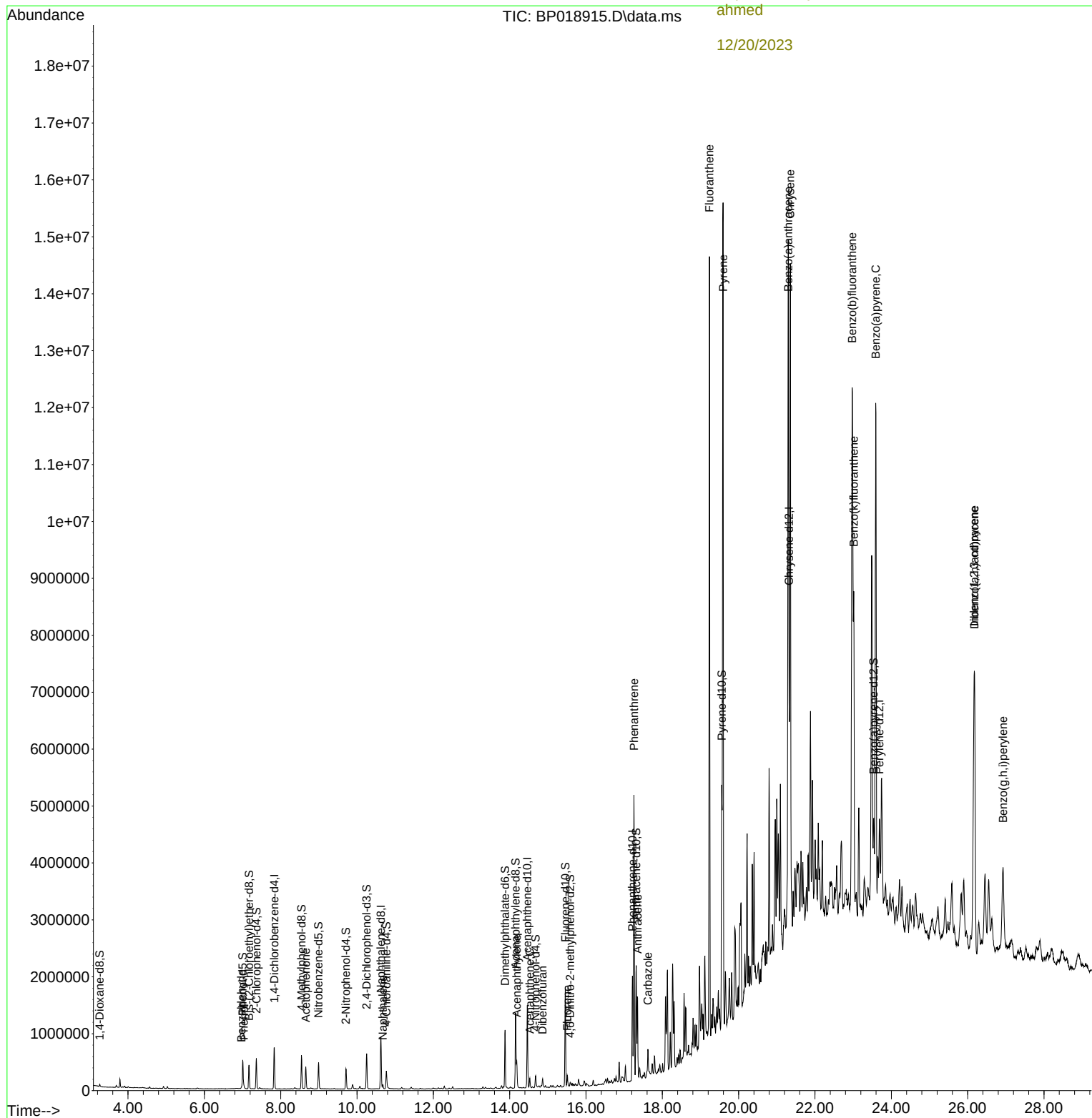
Quant Time: Dec 18 23:38:34 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_P\Methods\SFAM-EPA-BP120123.MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Dec 13 23:34:47 2023  
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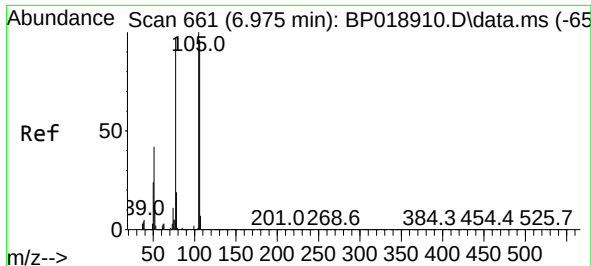
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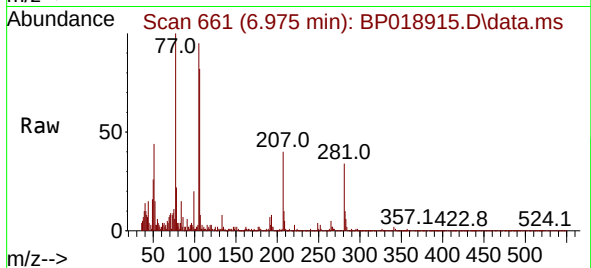
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#6  
Benzaldehyde  
Concen: 1.096 ng/ul  
RT: 6.975 min Scan# 661  
Delta R.T. -0.000 min  
Lab File: BP018915.D  
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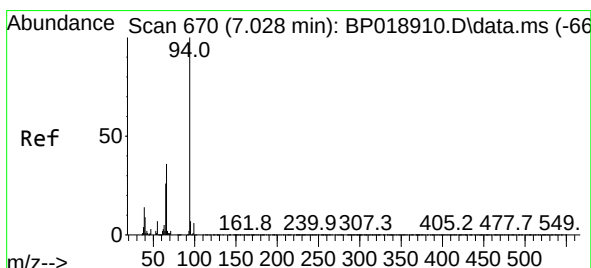
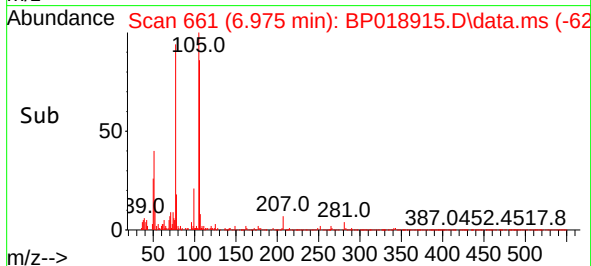
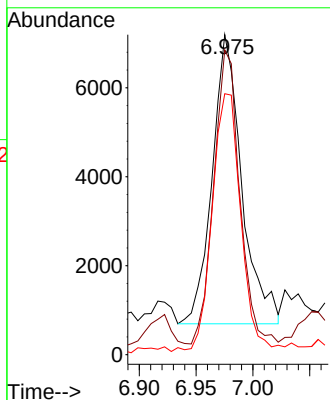
Tgt Ion: 77 Resp: 11764  
Ion Ratio Lower Upper  
77 100  
105 95.3 77.9 116.9  
106 81.5 74.6 111.8

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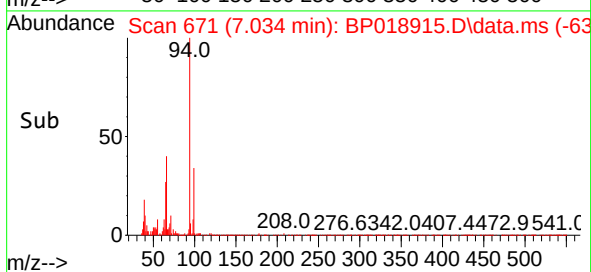
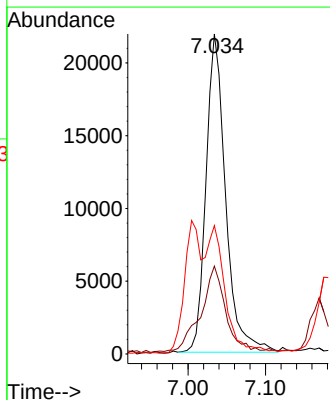
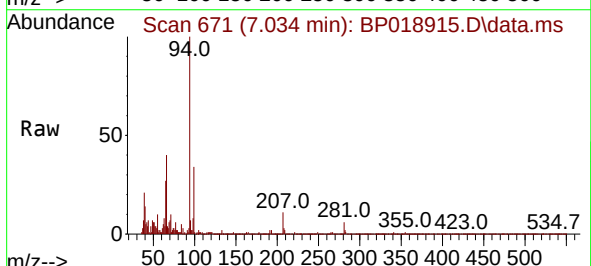
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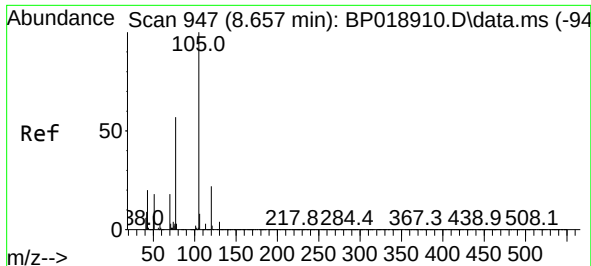
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#8  
Phenol  
Concen: 1.893 ng/ul  
RT: 7.034 min Scan# 671  
Delta R.T. 0.006 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

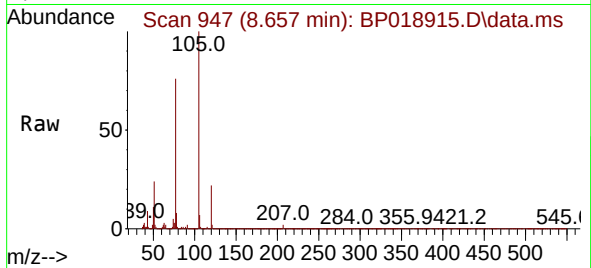
Tgt Ion: 94 Resp: 38575  
Ion Ratio Lower Upper  
94 100  
65 27.4 21.0 31.6  
66 40.1 28.6 43.0





#16  
Acetophenone  
Concen: 8.408 ng/ul  
RT: 8.657 min Scan# 947  
Delta R.T. -0.000 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

Instrument :  
BNA\_P  
ClientSampleId :  
BGRG7



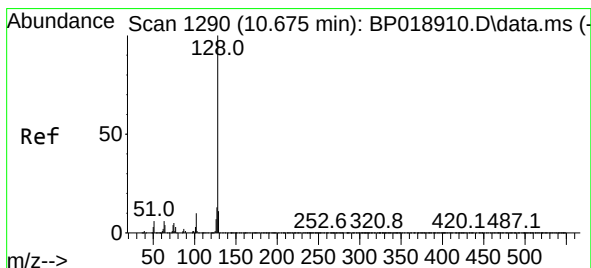
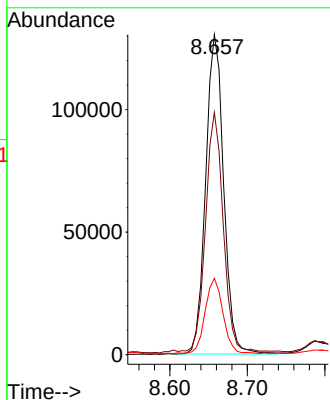
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Ion Ratio Lower Upper  
105 100  
77 75.7 59.4 89.0  
51 23.9 19.4 29.0

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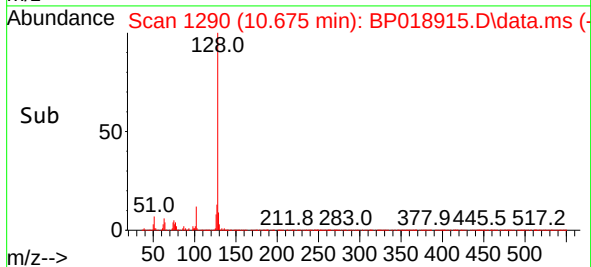
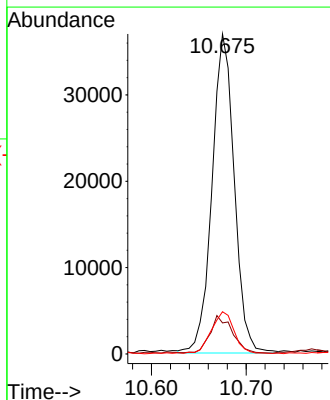
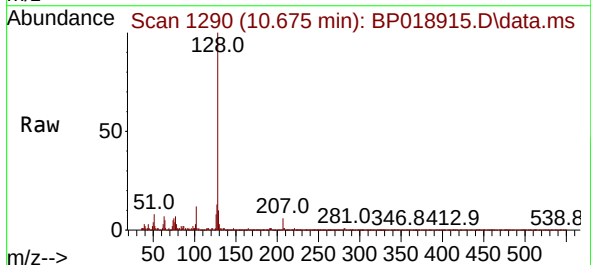
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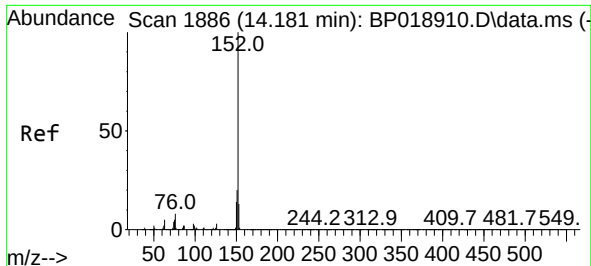
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#30  
Naphthalene  
Concen: 1.304 ng/ul  
RT: 10.675 min Scan# 1290  
Delta R.T. -0.000 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

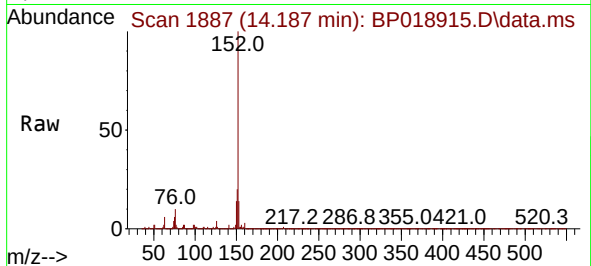
Tgt Ion:128 Resp: 60386  
Ion Ratio Lower Upper  
128 100  
129 9.7 8.9 13.3  
127 13.2 10.5 15.7





#50  
Acenaphthylene  
Concen: 6.432 ng/ul  
RT: 14.187 min Scan# 1886  
Delta R.T. -0.000 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

Instrument :  
BNA\_P  
ClientSampleId :  
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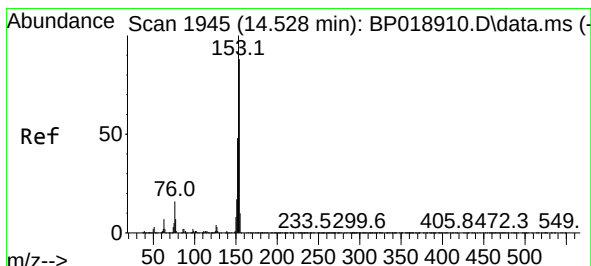
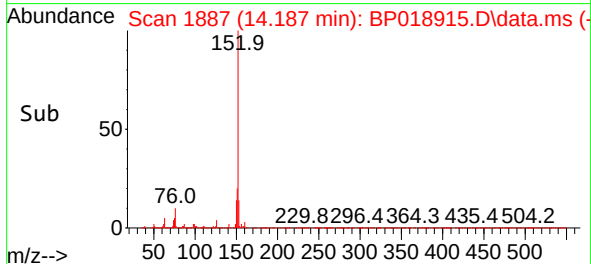
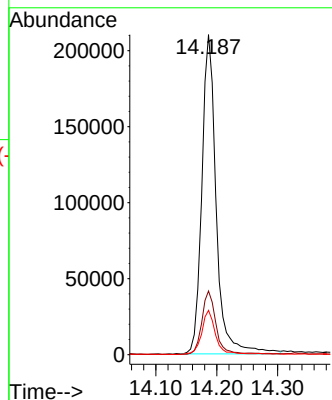
Tgt Ion:152 Resp: 345110  
Ion Ratio Lower Upper  
152 100  
151 19.9 15.9 23.9  
153 13.8 10.6 16.0

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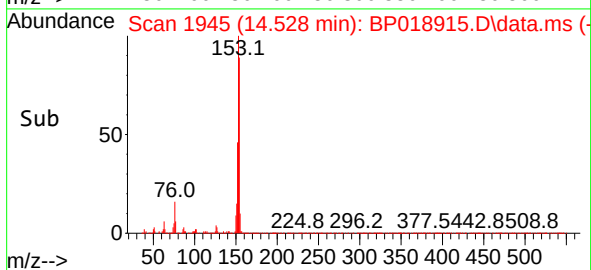
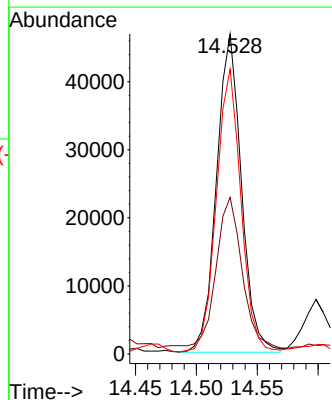
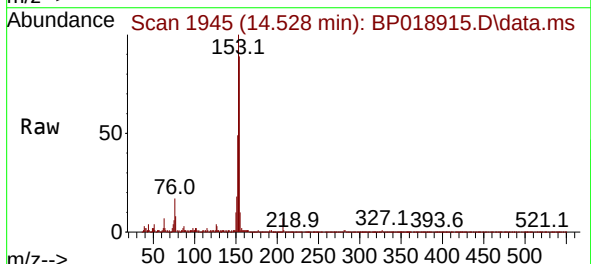
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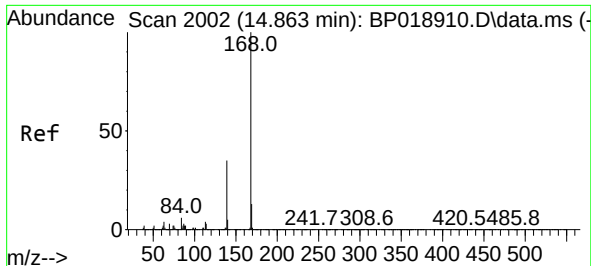
12/20/2023



#52  
Acenaphthene  
Concen: 1.876 ng/ul  
RT: 14.528 min Scan# 1945  
Delta R.T. -0.000 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

Tgt Ion:153 Resp: 66546  
Ion Ratio Lower Upper  
153 100  
152 48.9 38.1 57.1  
154 89.0 71.7 107.5





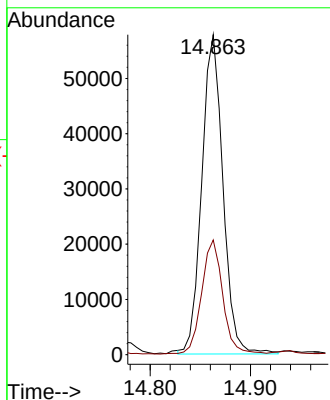
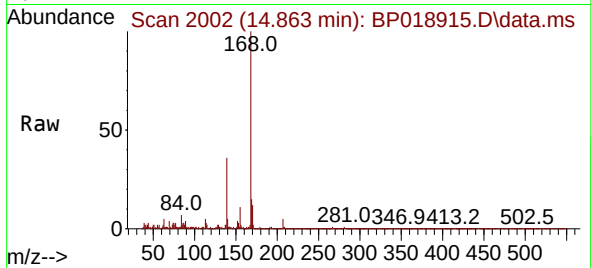
#56  
Dibenzenofuran  
Concen: 1.724 ng/ul  
RT: 14.863 min Scan# 2002  
Delta R.T. -0.000 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

Instrument :  
BNA\_P  
ClientSampleId :  
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Tgt Ion:168 Resp: 85000  
Ion Ratio Lower Upper  
168 100  
139 35.9 29.1 43.7

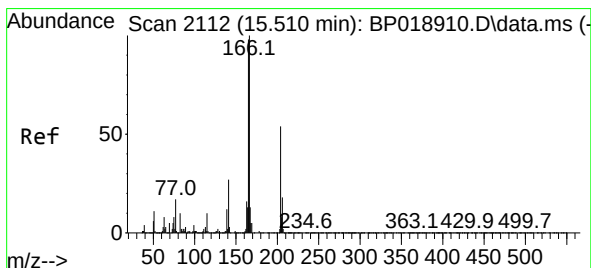
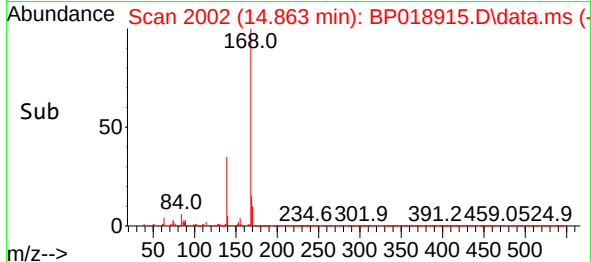
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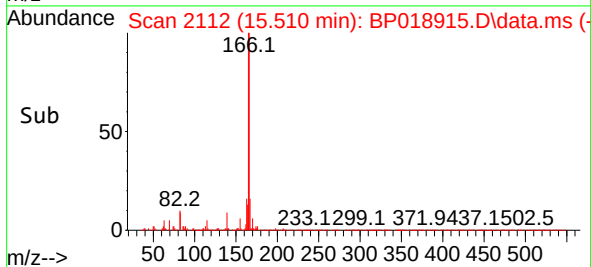
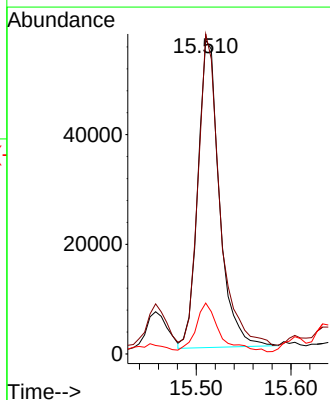
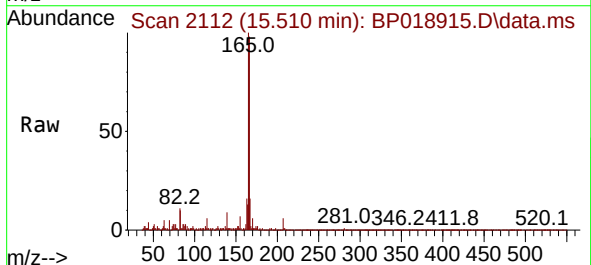
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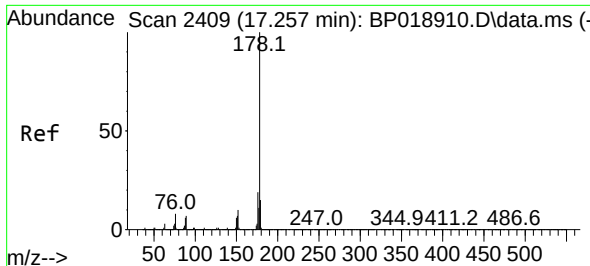
12/20/2023



#61  
Fluorene  
Concen: 2.277 ng/ul  
RT: 15.510 min Scan# 2112  
Delta R.T. -0.006 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

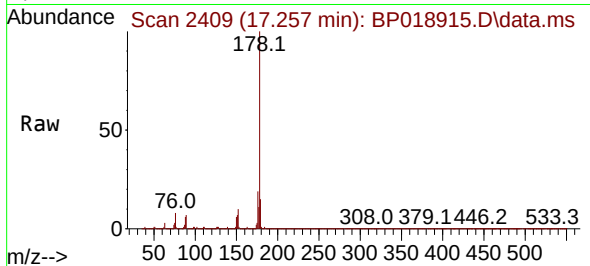
Tgt Ion:166 Resp: 88825  
Ion Ratio Lower Upper  
166 100  
165 102.0 78.0 117.0  
167 16.2 10.8 16.2





#72  
Phenanthrene  
Concen: 44.735 ng/u1  
RT: 17.257 min Scan# 2409  
Delta R.T. -0.000 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

Instrument :  
BNA\_P  
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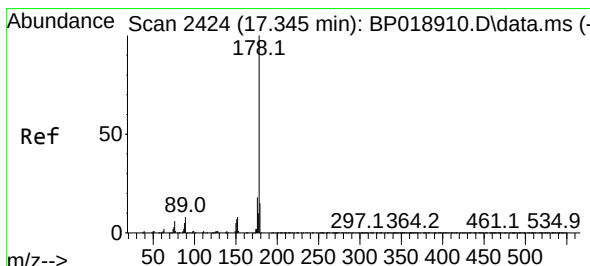
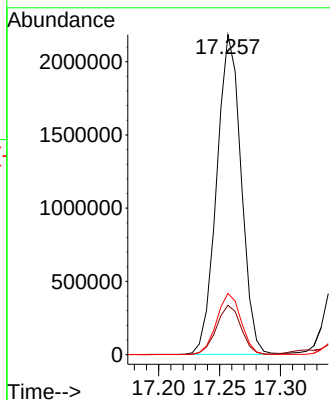
Tgt Ion:178 Resp: 3049860  
Ion Ratio Lower Upper  
178 100  
179 15.5 12.3 18.5  
176 19.1 15.4 23.2

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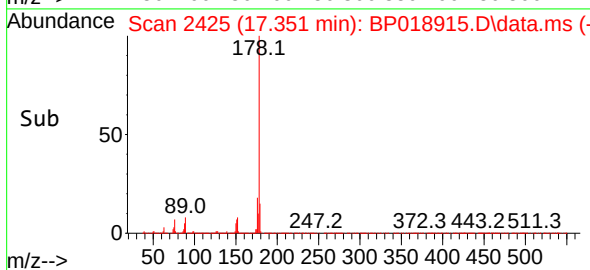
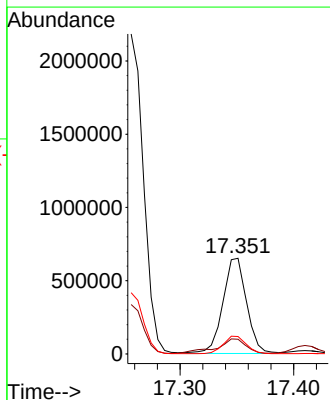
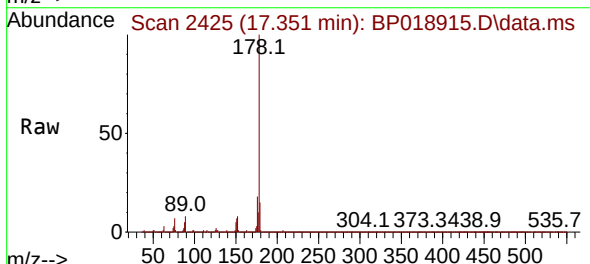
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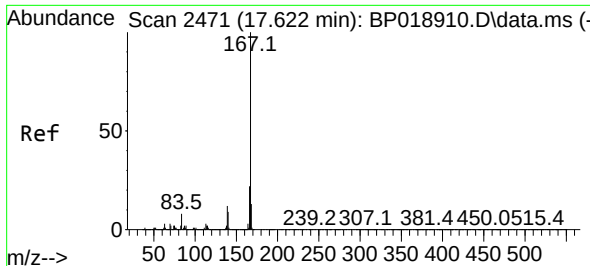


#74  
Anthracene  
Concen: 13.869 ng/u1  
RT: 17.351 min Scan# 2425  
Delta R.T. 0.006 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

Tgt Ion:178 Resp: 947752  
Ion Ratio Lower Upper  
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179 15.3 12.5 18.7  
176 18.2 15.0 22.6

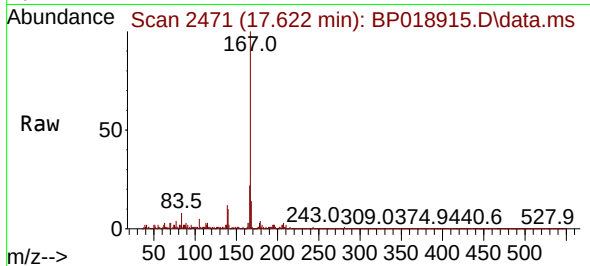






#77  
 Carbazole  
 Concen: 5.171 ng/ul  
 RT: 17.622 min Scan# 2471  
 Delta R.T. -0.000 min  
 Lab File: BP018915.D  
 Acq: 18 Dec 2023 19:51

Instrument :  
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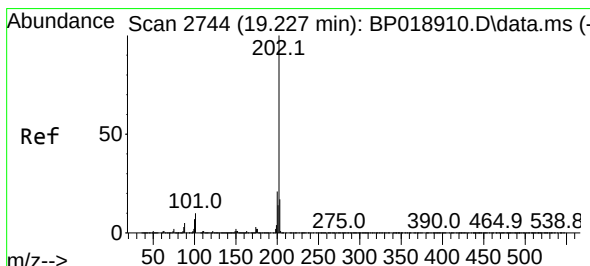
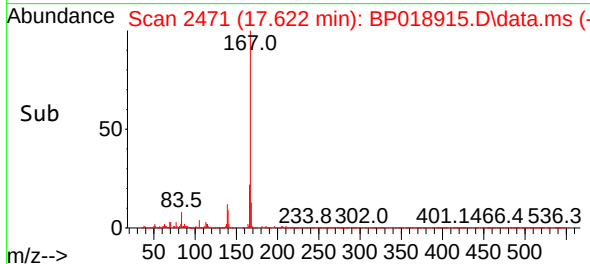
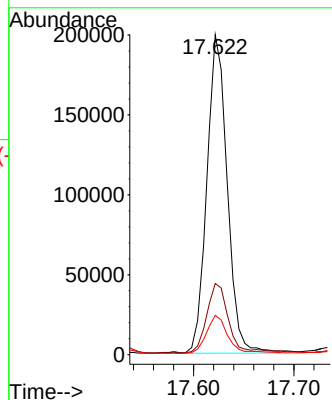
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 167 100  
 166 22.3 17.1 25.7  
 139 12.3 10.2 15.4

Manual Integrations  
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Reviewed By :Yogesh Patel 12/19/2023  
 Supervised By :mohammad ahmed 12/20/2023

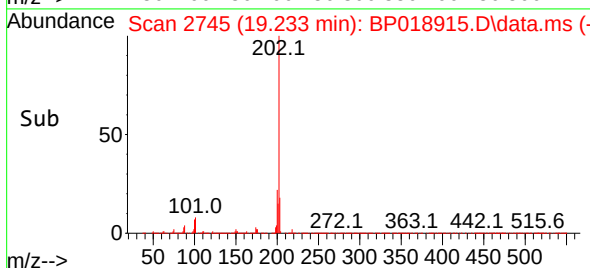
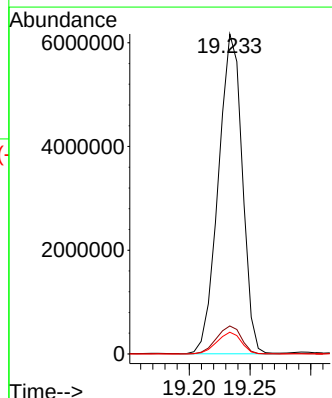
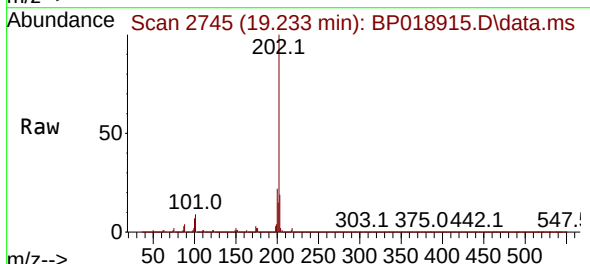
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 ahmed

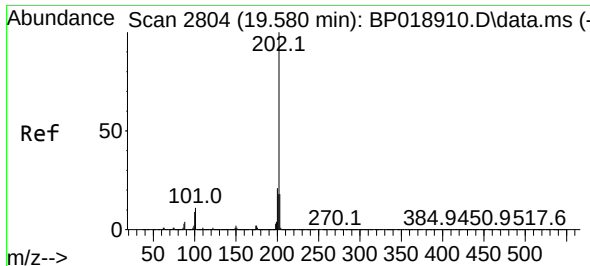
12/20/2023



#80  
 Fluoranthene  
 Concen: 89.695 ng/ul m  
 RT: 19.233 min Scan# 2745  
 Delta R.T. 0.006 min  
 Lab File: BP018915.D  
 Acq: 18 Dec 2023 19:51

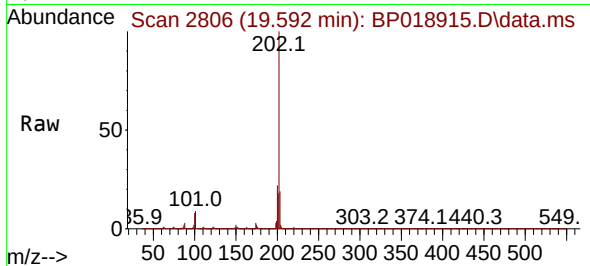
Tgt Ion:202 Resp: 8452412  
 Ion Ratio Lower Upper  
 202 100  
 101 8.8 9.1 13.7#  
 100 6.8 7.1 10.7#





#82  
 Pyrene  
 Concen: 99.848 ng/ul  
 RT: 19.592 min Scan# 2806  
 Delta R.T. 0.012 min  
 Lab File: BP018915.D  
 Acq: 18 Dec 2023 19:51

Instrument :  
 BNA\_P  
 ClientSampleId :  
 BGRG7



Tgt Ion:202 Resp: 949214

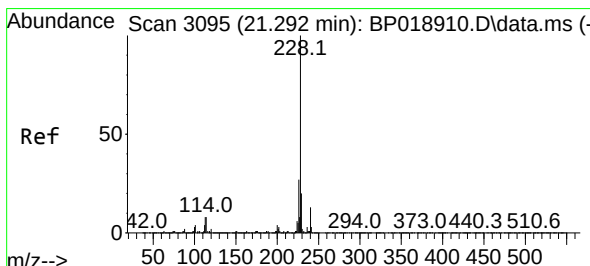
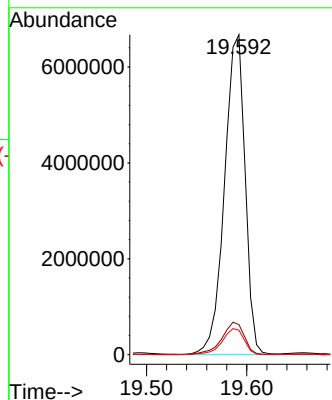
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 202 | 100   |       |       |
| 101 | 9.4   | 11.0  | 16.4  |
| 100 | 7.7   | 9.1   | 13.7  |

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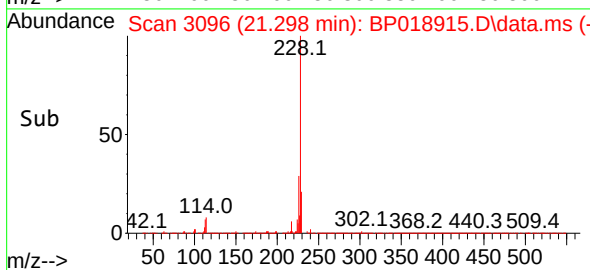
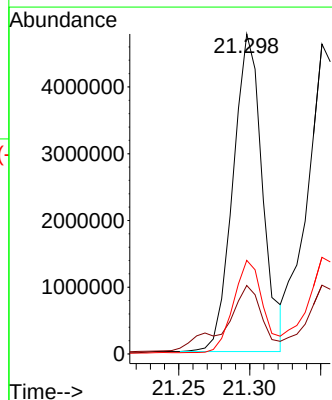
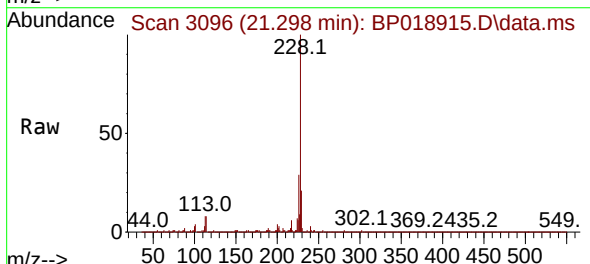
12/20/2023

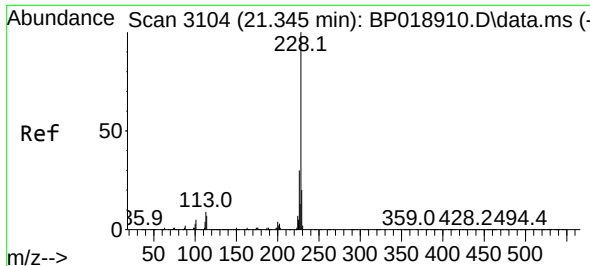


#85  
 Benzo(a)anthracene  
 Concen: 82.792 ng/ul  
 RT: 21.298 min Scan# 3096  
 Delta R.T. 0.012 min  
 Lab File: BP018915.D  
 Acq: 18 Dec 2023 19:51

Tgt Ion:228 Resp: 6882472

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 229 | 21.4  | 15.7  | 23.5  |
| 226 | 29.2  | 21.9  | 32.9  |





#87  
Chrysene  
Concen: 90.077 ng/ul  
RT: 21.351 min Scan# 3104  
Delta R.T. 0.012 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

Instrument :  
BNA\_P  
ClientSampleId :  
BGRG7

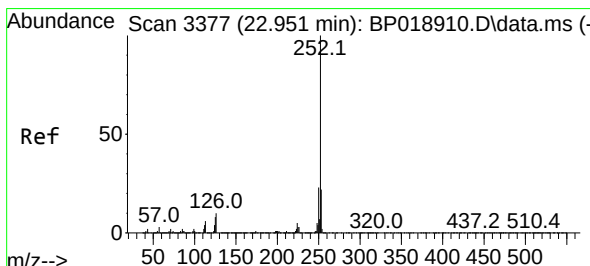
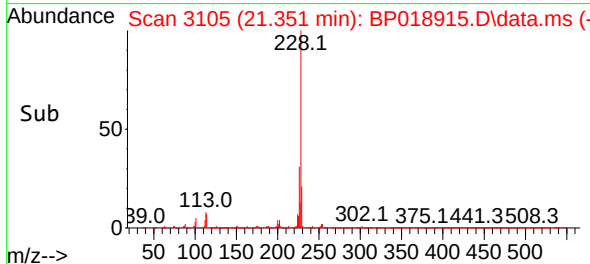
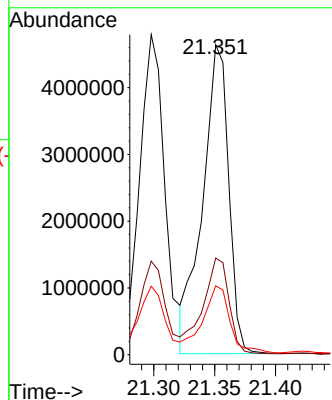
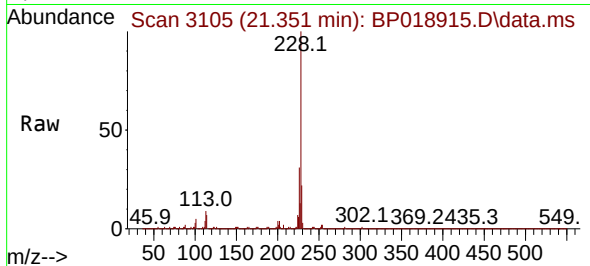
Tgt Ion:228 Resp: 6895620  
Ion Ratio Lower Upper  
228 100  
226 31.2 23.9 35.9  
229 22.2 15.6 23.4

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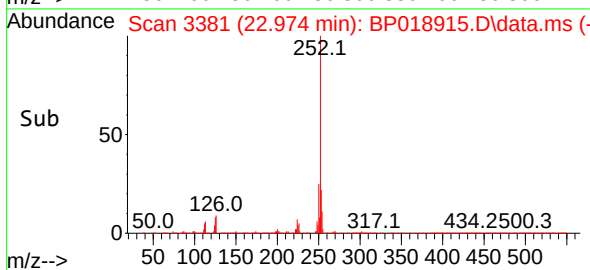
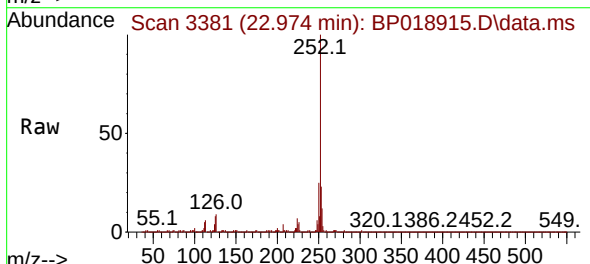
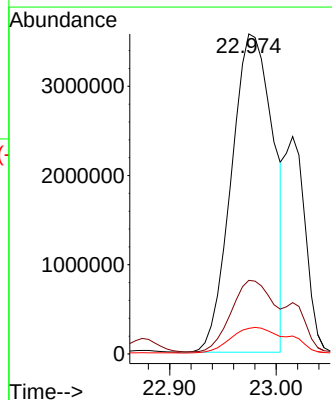
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ahmed

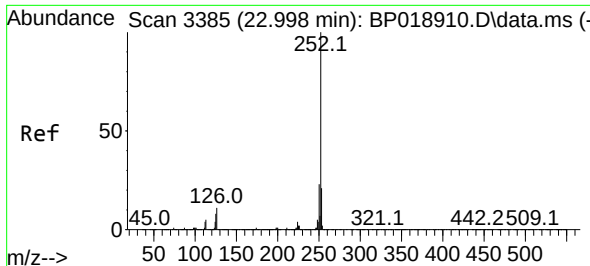
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#90  
Benzo(b)fluoranthene  
Concen: 98.931 ng/ul  
RT: 22.974 min Scan# 3381  
Delta R.T. 0.029 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

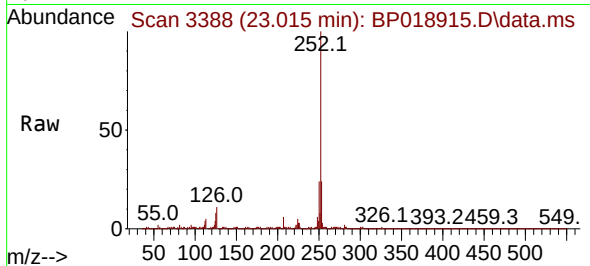
Tgt Ion:252 Resp: 9742532  
Ion Ratio Lower Upper  
252 100  
253 23.0 17.3 25.9  
125 8.0 7.8 11.6





#91  
Benzo(k)fluoranthene  
Concen: 34.338 ng/ul m  
RT: 23.015 min Scan# 3385  
Delta R.T. 0.023 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

Instrument :  
BNA\_P  
ClientSampleId :  
BGRG7



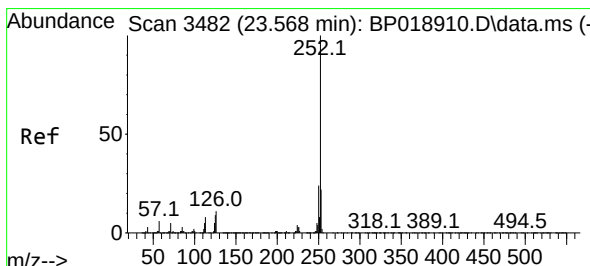
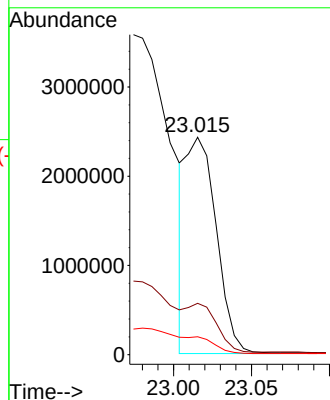
Tgt Ion:252 Resp: 3271869  
Ion Ratio Lower Upper  
252 100  
253 23.6 17.7 26.5  
125 8.2 8.0 12.0

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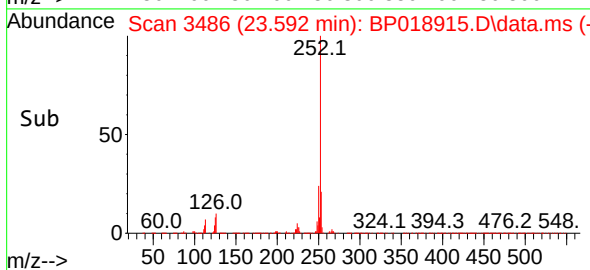
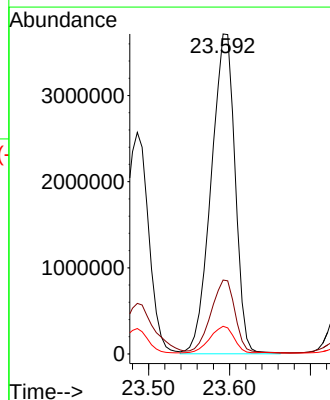
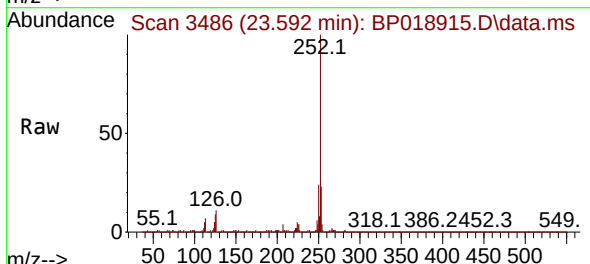
12/19/2023  
Supervised By :mohammad  
ahmed

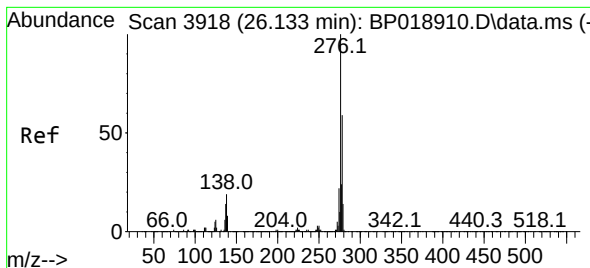
12/20/2023



#93  
Benzo(a)pyrene  
Concen: 84.893 ng/ul m  
RT: 23.592 min Scan# 3486  
Delta R.T. 0.029 min  
Lab File: BP018915.D  
Acq: 18 Dec 2023 19:51

Tgt Ion:252 Resp: 7638837  
Ion Ratio Lower Upper  
252 100  
253 23.1 17.8 26.8  
125 8.6 9.2 13.8#





#94

Indeno(1,2,3-cd)pyrene

Concen: 53.098 ng/ul

RT: 26.174 min Scan# 3918

Delta R.T. 0.053 min

Lab File: BP018915.D

Acq: 18 Dec 2023 19:51

Instrument :

BNA\_P

ClientSampleId :

BGRG7

Tgt Ion:276 Resp: 570853

Ion Ratio Lower Upper

276 100

138 17.2 19.4 29.2

277 25.4 19.8 29.6

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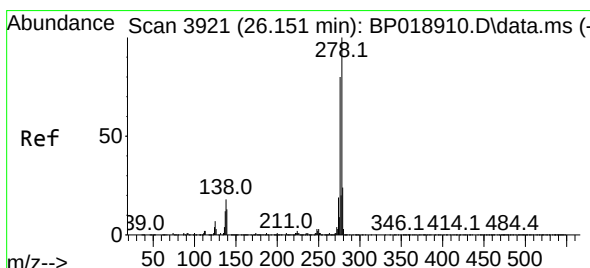
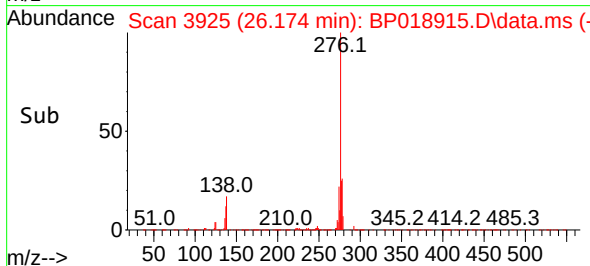
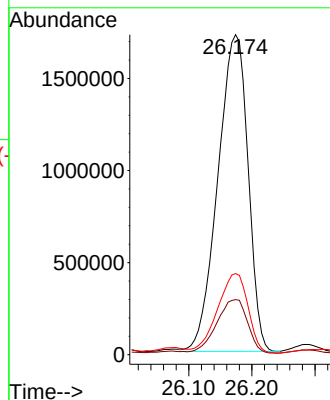
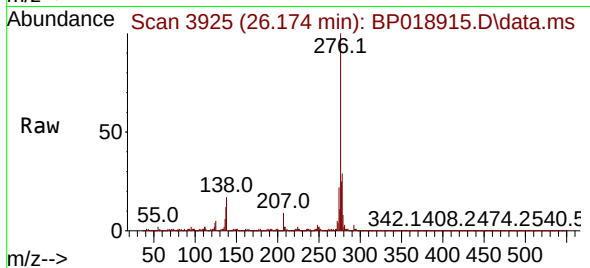
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Supervised By :mohammad ahmed 12/20/2023

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ahmed

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#95

Dibenzo(a,h)anthracene

Concen: 18.873 ng/ul

RT: 26.180 min Scan# 3926

Delta R.T. 0.041 min

Lab File: BP018915.D

Acq: 18 Dec 2023 19:51

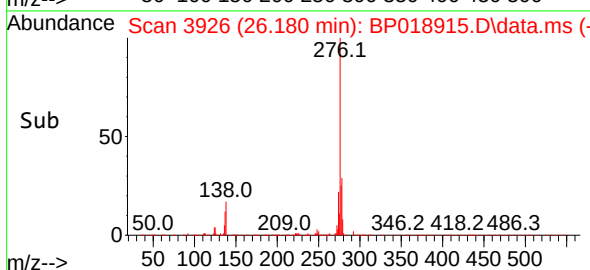
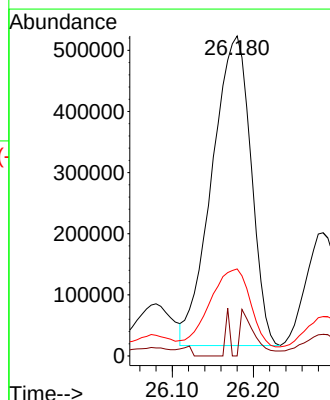
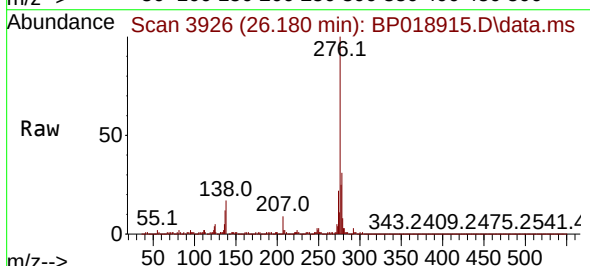
Tgt Ion:278 Resp: 1687906

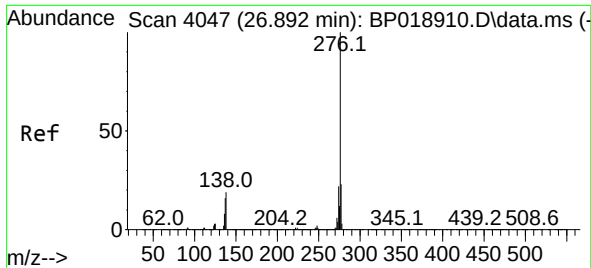
Ion Ratio Lower Upper

278 100

139 0.0 13.0 19.6

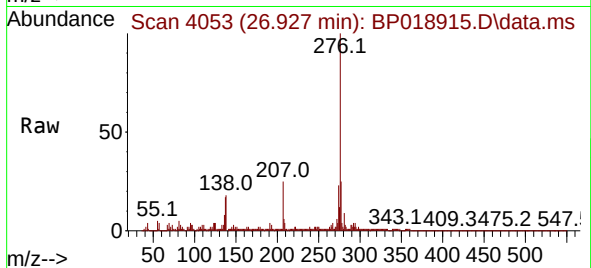
279 27.2 18.7 28.1





#96  
 Benzo(g,h,i)perylene  
 Concen: 23.526 ng/ul  
 RT: 26.927 min Scan# 4053  
 Delta R.T. 0.053 min  
 Lab File: BP018915.D  
 Acq: 18 Dec 2023 19:51

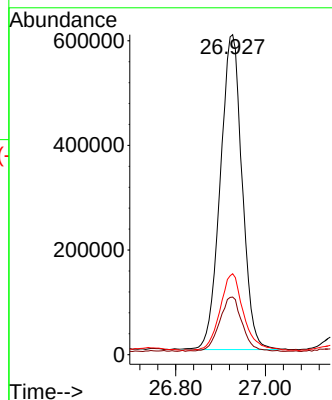
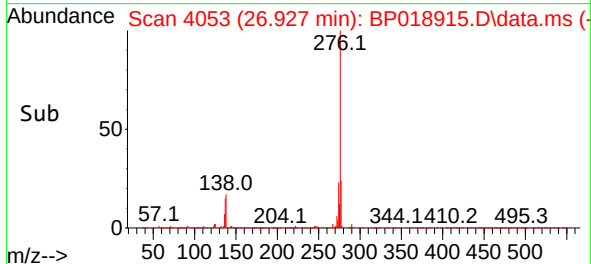
Instrument :  
 BNA\_P  
 ClientSampleId :  
 BGRG7



Tgt Ion:276 Resp: 2035484  
 Ion Ratio Lower Upper  
 276 100  
 138 18.0 18.1 27.1  
 277 25.3 19.4 29.0

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