

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF092520\  
 Data File : BF121699.D  
 Acq On : 25 Sep 2020 16:55  
 Operator : JU/CG  
 Sample : L4152-02 5X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 WR-PILE-3-4

Manual Integrations  
 APPROVED

mohammad  
 9/28/2020 11:10:39 AM

Quant Time: Sep 25 17:30:56 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091020.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Sep 25 14:15:19 2020  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.80  | 152  | 154088   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.08  | 136  | 599387   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.83  | 164  | 310238   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.33 | 188  | 586035   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 13.97 | 240  | 387283   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.42 | 264  | 342038   | 20.00 | ng    | 0.00     |

|                             |       |     |        |       |    |       |
|-----------------------------|-------|-----|--------|-------|----|-------|
| System Monitoring Compounds |       |     |        |       |    |       |
| 5) 2-Fluorophenol           | 5.41  | 112 | 62416  | 6.02  | ng | 0.00  |
| 7) Phenol-d6                | 6.43  | 99  | 167311 | 12.30 | ng | -0.01 |
| 23) Nitrobenzene-d5         | 7.36  | 82  | 150639 | 13.49 | ng | -0.01 |
| 42) 2,4,6-Tribromophenol    | 10.63 | 330 | 3706   | 0.96  | ng | 0.00  |
| 45) 2-Fluorobiphenyl        | 9.16  | 172 | 304574 | 14.87 | ng | 0.00  |
| 79) Terphenyl-d14           | 12.91 | 244 | 315547 | 16.51 | ng | 0.00  |

|                                |       |     |          |        |    |     |
|--------------------------------|-------|-----|----------|--------|----|-----|
| Target Compounds               |       |     |          | Qvalue |    |     |
| 31) Naphthalene                | 8.10  | 128 | 99339    | 3.140  | ng | 97  |
| 52) Acenaphthene               | 9.87  | 154 | 160916   | 8.472  | ng | 98  |
| 55) Dibenzofuran               | 10.04 | 168 | 201428   | 7.531  | ng | 96  |
| 58) Fluorene                   | 10.38 | 166 | 238357   | 11.653 | ng | 98  |
| 71) Phenanthrene               | 11.36 | 178 | 2605435  | 81.599 | ng | 98  |
| 72) Anthracene                 | 11.40 | 178 | 803967   | 24.400 | ng | 99  |
| 73) Carbazole                  | 11.55 | 167 | 292156   | 9.826  | ng | 99  |
| 75) Fluoranthene               | 12.55 | 202 | 3280913  | 96.258 | ng | 98  |
| 78) Pyrene                     | 12.78 | 202 | 2739182  | 96.804 | ng | 98  |
| 81) Benzo(a)anthracene         | 13.96 | 228 | 1476658  | 60.268 | ng | 100 |
| 83) Chrysene                   | 14.00 | 228 | 1271738  | 51.257 | ng | 97  |
| 84) Bis(2-ethylhexyl)phthalate | 13.94 | 149 | 31751    | 2.077  | ng | 96  |
| 87) Indeno(1,2,3-cd)pyrene     | 16.86 | 276 | 683823   | 30.700 | ng | 95  |
| 88) Benzo(b)fluoranthene       | 15.00 | 252 | 1393053m | 60.924 | ng |     |
| 89) Benzo(k)fluoranthene       | 15.03 | 252 | 459341m  | 21.937 | ng |     |
| 90) Benzo(a)pyrene             | 15.36 | 252 | 962922   | 49.542 | ng | 98  |
| 91) Dibenzo(a,h)anthracene     | 16.86 | 278 | 174554   | 9.414  | ng | 95  |
| 92) Benzo(g,h,i)perylene       | 17.29 | 276 | 610318   | 33.485 | ng | 99  |

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

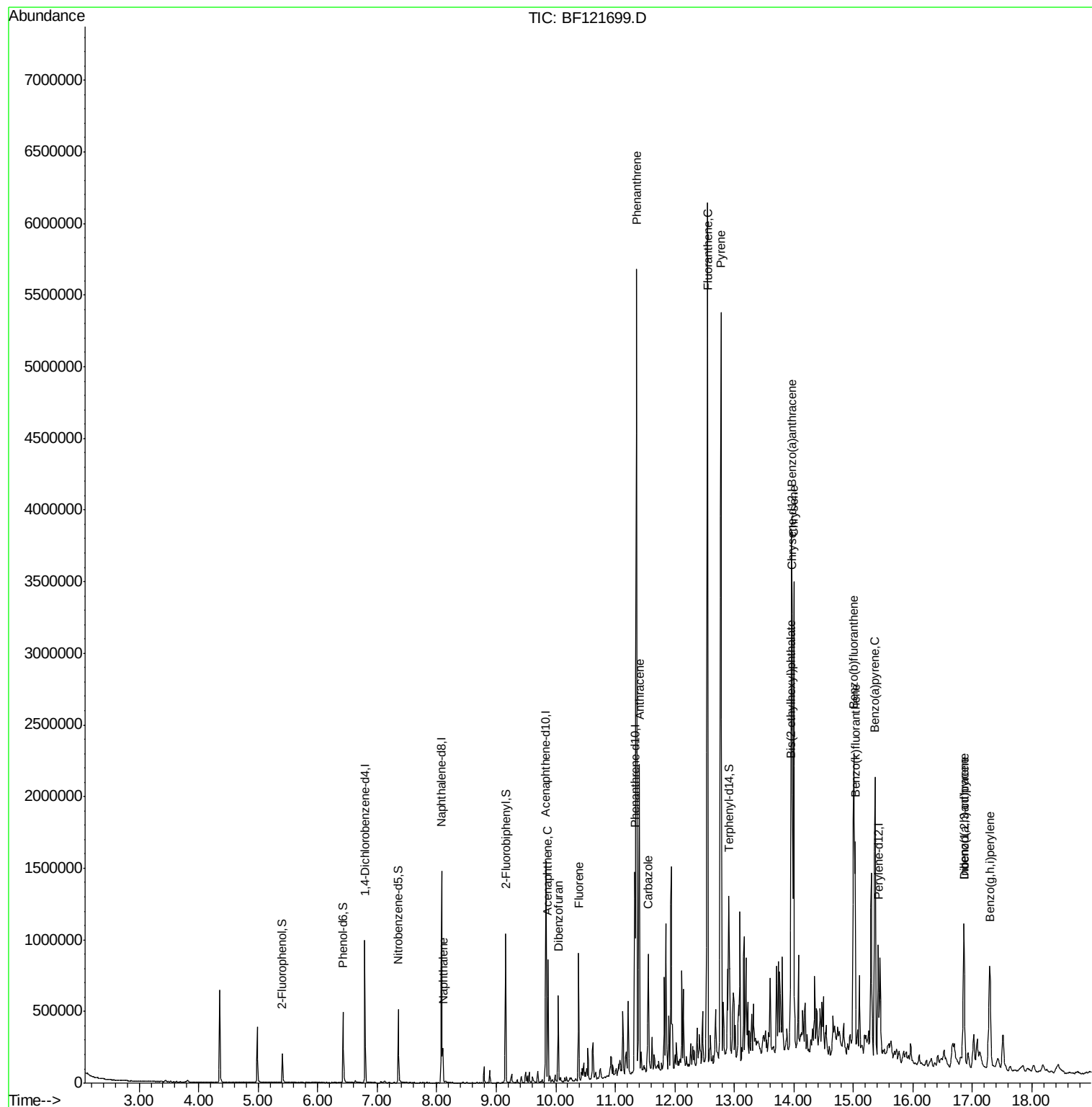
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF092520\  
Data File : BF121699.D  
Acq On : 25 Sep 2020 16:55  
Operator : JU/CG  
Sample : L4152-02 5X  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

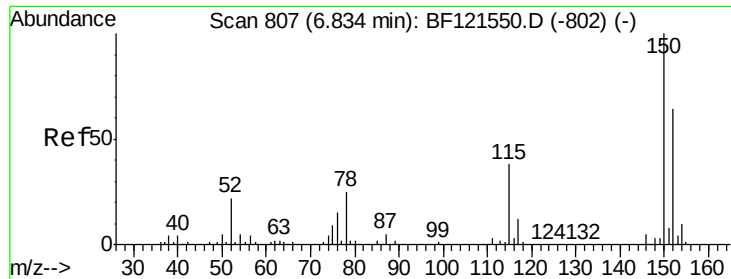
Instrument :  
BNA\_F  
ClientSampleId :  
WR-PILE-3-4

Manual Integrations  
APPROVED

mohammad  
9/28/2020 11:10:39 AM

Quant Time: Sep 25 17:30:56 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Sep 25 14:15:19 2020  
Response via : Initial Calibration





#1

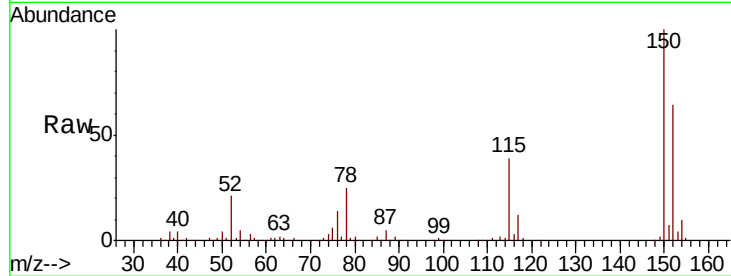
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.80 min Scan# 801  
Delta R.T. -0.00 min  
Lab File: BF121699.D  
Acq: 25 Sep 2020 16:55

Instrument :  
BNA\_F  
ClientSampleId :  
WR-PILE-3-4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 155.3 | 126.1 | 189.1 |
| 115     | 59.8  | 50.6  | 76.0  |

Manual Integrations  
APPROVED

mohammad  
9/28/2020 11:10:39 AM

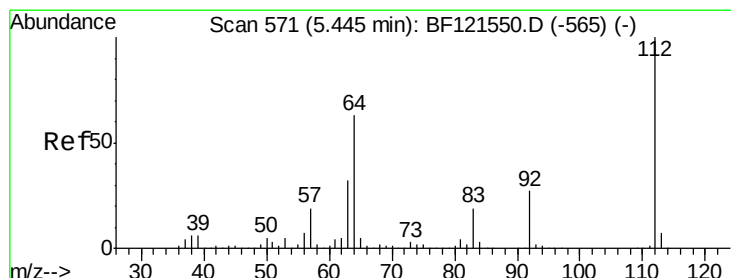
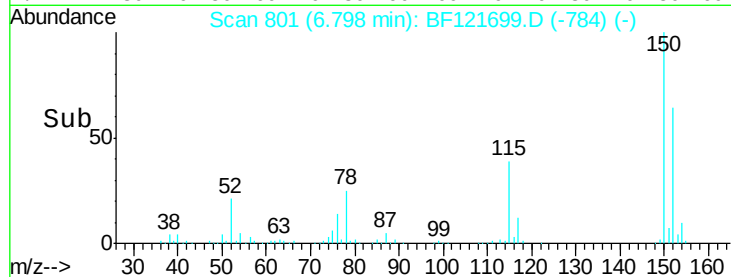
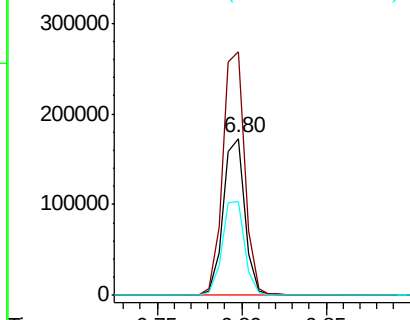


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

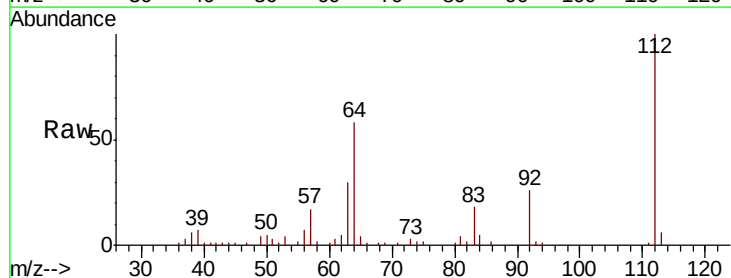
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 6.020 ng  
RT: 5.41 min Scan# 565  
Delta R.T. -0.01 min  
Lab File: BF121699.D  
Acq: 25 Sep 2020 16:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 58.2  | 49.5  | 74.3  |
| 63      | 29.6  | 25.2  | 37.8  |

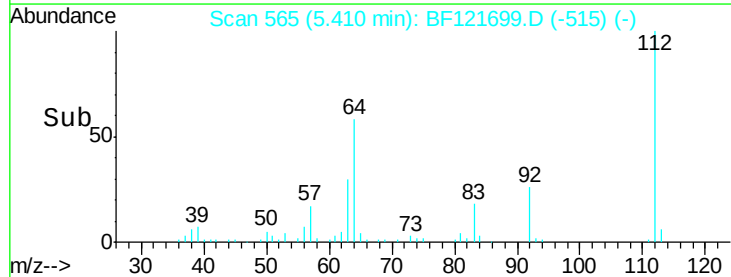
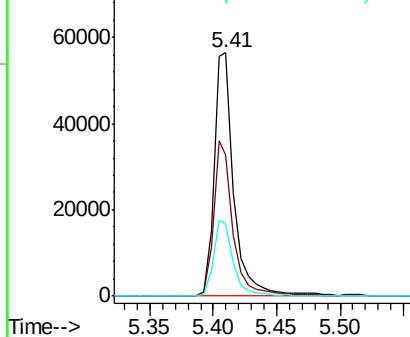


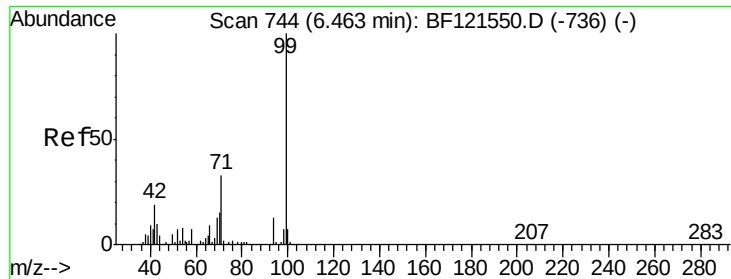
Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 12.300 ng

RT: 6.43 min Scan# 738

Delta R.T. -0.01 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

Instrument :

BNA\_F

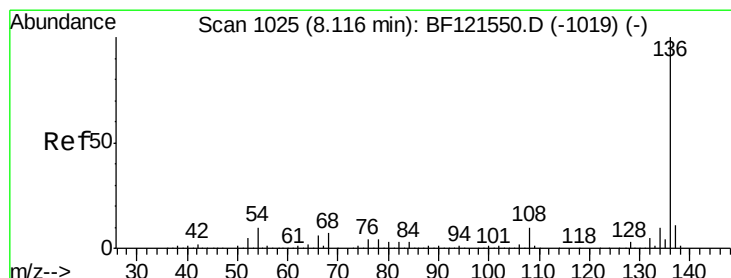
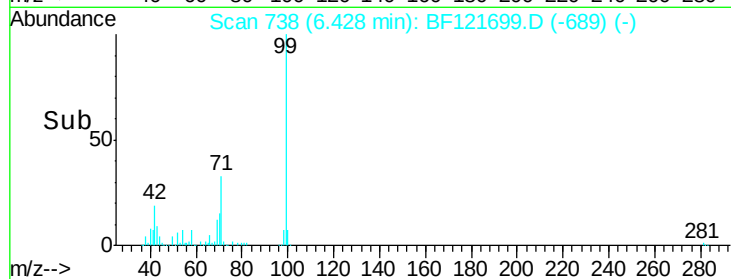
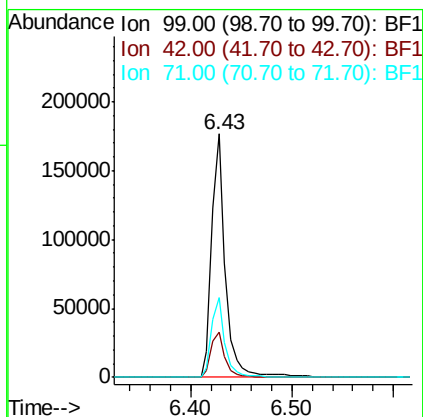
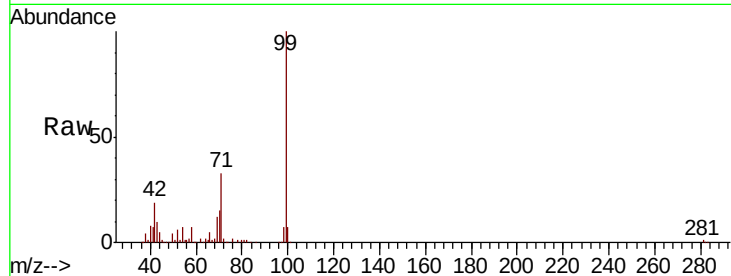
ClientSampleId :

WR-PILE-3-4

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 167311 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 18.6  | 16.1  | 24.1   |
| 71        | 32.5  | 27.9  | 41.9   |

Manual Integrations  
APPROVED

mohammad  
9/28/2020 11:10:39 AM



#21

Naphthalene-d8

Concen: 20.000 ng

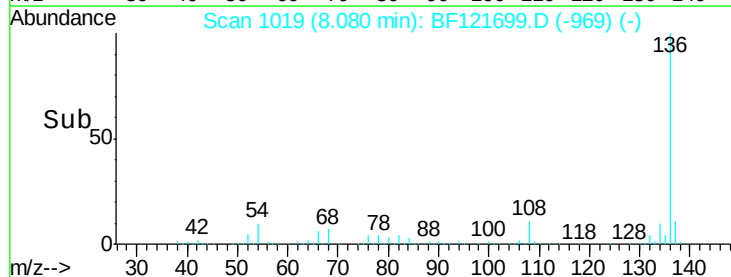
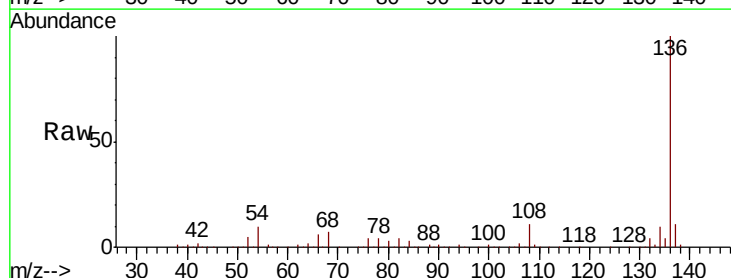
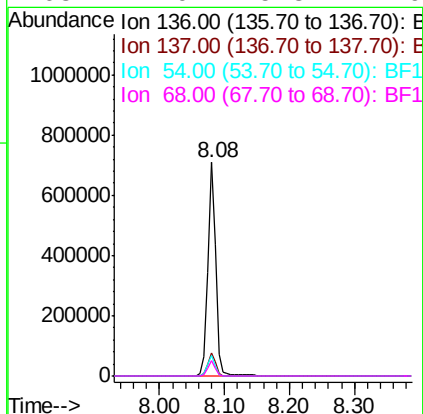
RT: 8.08 min Scan# 1019

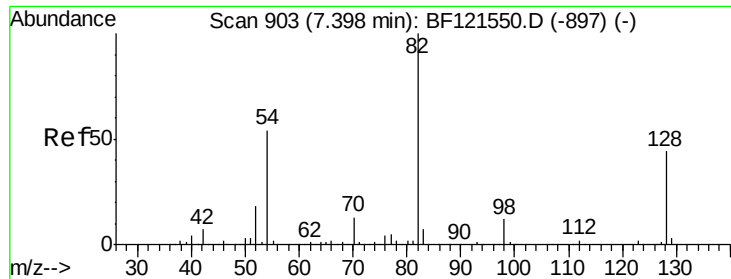
Delta R.T. -0.01 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 599387 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 10.9  | 8.9   | 13.3   |
| 54        | 9.7   | 7.6   | 11.4   |
| 68        | 7.0   | 5.3   | 7.9    |





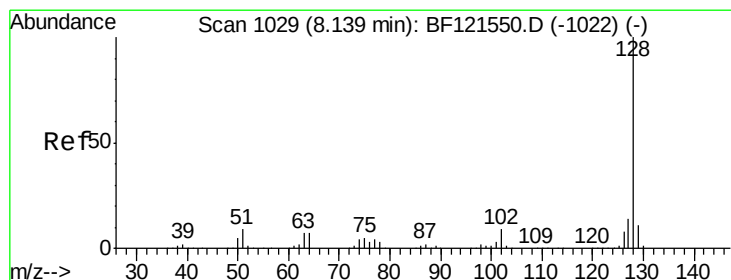
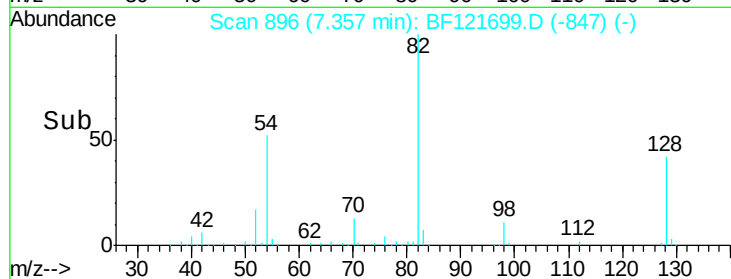
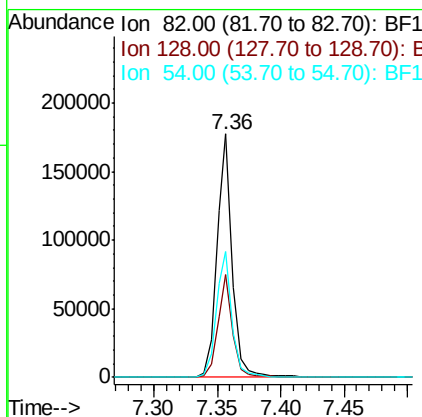
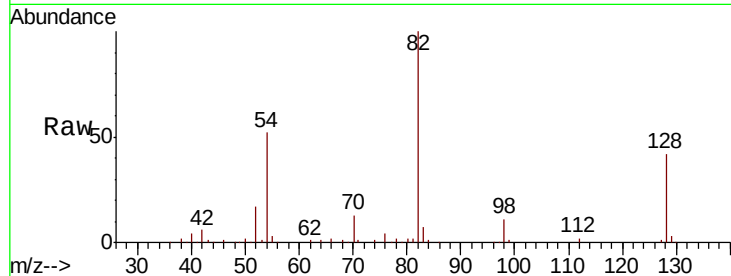
#23  
Nitrobenzene-d5  
Concen: 13.494 ng  
RT: 7.36 min Scan# 896  
Delta R.T. -0.01 min  
Lab File: BF121699.D  
Acq: 25 Sep 2020 16:55

Instrument :  
BNA\_F  
ClientSampleId :  
WR-PILE-3-4

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 82    | Resp: | 150639 |
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 42.1  | 33.9  | 50.9   |
| 54        | 51.9  | 43.2  | 64.8   |

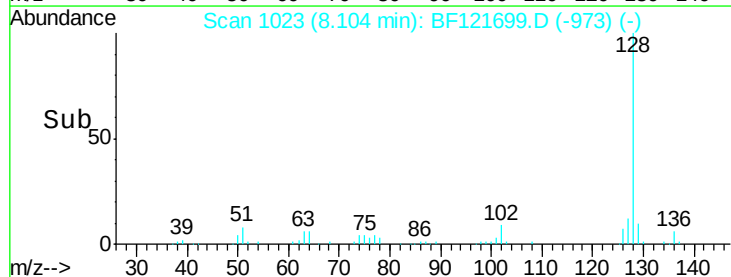
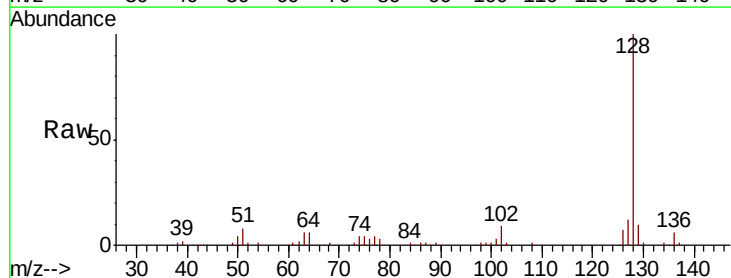
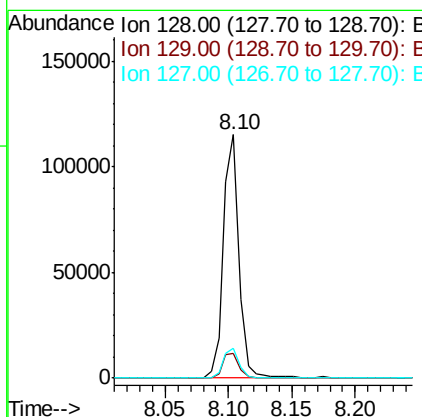
Manual Integrations  
APPROVED

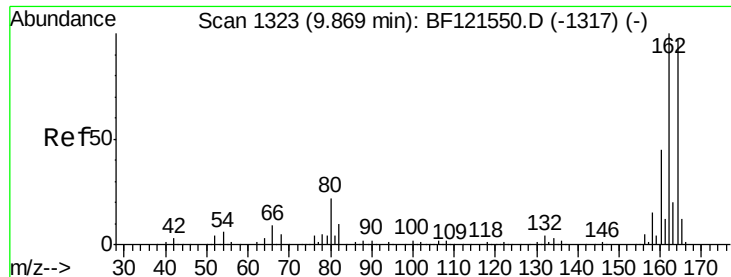
mohammad  
9/28/2020 11:10:39 AM



#31  
Naphthalene  
Concen: 3.140 ng  
RT: 8.10 min Scan# 1023  
Delta R.T. -0.01 min  
Lab File: BF121699.D  
Acq: 25 Sep 2020 16:55

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 128   | Resp: | 99339 |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 10.2  | 9.0   | 13.4  |
| 127       | 12.3  | 11.0  | 16.4  |





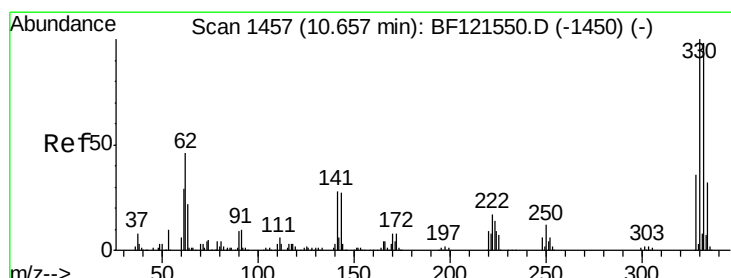
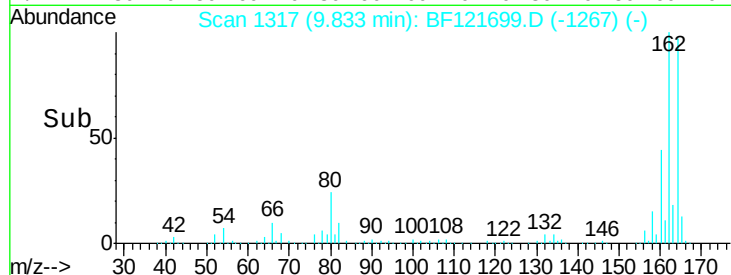
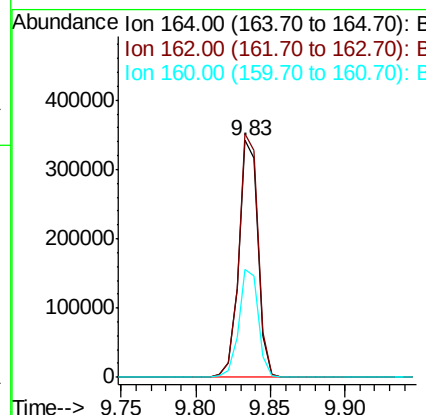
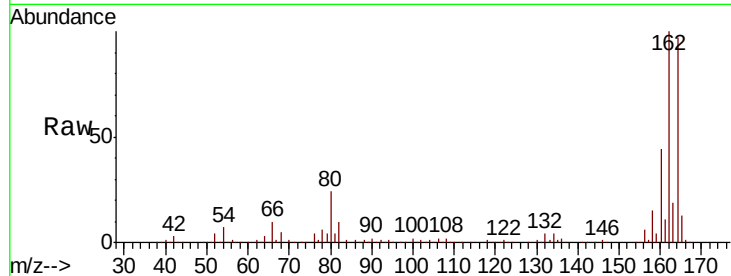
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.83 min Scan# 1317  
Delta R.T. -0.01 min  
Lab File: BF121699.D  
Acq: 25 Sep 2020 16:55

Instrument :  
BNA\_F  
ClientSampleId :  
WR-PILE-3-4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 102.8 | 82.3  | 123.5 |
| 160     | 45.6  | 37.1  | 55.7  |

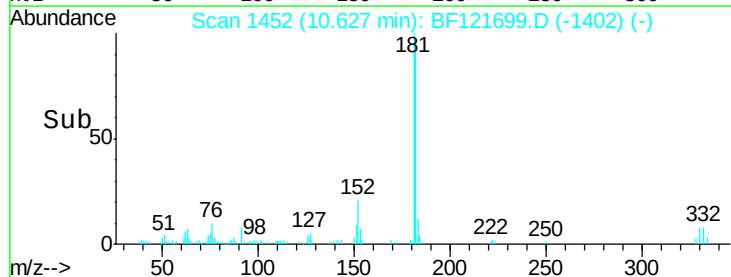
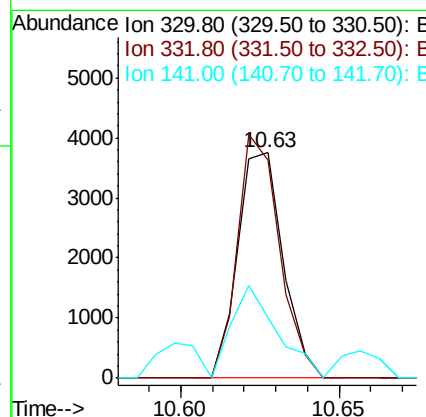
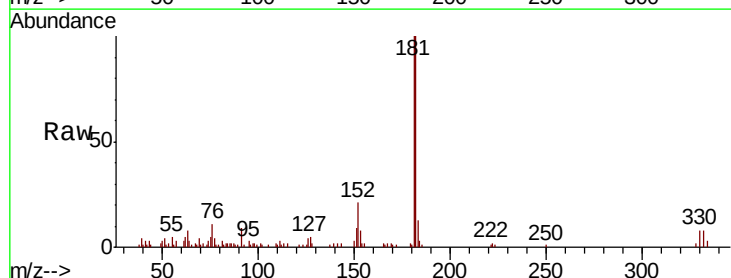
Manual Integrations  
APPROVED

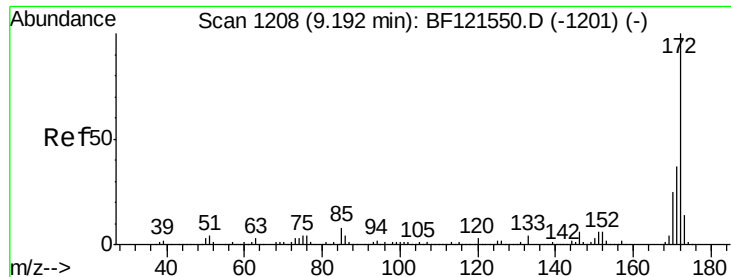
mohammad  
9/28/2020 11:10:39 AM



#42  
2,4,6-Tribromophenol  
Concen: 0.961 ng  
RT: 10.63 min Scan# 1452  
Delta R.T. -0.01 min  
Lab File: BF121699.D  
Acq: 25 Sep 2020 16:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 100.1 | 76.7  | 115.1 |
| 141     | 41.3  | 22.2  | 33.2# |





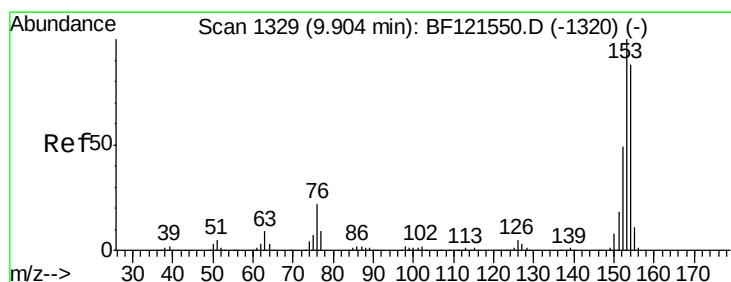
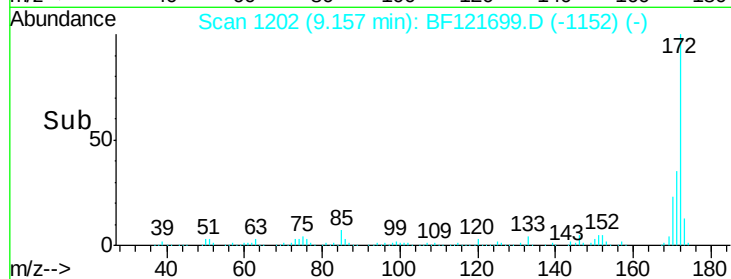
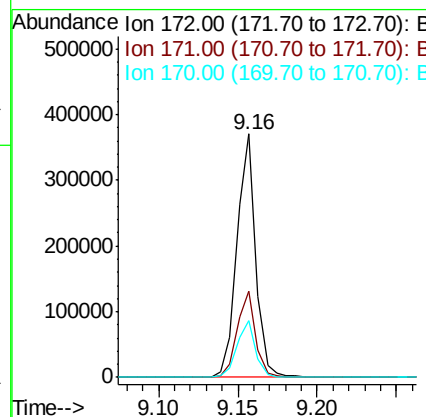
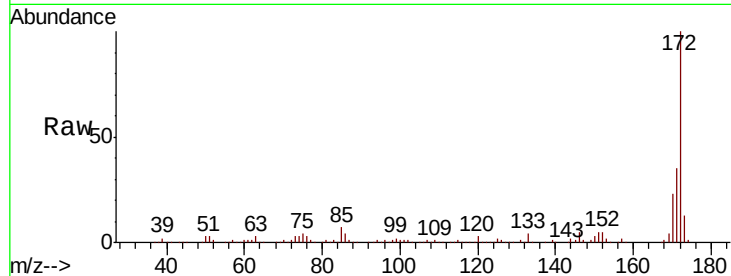
#45  
2-Fluorobiphenyl  
Concen: 14.869 ng  
RT: 9.16 min Scan# 1202  
Delta R.T. -0.01 min  
Lab File: BF121699.D  
Acq: 25 Sep 2020 16:55

Instrument :  
BNA\_F  
ClientSampleId :  
WR-PILE-3-4

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 172     | 100   | 304574 |       |       |
| 171     | 35.2  |        | 29.4  | 44.0  |
| 170     | 23.1  |        | 19.6  | 29.4  |

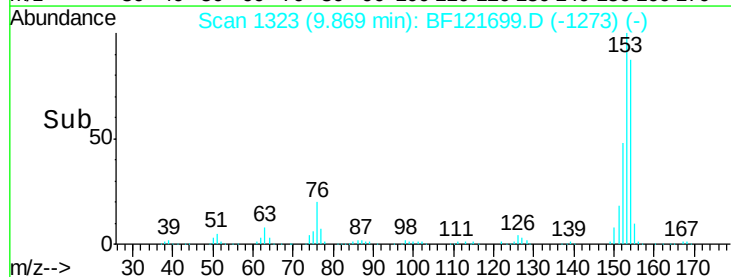
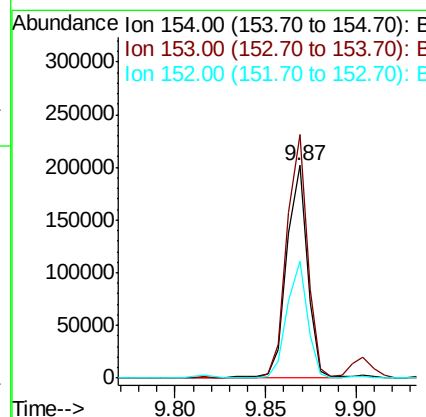
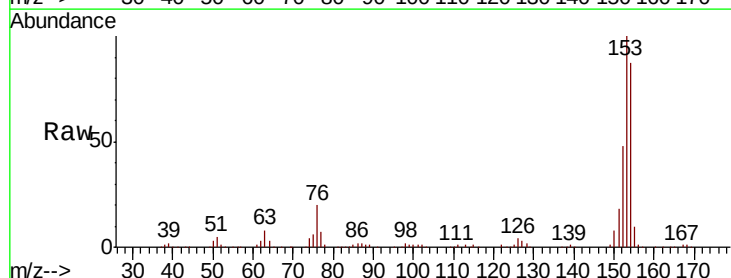
Manual Integrations  
APPROVED

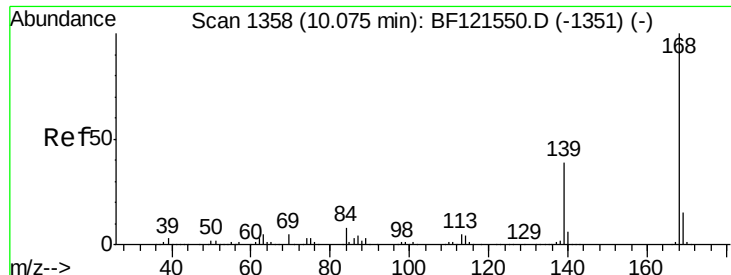
mohammad  
9/28/2020 11:10:39 AM



#52  
Acenaphthene  
Concen: 8.472 ng  
RT: 9.87 min Scan# 1323  
Delta R.T. -0.01 min  
Lab File: BF121699.D  
Acq: 25 Sep 2020 16:55

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 154     | 100   | 160916 |       |       |
| 153     | 114.5 |        | 89.1  | 133.7 |
| 152     | 55.0  |        | 43.0  | 64.6  |





#55

Dibenzenofuran

Concen: 7.531 ng

RT: 10.04 min Scan# 1352

Delta R.T. -0.01 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

Instrument :

BNA\_F

ClientSampleId :

WR-PILE-3-4

Tot Ion:168 Resp: 201428

Ion Ratio Lower Upper

168 100

139 37.4 32.2 48.2

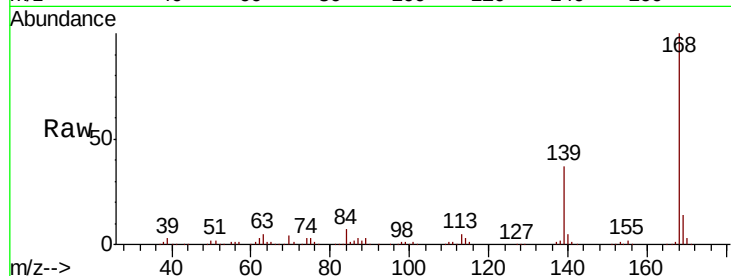
169 13.6 11.8 17.8

Manual Integrations

APPROVED

mohammad

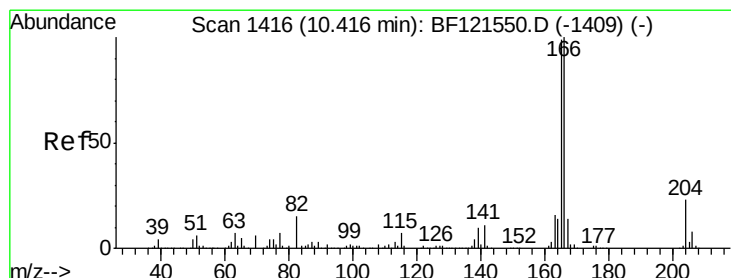
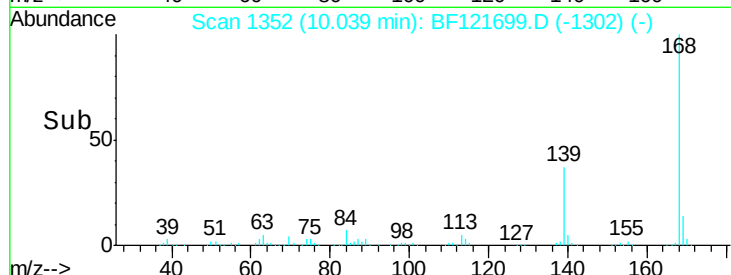
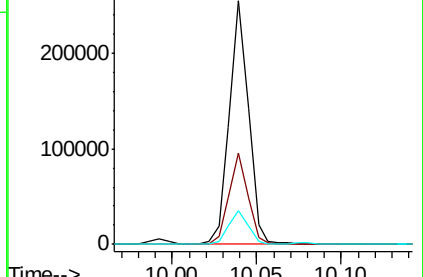
9/28/2020 11:10:39 AM



Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 169.00 (168.70 to 169.70): E



#58

Fluorene

Concen: 11.653 ng

RT: 10.38 min Scan# 1410

Delta R.T. -0.01 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

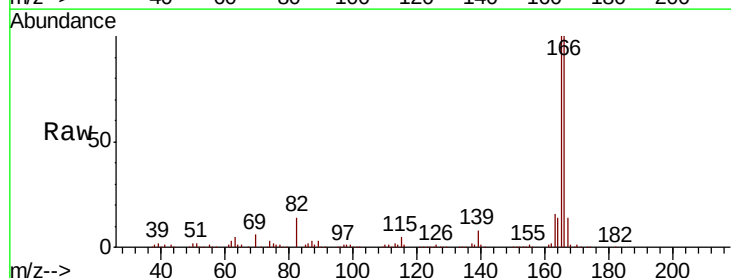
Tgt Ion:166 Resp: 238357

Ion Ratio Lower Upper

166 100

165 100.3 78.7 118.1

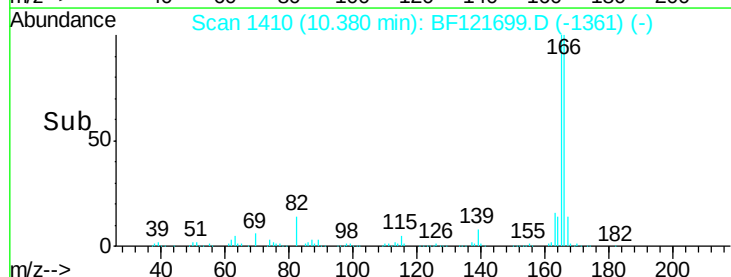
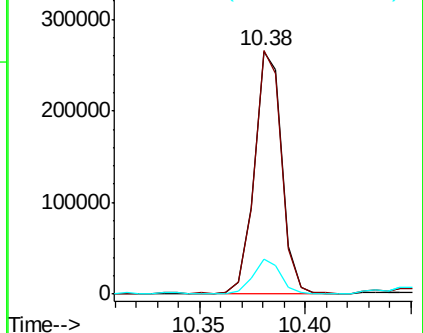
167 14.3 10.6 16.0



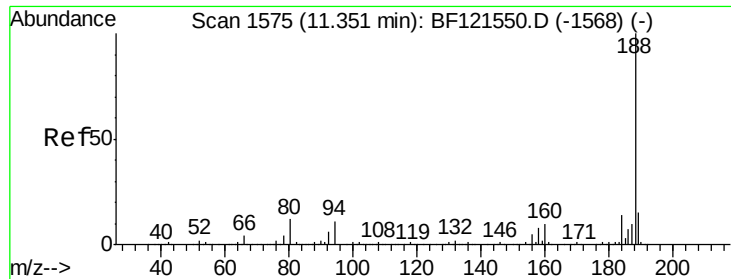
Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E







#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.33 min Scan# 1571

Delta R.T. -0.00 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

Instrument :

BNA\_F

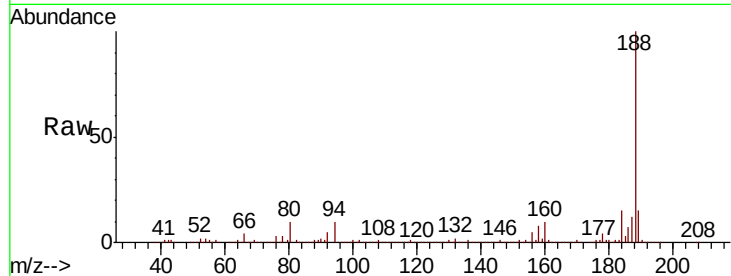
ClientSampleId :

WR-PILE-3-4

|             |              |
|-------------|--------------|
| Tot Ion:188 | Resp: 586035 |
| Ion Ratio   | Lower Upper  |
| 188 100     |              |
| 94 10.0     | 7.9 11.9     |
| 80 10.3     | 8.6 13.0     |

Manual Integrations  
APPROVED

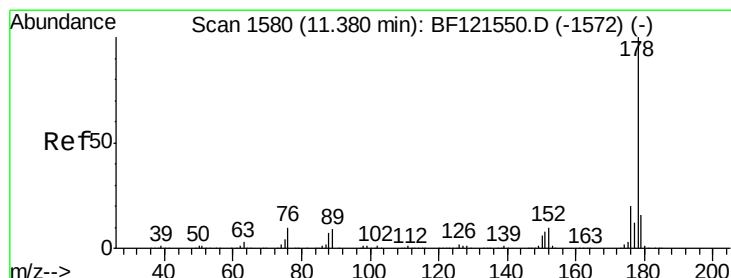
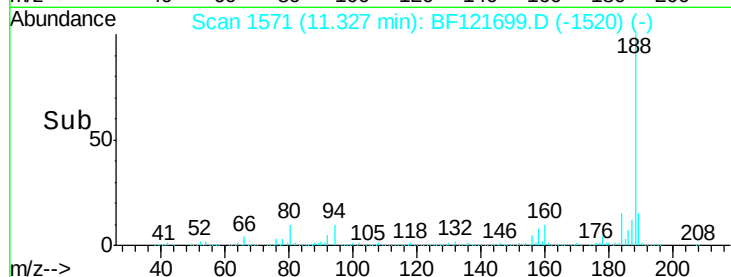
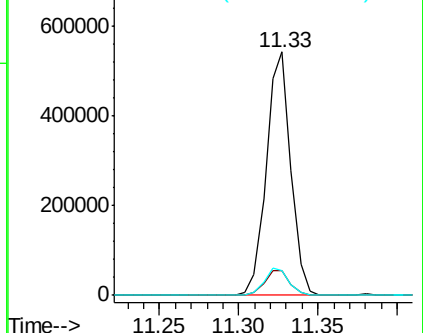
mohammad  
9/28/2020 11:10:39 AM



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF1

Ion 80.00 (79.70 to 80.70): BF1



#71

Phenanthrene

Concen: 81.599 ng

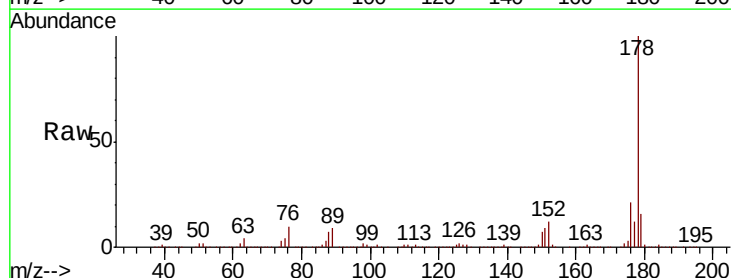
RT: 11.36 min Scan# 1576

Delta R.T. 0.01 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

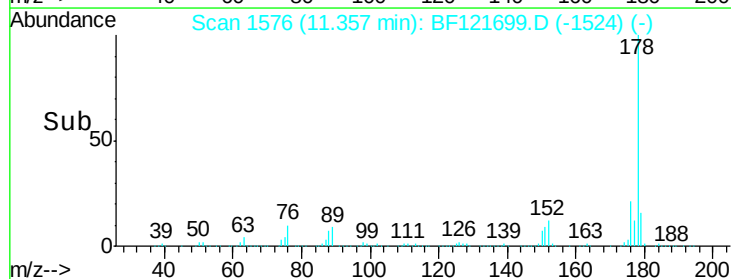
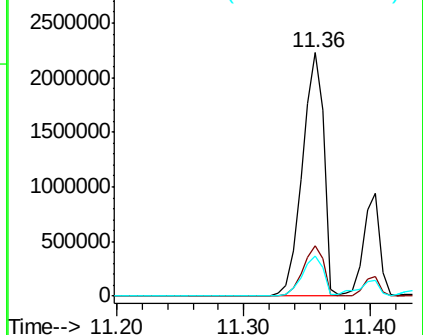
|             |               |
|-------------|---------------|
| Tgt Ion:178 | Resp: 2605435 |
| Ion Ratio   | Lower Upper   |
| 178 100     |               |
| 176 20.9    | 15.8 23.8     |
| 179 16.2    | 12.6 19.0     |

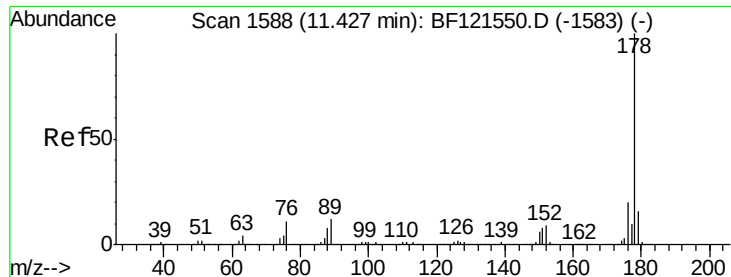


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#72

Anthracene

Concen: 24.400 ng

RT: 11.40 min Scan# 1584

Delta R.T. -0.00 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

Instrument :

BNA\_F

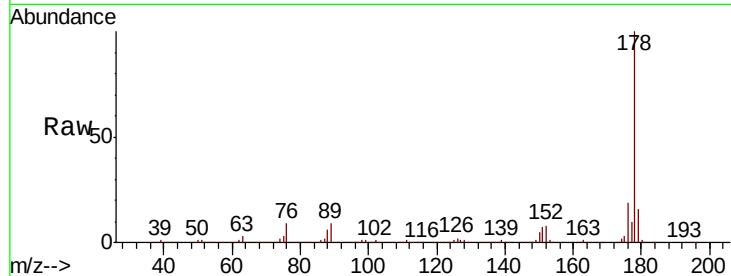
ClientSampleId :

WR-PILE-3-4

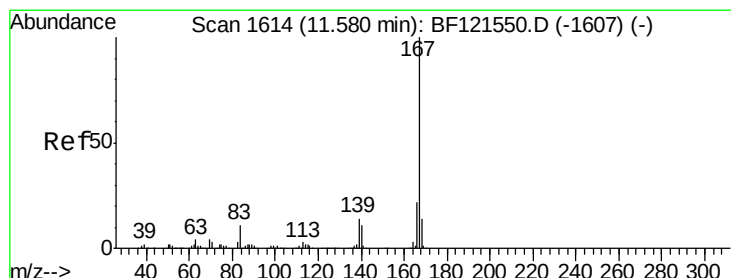
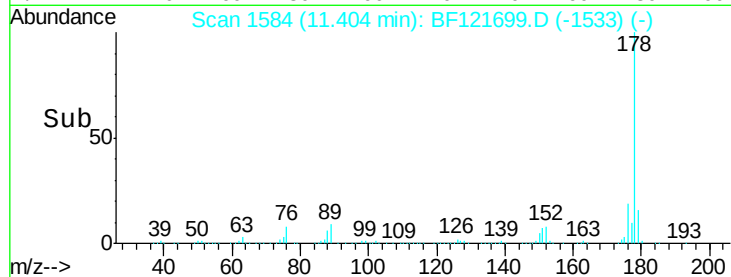
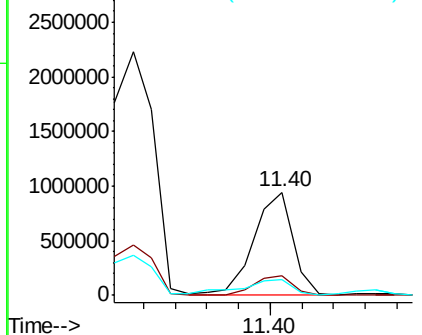
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 178   | Resp: | 803967 |
| Ion      | Ratio | Lower | Upper  |
| 178      | 100   |       |        |
| 176      | 19.2  | 15.8  | 23.6   |
| 179      | 15.6  | 12.9  | 19.3   |

Manual Integrations  
APPROVED

mohammad  
9/28/2020 11:10:39 AM



Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 176.00 (175.70 to 176.70): E  
Ion 179.00 (178.70 to 179.70): E



#73

Carbazole

Concen: 9.826 ng

RT: 11.55 min Scan# 1609

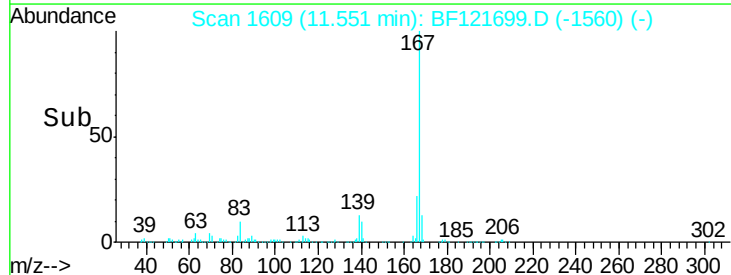
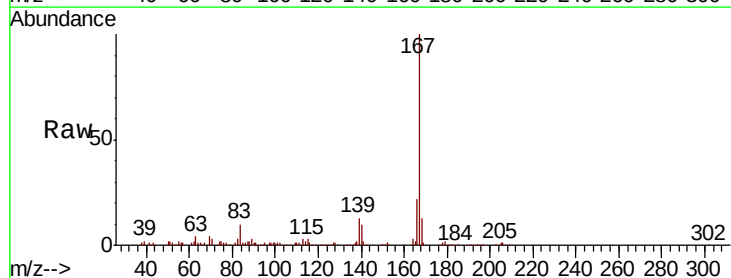
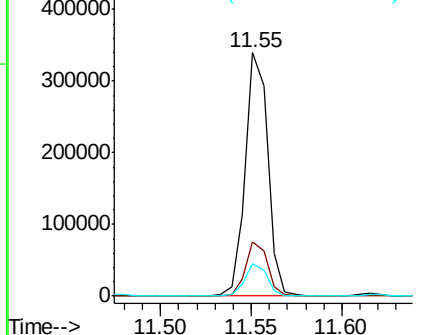
Delta R.T. -0.01 min

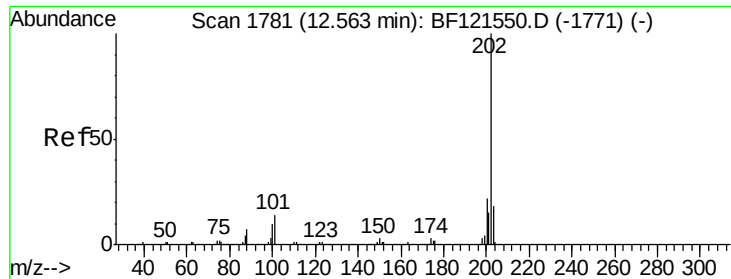
Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 167   | Resp: | 292156 |
| Ion      | Ratio | Lower | Upper  |
| 167      | 100   |       |        |
| 166      | 22.0  | 18.0  | 27.0   |
| 139      | 13.2  | 10.6  | 15.8   |

Abundance Ion 167.00 (166.70 to 167.70): E  
Ion 166.00 (165.70 to 166.70): E  
Ion 139.00 (138.70 to 139.70): E





#75

Fluoranthene

Concen: 96.258 ng

RT: 12.55 min Scan# 1779

Delta R.T. 0.01 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

Instrument :

BNA\_F

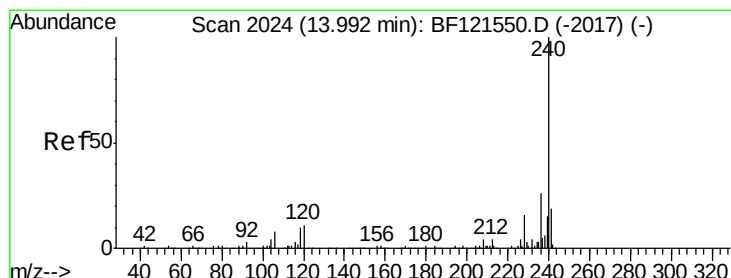
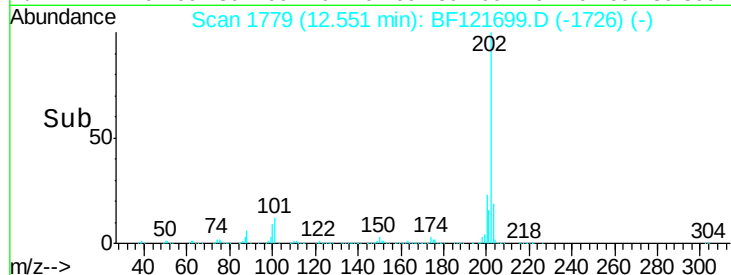
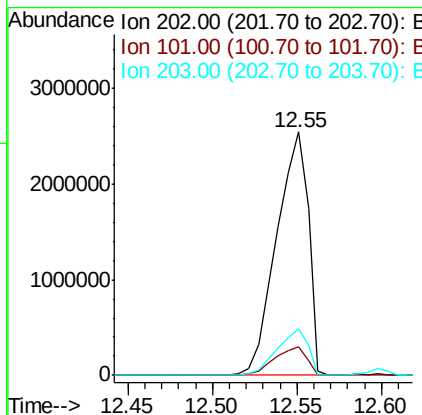
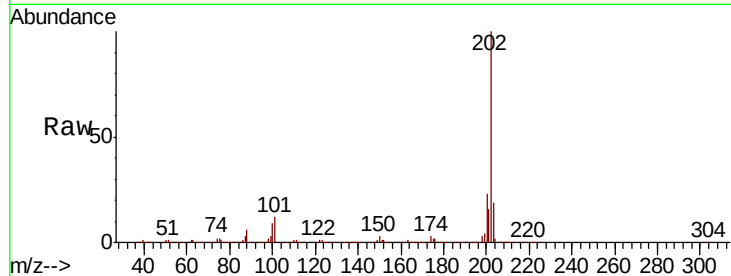
ClientSampleId :

WR-PILE-3-4

|           |       |       |         |
|-----------|-------|-------|---------|
| Tot Ion:  | 202   | Resp: | 3280913 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 101       | 11.9  | 0.0   | 33.2    |
| 203       | 18.9  | 0.0   | 38.2    |

Manual Integrations  
APPROVED

mohammad  
9/28/2020 11:10:39 AM



#76

Chrysene-d12

Concen: 20.000 ng

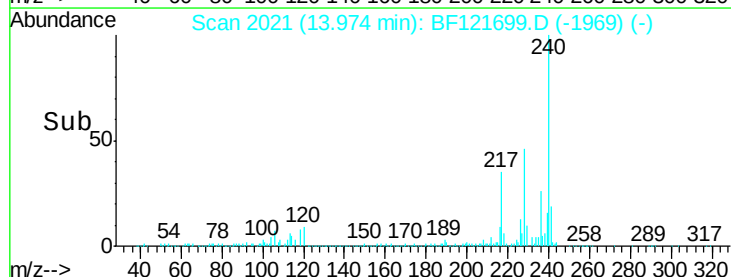
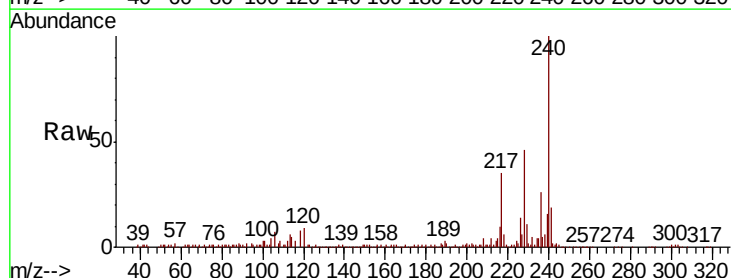
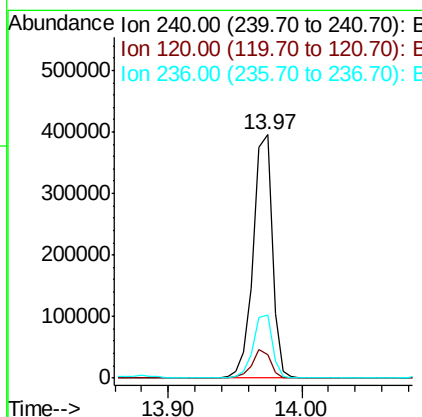
RT: 13.97 min Scan# 2021

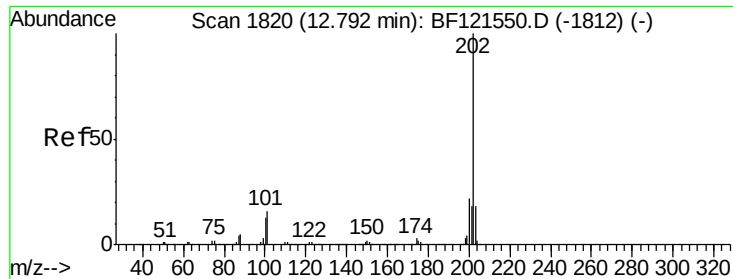
Delta R.T. 0.01 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 387283 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 9.4   | 9.9   | 14.9#  |
| 236       | 26.0  | 20.6  | 31.0   |





#78

Pvrene

Concen: 96.804 ng

RT: 12.78 min Scan# 1818

Delta R.T. 0.01 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

Instrument :

BNA\_F

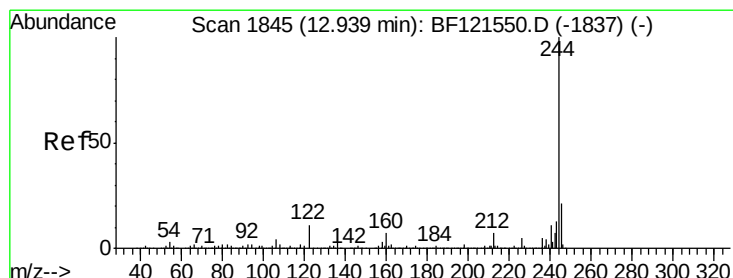
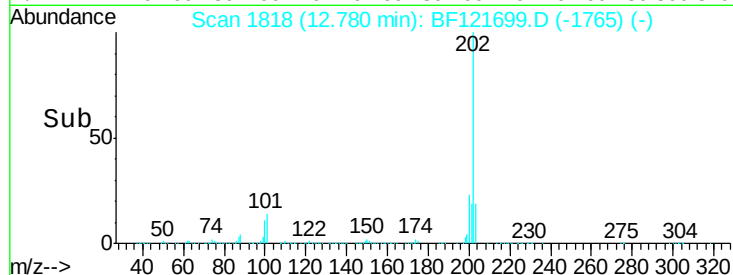
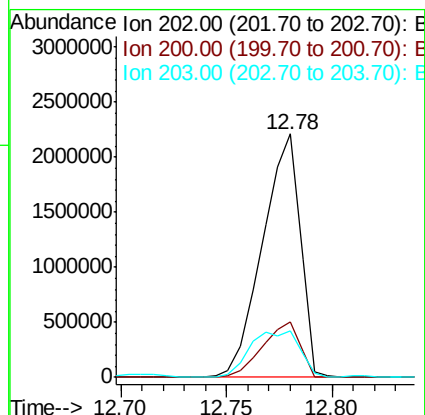
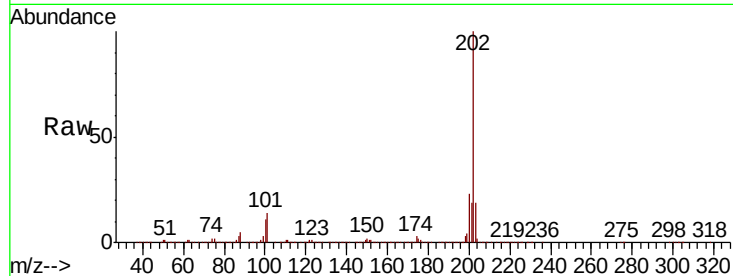
ClientSampleId :

WR-PILE-3-4

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 202   | Resp: | 2739182 |
| Ion      | Ratio | Lower | Upper   |
| 202      | 100   |       |         |
| 200      | 22.8  | 17.8  | 26.6    |
| 203      | 19.0  | 14.6  | 21.8    |

Manual Integrations  
APPROVED

mohammad  
9/28/2020 11:10:39 AM



#79

Terphenyl-d14

Concen: 16.506 ng

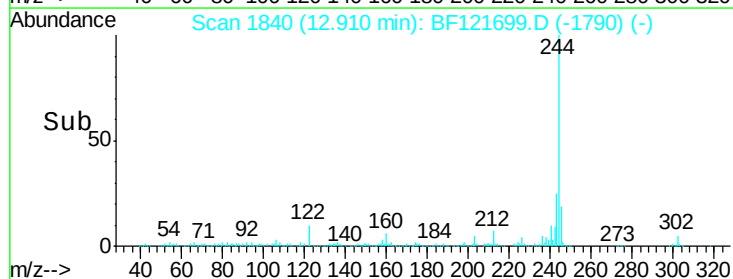
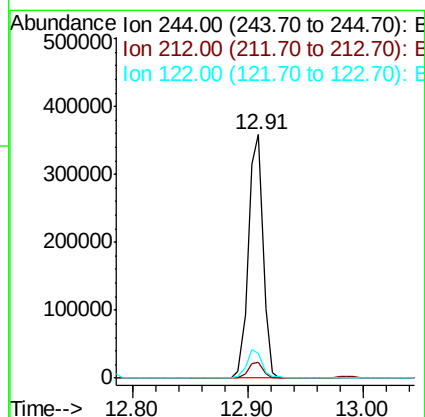
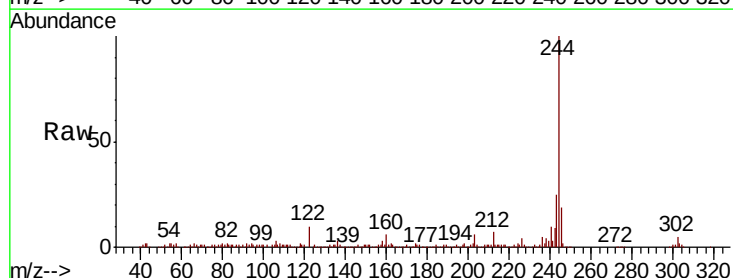
RT: 12.91 min Scan# 1840

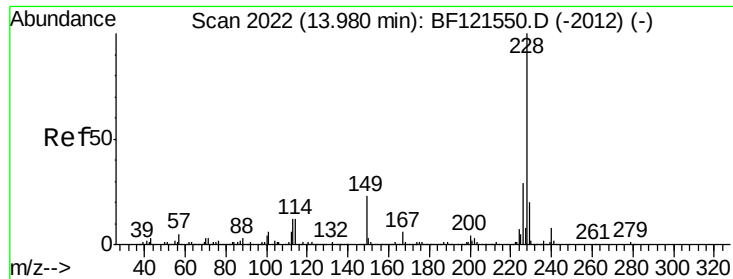
Delta R.T. -0.01 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 244   | Resp: | 315547 |
| Ion      | Ratio | Lower | Upper  |
| 244      | 100   |       |        |
| 212      | 6.7   | 5.8   | 8.6    |
| 122      | 10.0  | 8.2   | 12.4   |





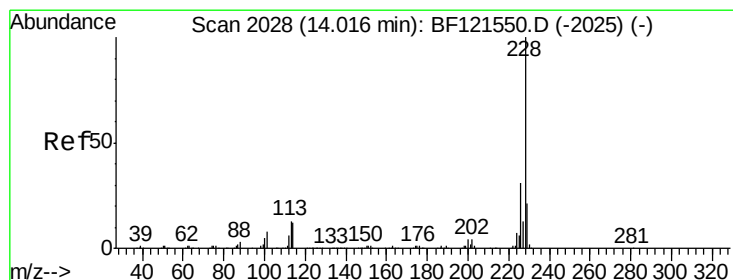
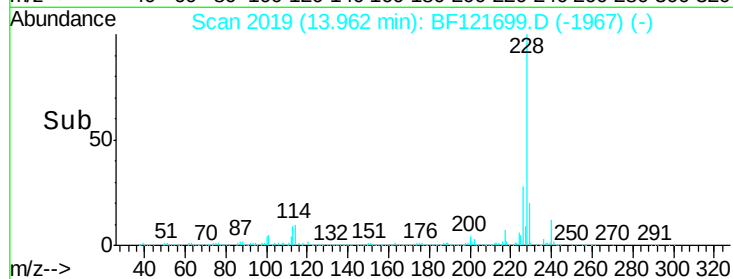
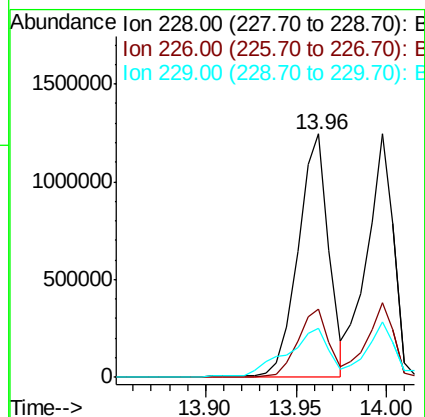
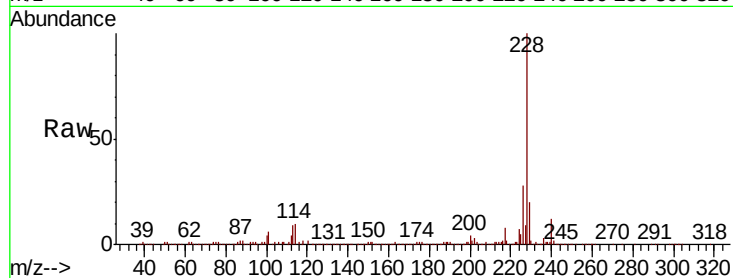
#81  
Benzo(a)anthracene  
Concen: 60.268 ng  
RT: 13.96 min Scan# 2019  
Delta R.T. 0.01 min  
Lab File: BF121699.D  
Acq: 25 Sep 2020 16:55

Instrument :  
BNA\_F  
ClientSampleId :  
WR-PILE-3-4

Tot Ion:228 Resp: 1476658  
Ion Ratio Lower Upper  
228 100  
226 28.2 22.5 33.7  
229 20.4 16.3 24.5

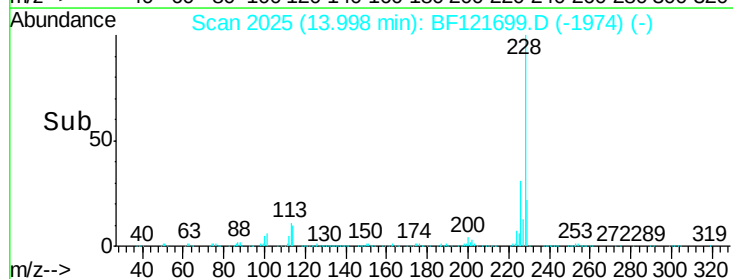
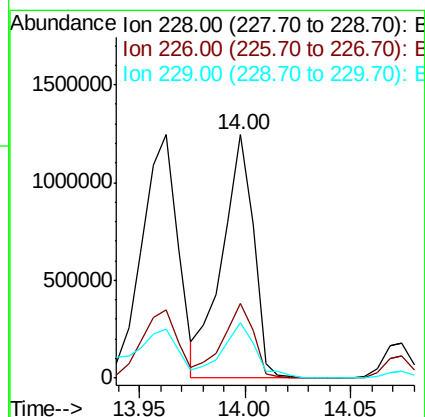
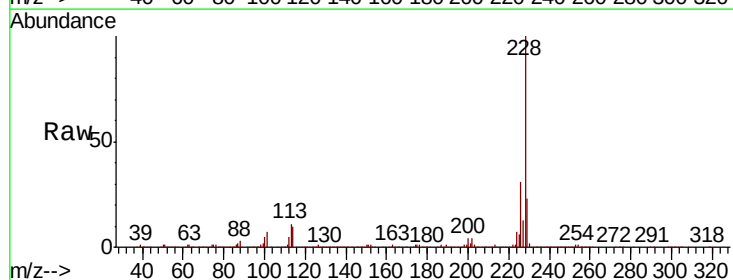
Manual Integrations  
APPROVED

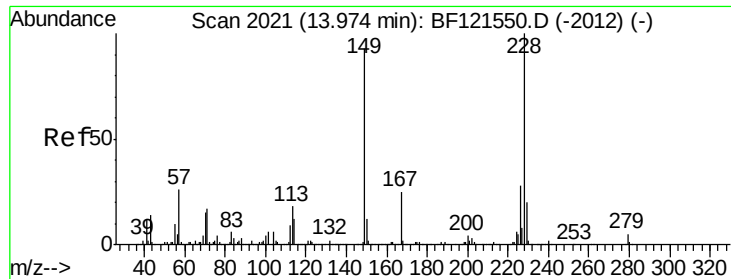
mohammad  
9/28/2020 11:10:39 AM



#83  
Chrysene  
Concen: 51.257 ng  
RT: 14.00 min Scan# 2025  
Delta R.T. -0.00 min  
Lab File: BF121699.D  
Acq: 25 Sep 2020 16:55

Tgt Ion:228 Resp: 1271738  
Ion Ratio Lower Upper  
228 100  
226 30.8 25.4 38.0  
229 22.8 16.2 24.2





#84

Bis(2-ethylhexyl)phthalate

Concen: 2.077 ng

RT: 13.94 min Scan# 2016

Delta R.T. -0.01 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

Instrument :

BNA\_F

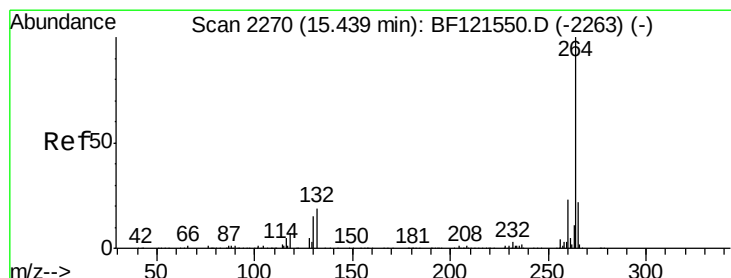
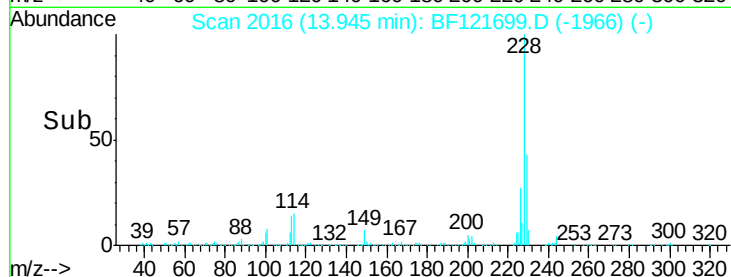
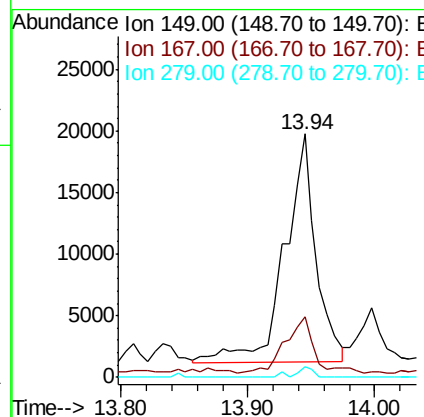
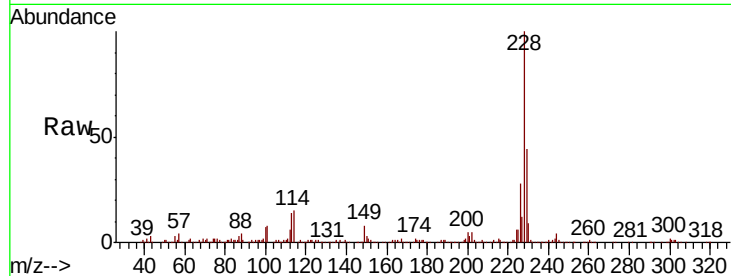
ClientSampled :

WR-PILE-3-4

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 149   | Resp: | 31751 |
| Ion Ratio | Lower | Upper |       |
| 149       | 100   |       |       |
| 167       | 25.1  | 21.8  | 32.8  |
| 279       | 4.2   | 4.2   | 6.2   |

Manual Integrations  
APPROVED

mohammad  
9/28/2020 11:10:39 AM



#86

Perylene-d12

Concen: 20.000 ng

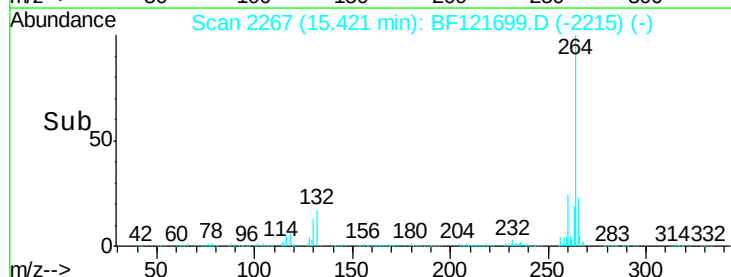
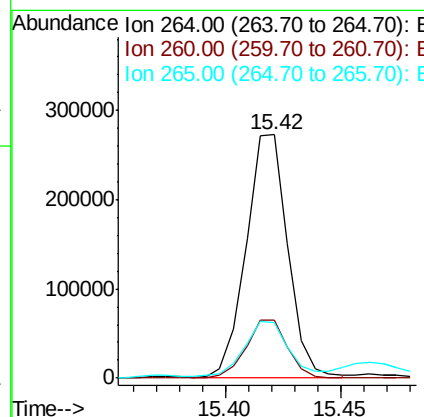
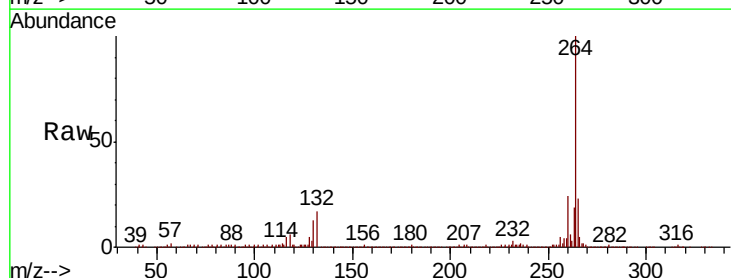
RT: 15.42 min Scan# 2267

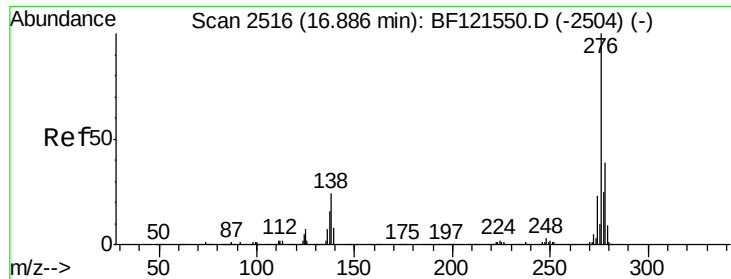
Delta R.T. 0.01 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 264   | Resp: | 342038 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 23.7  | 18.4  | 27.6   |
| 265       | 23.0  | 17.6  | 26.4   |





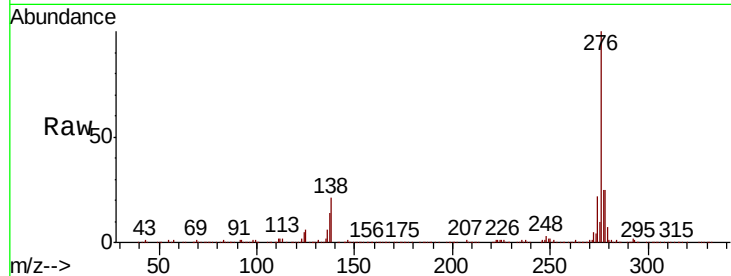
#87  
 Indeno(1,2,3-cd)pyrene  
 Concen: 30.700 ng  
 RT: 16.86 min Scan# 2511  
 Delta R.T. -0.01 min  
 Lab File: BF121699.D  
 Acq: 25 Sep 2020 16:55

Instrument :  
 BNA\_F  
 ClientSampleId :  
 WR-PILE-3-4

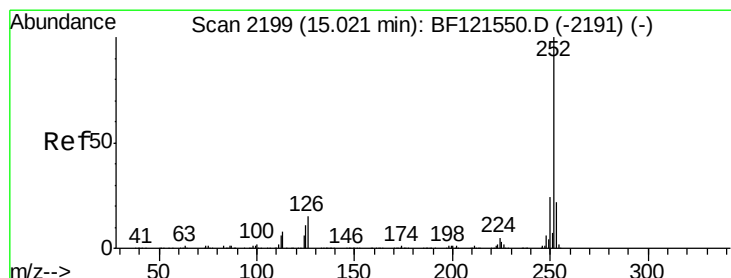
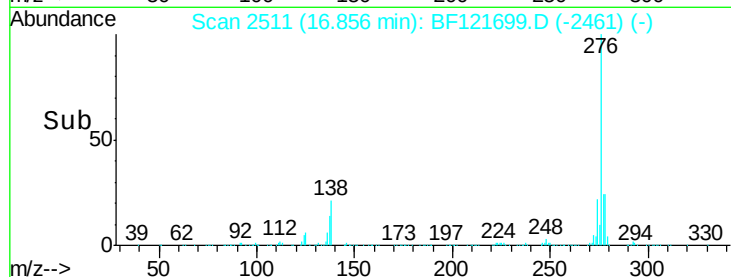
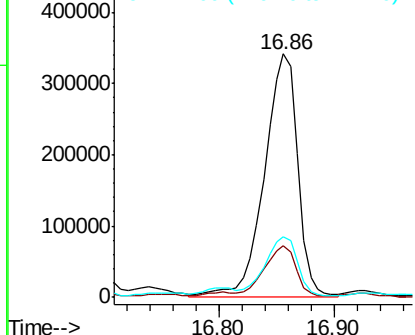
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 683823 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 20.0  | 19.2  | 28.8   |
| 277       | 23.9  | 20.1  | 30.1   |

Manual Integrations  
 APPROVED

mohammad  
 9/28/2020 11:10:39 AM



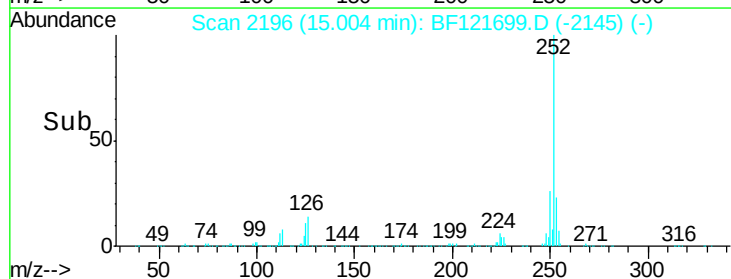
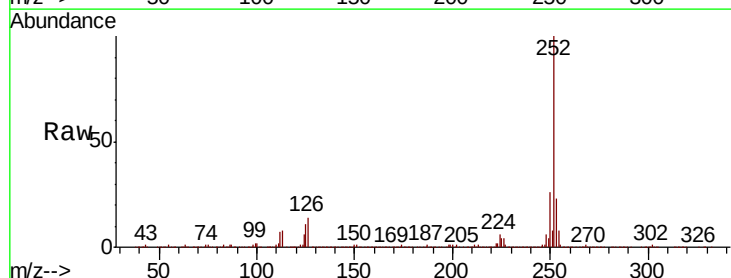
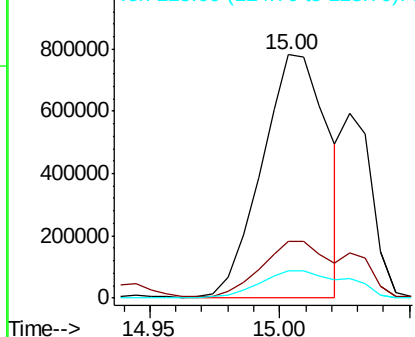
Abundance Ion 276.00 (275.70 to 276.70): E  
 Ion 138.00 (137.70 to 138.70): E  
 Ion 277.00 (276.70 to 277.70): E

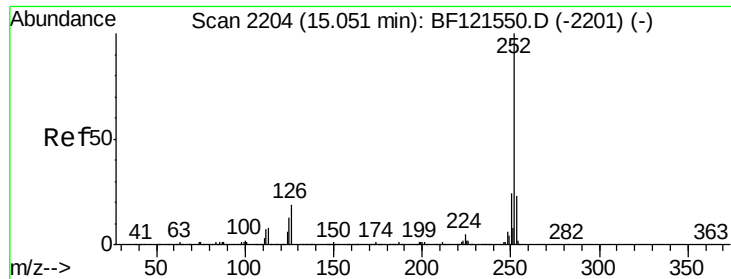


#88  
 Benzo(b)fluoranthene  
 Concen: 60.924 ng m  
 RT: 15.00 min Scan# 2196  
 Delta R.T. -0.00 min  
 Lab File: BF121699.D  
 Acq: 25 Sep 2020 16:55

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 252   | Resp: | 1393053 |
| Ion Ratio | Lower | Upper |         |
| 252       | 100   |       |         |
| 253       | 23.4  | 17.8  | 26.6    |
| 125       | 11.4  | 7.8   | 11.6    |

Abundance Ion 252.00 (251.70 to 252.70): E  
 Ion 253.00 (252.70 to 253.70): E  
 Ion 125.00 (124.70 to 125.70): E





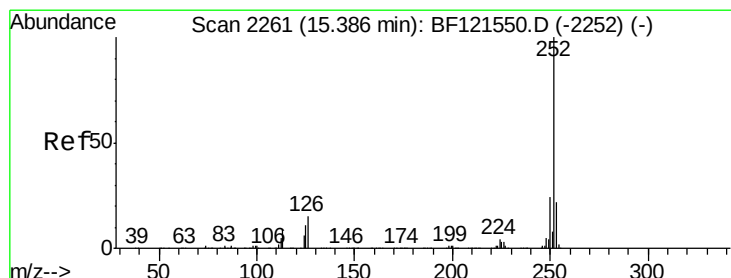
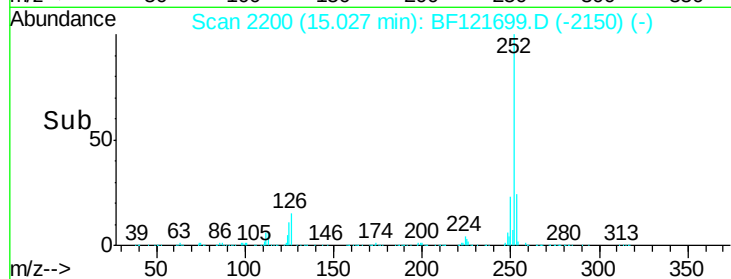
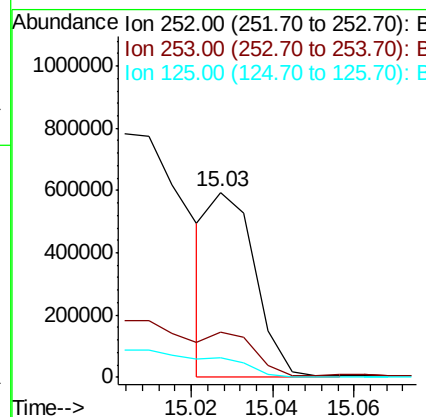
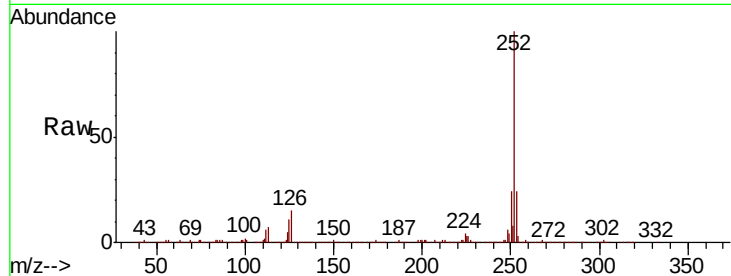
#89  
Benzo(k)fluoranthene  
Concen: 21.937 ng m  
RT: 15.03 min Scan# 2200  
Delta R.T. -0.01 min  
Lab File: BF121699.D  
Acq: 25 Sep 2020 16:55

Instrument :  
BNA\_F  
ClientSampleId :  
WR-PILE-3-4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.1  | 18.0  | 27.0  |
| 125     | 10.9  | 8.2   | 12.4  |

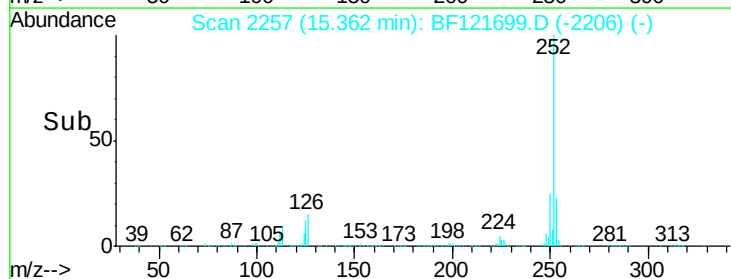
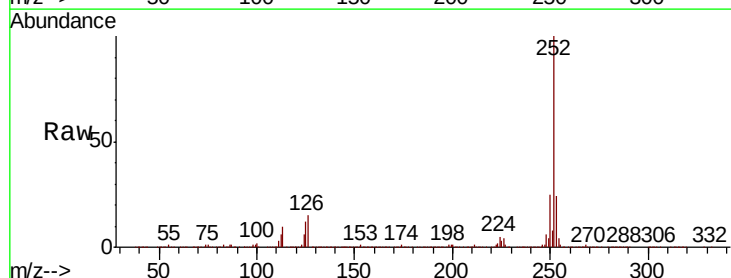
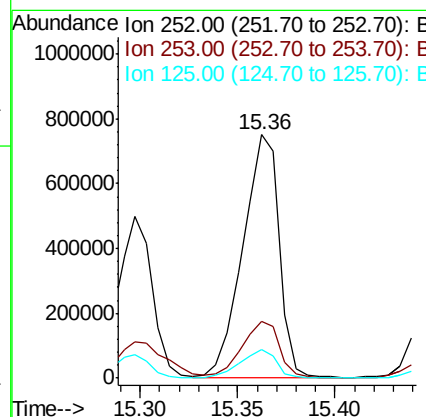
Manual Integrations  
APPROVED

mohammad  
9/28/2020 11:10:39 AM

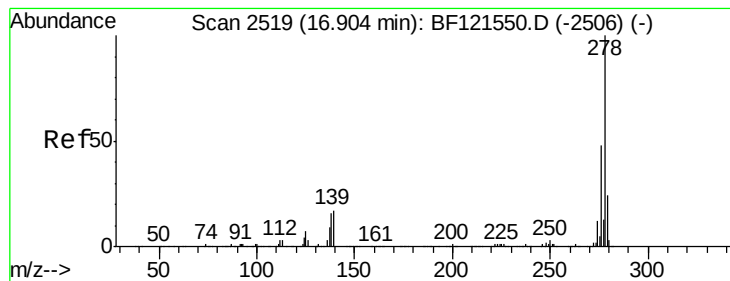


#90  
Benzo(a)pyrene  
Concen: 49.542 ng  
RT: 15.36 min Scan# 2257  
Delta R.T. -0.00 min  
Lab File: BF121699.D  
Acq: 25 Sep 2020 16:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.5  | 17.8  | 26.6  |
| 125     | 11.8  | 9.1   | 13.7  |







#91

Dibenzo(a,h)anthracene

Concen: 9.414 ng

RT: 16.86 min Scan# 2512

Delta R.T. -0.01 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

Instrument :

BNA\_F

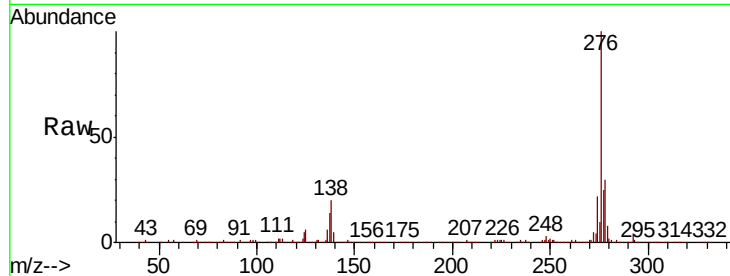
ClientSampleId :

WR-PILE-3-4

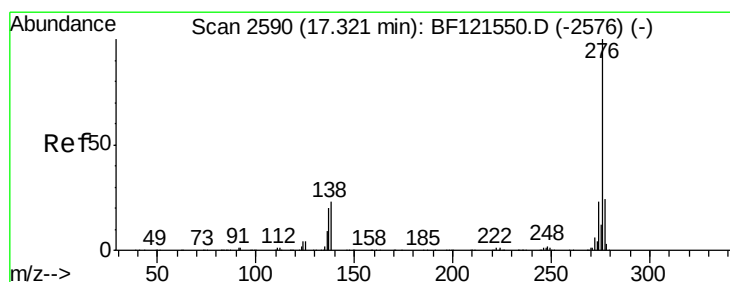
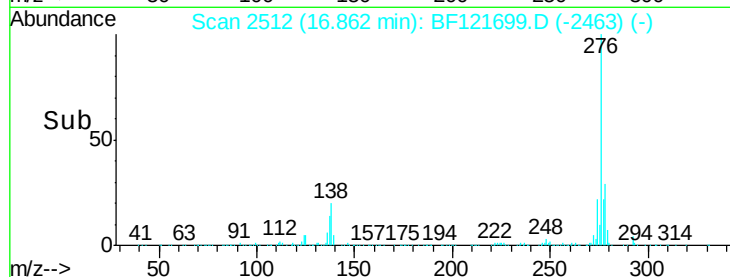
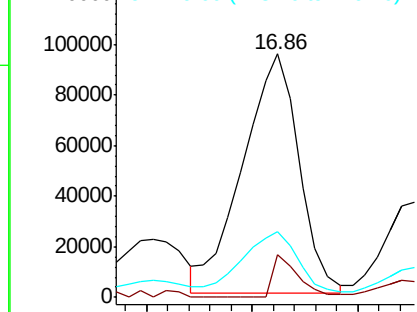
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 278   | Resp: | 174554 |
| Ion      | Ratio | Lower | Upper  |
| 278      | 100   |       |        |
| 139      | 17.6  | 12.6  | 19.0   |
| 279      | 26.9  | 19.4  | 29.2   |

Manual Integrations  
APPROVED

mohammad  
9/28/2020 11:10:39 AM



Abundance Ion 278.00 (277.70 to 278.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 279.00 (278.70 to 279.70): E



#92

Benzo(g,h,i)perylene

Concen: 33.485 ng

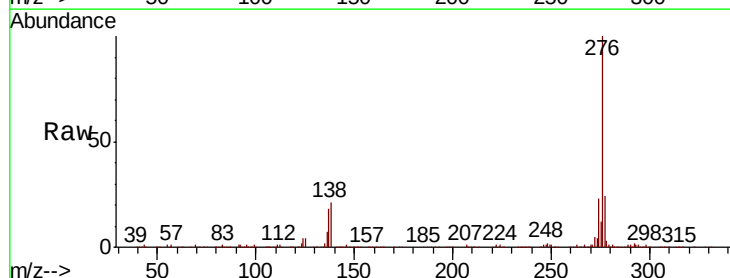
RT: 17.29 min Scan# 2585

Delta R.T. -0.00 min

Lab File: BF121699.D

Acq: 25 Sep 2020 16:55

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 276   | Resp: | 610318 |
| Ion      | Ratio | Lower | Upper  |
| 276      | 100   |       |        |
| 277      | 23.8  | 18.7  | 28.1   |
| 138      | 20.6  | 16.8  | 25.2   |



Abundance Ion 276.00 (275.70 to 276.70): E  
Ion 277.00 (276.70 to 277.70): E  
Ion 138.00 (137.70 to 138.70): E

