

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN020620\  
 Data File : BN009633.D  
 Acq On : 07 Feb 2020 05:59  
 Operator : CG/JU  
 Sample : L1324-05 10X  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAT62

Manual Integrations  
 APPROVED

mohammad  
 2/10/2020 8:20:35 AM

Quant Time: Feb 07 14:44:34 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN020320MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri Feb 07 11:12:58 2020  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.43  | 152  | 205739   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.19 | 136  | 853392   | 20.00 | ng/ul | 0.01     |
| 35) Acenaphthene-d10      | 14.07 | 164  | 522184   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.84 | 188  | 985736   | 20.00 | ng/ul | 0.01     |
| 77) Chrysene-d12          | 21.06 | 240  | 852864   | 20.00 | ng/ul | 0.02     |
| 85) Perylene-d12          | 23.17 | 264  | 969649   | 20.00 | ng/ul | 0.02     |

## System Monitoring Compounds

|                                |       |     |        |      |       |      |
|--------------------------------|-------|-----|--------|------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.10  | 96  | 311    | 0.06 | ng/uL | 0.02 |
| 5) Phenol-d5                   | 6.64  | 99  | 17748  | 0.99 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.80  | 67  | 11884  | 0.99 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 6.98  | 132 | 13459  | 1.02 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.16  | 113 | 14779  | 1.03 | ng/ul | 0.01 |
| 19) Nitrobenzene-d5            | 8.59  | 128 | 7032   | 1.11 | ng/ul | 0.01 |
| 22) 2-Nitrophenol-d4           | 9.30  | 143 | 7058   | 1.00 | ng/ul | 0.01 |
| 26) 2,4-Dichlorophenol-d3      | 9.83  | 165 | 14551  | 1.10 | ng/ul | 0.02 |
| 29) 4-Chloroaniline-d4         | 10.37 | 131 | 31090  | 2.18 | ng/ul | 0.04 |
| 43) Dimethylphthalate-d6       | 13.50 | 166 | 64332  | 1.69 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 13.77 | 160 | 54518  | 1.18 | ng/ul | 0.01 |
| 51) 4-Nitrophenol-d4           | 14.30 | 143 | 3421   | 0.48 | ng/ul | 0.00 |
| 57) Fluorene-d10               | 15.08 | 176 | 42952  | 1.28 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.26 | 200 | 3618m  | 0.59 | ng/ul | 0.04 |
| 70) Anthracene-d10             | 16.95 | 188 | 64274m | 1.43 | ng/ul | 0.02 |
| 78) Pyrene-d10                 | 19.25 | 212 | 64957  | 1.45 | ng/ul | 0.01 |
| 89) Benzo(a)pyrene-d12         | 23.04 | 264 | 62831  | 1.32 | ng/ul | 0.02 |

## Target Compounds

|                            |       |     |           |         | Ovalue    |
|----------------------------|-------|-----|-----------|---------|-----------|
| 14) Acetophenone           | 8.26  | 105 | 55959     | 2.447   | ng/ul 96  |
| 28) Naphthalene            | 10.25 | 128 | 35962307m | 777.081 | ng/ul     |
| 34) 2-Methylnaphthalene    | 11.88 | 142 | 20576523  | 635.344 | ng/ul 99  |
| 40) 1,1'-Biphenyl          | 12.90 | 154 | 4696352   | 115.512 | ng/ul 99  |
| 47) Acenaphthylene         | 13.81 | 152 | 17053682  | 338.333 | ng/ul# 86 |
| 49) Acenaphthene           | 14.14 | 153 | 1182858   | 34.520  | ng/ul 99  |
| 53) Dibenzofuran           | 14.48 | 168 | 1570450   | 32.912  | ng/ul 95  |
| 58) Fluorene               | 15.15 | 166 | 8074280   | 202.474 | ng/ul 98  |
| 69) Phenanthrene           | 16.89 | 178 | 26631469m | 473.739 | ng/ul     |
| 71) Anthracene             | 16.98 | 178 | 5385462   | 94.416  | ng/ul 99  |
| 74) Carbazole              | 17.25 | 167 | 166593    | 3.354   | ng/ul 94  |
| 76) Fluoranthene           | 18.92 | 202 | 15426812m | 240.443 | ng/ul     |
| 79) Pyrene                 | 19.28 | 202 | 19118037m | 307.072 | ng/ul     |
| 82) Benzo(a)anthracene     | 21.04 | 228 | 7916863m  | 134.445 | ng/ul     |
| 84) Chrysene               | 21.10 | 228 | 7171260   | 122.330 | ng/ul 98  |
| 87) Benzo(b)fluoranthene   | 22.56 | 252 | 5968824m  | 98.387  | ng/ul     |
| 88) Benzo(k)fluoranthene   | 22.58 | 252 | 1923373m  | 32.193  | ng/ul     |
| 90) Benzo(a)pyrene         | 23.09 | 252 | 4840631   | 86.120  | ng/ul 96  |
| 91) Indeno(1,2,3-cd)pyrene | 25.24 | 276 | 2828028   | 42.319  | ng/ul 94  |
| 92) Dibenz(a,h)anthracene  | 25.24 | 278 | 912852    | 16.228  | ng/ul# 91 |
| 93) Benzo(a,h,i)perylene   | 25.88 | 276 | 2878197   | 51.390  | ng/ul 92  |

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_N\DATA\BN020620\  
Data File : BN009633.D  
Acq On : 07 Feb 2020 05:59  
Operator : CG/JU  
Sample : L1324-05 10X  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
GAT62

Manual Integrations  
APPROVED

mohammad  
2/10/2020 8:20:35 AM

Quant Time: Feb 07 14:44:34 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN020320MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Feb 07 11:12:58 2020  
Response via : Initial Calibration

| Internal Standards                                                         | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------------------------------------------------------|------|------|----------|------|-------|----------|
| -----                                                                      |      |      |          |      |       |          |
| (#) = qualifier out of range (m) = manual integration (+) = signals summed |      |      |          |      |       |          |

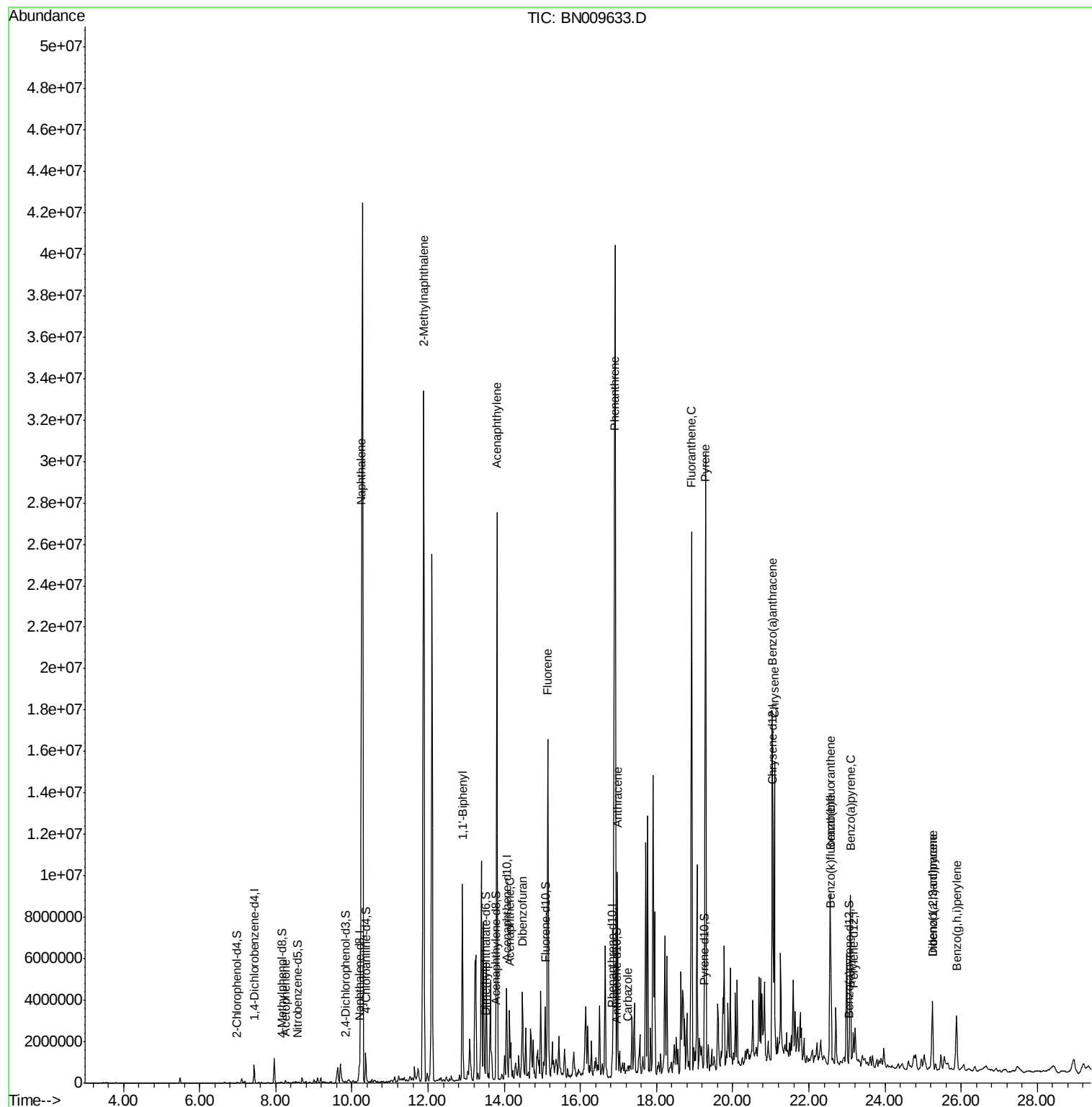
Data Path : Z:\SVOASRV\HPCHEM1\BNA\_N\DATA\BN020620\  
Data File : BN009633.D  
Acq On : 07 Feb 2020 05:59  
Operator : CG/JU  
Sample : L1324-05 10X  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

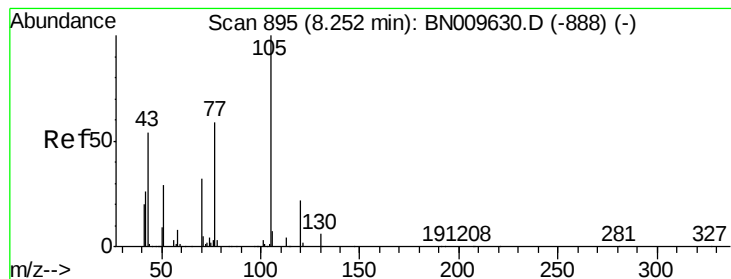
Instrument :  
BNA\_N  
ClientSampleId :  
GAT62

Manual Integrations  
APPROVED

mohammad  
2/10/2020 8:20:35 AM

Quant Time: Feb 07 14:44:34 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN020320MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Feb 07 11:12:58 2020  
Response via : Initial Calibration





#14

Acetophenone

Concen: 2.447 ng/ul

RT: 8.26 min Scan# 896

Delta R.T. 0.01 min

Lab File: BN009633.D

Acq: 07 Feb 2020 05:59

Instrument :

BNA\_N

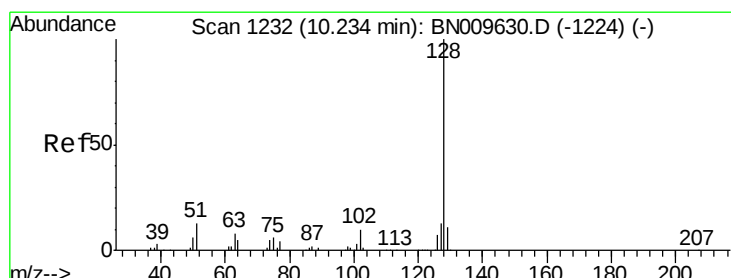
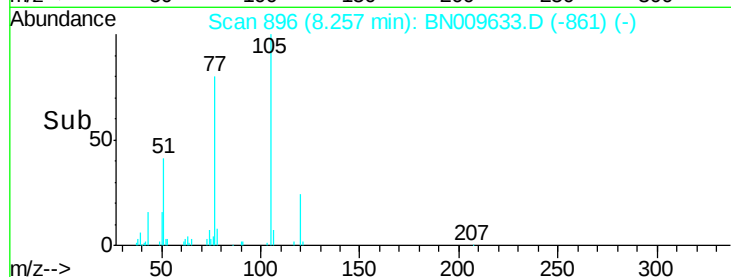
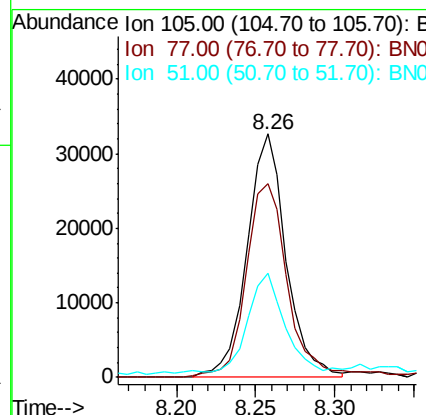
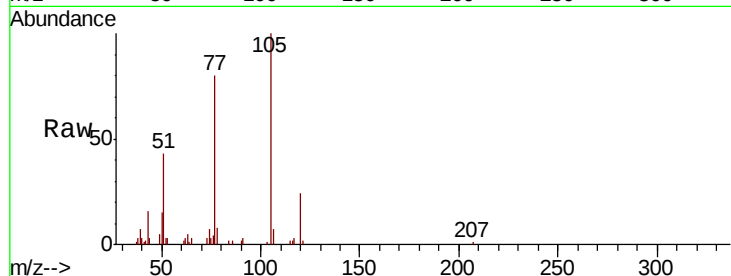
ClientSampleId :

GAT62

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 105   | Resp: | 55959 |
| Ion Ratio | Lower | Upper |       |
| 105       | 100   |       |       |
| 77        | 79.6  | 67.7  | 101.5 |
| 51        | 42.6  | 34.3  | 51.5  |

Manual Integrations  
APPROVED

mohammad  
2/10/2020 8:20:35 AM



#28

Naphthalene

Concen: 777.081 ng/ul m

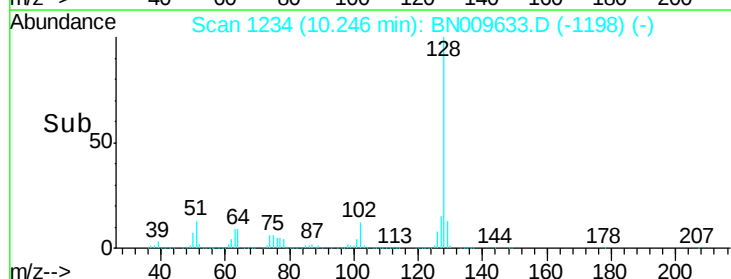
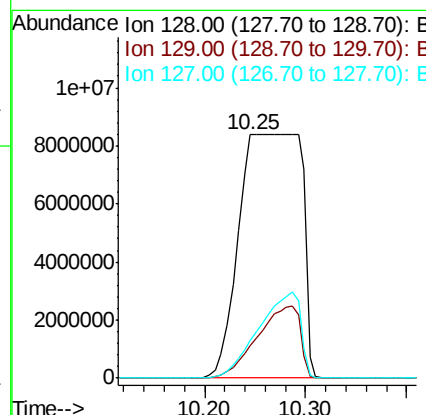
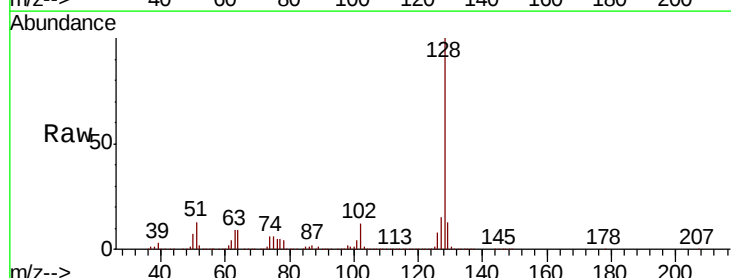
RT: 10.25 min Scan# 1234

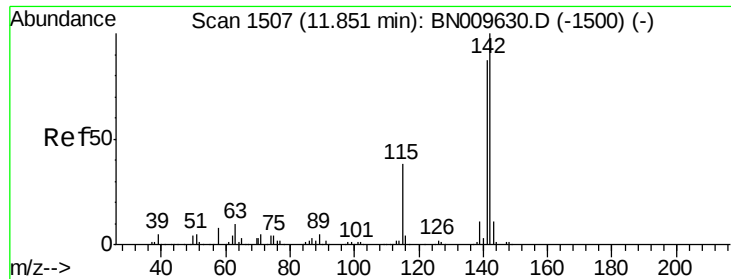
Delta R.T. 0.01 min

Lab File: BN009633.D

Acq: 07 Feb 2020 05:59

|           |       |       |          |
|-----------|-------|-------|----------|
| Tgt Ion:  | 128   | Resp: | 35962307 |
| Ion Ratio | Lower | Upper |          |
| 128       | 100   |       |          |
| 129       | 13.3  | 8.7   | 13.1#    |
| 127       | 15.3  | 10.7  | 16.1     |





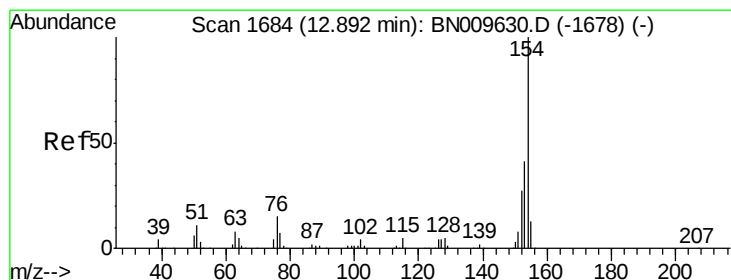
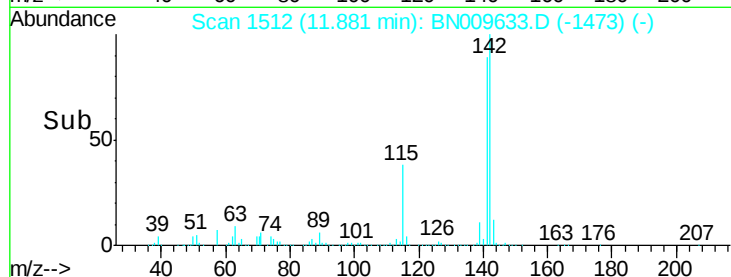
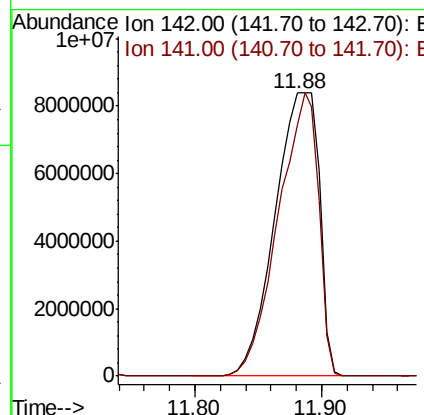
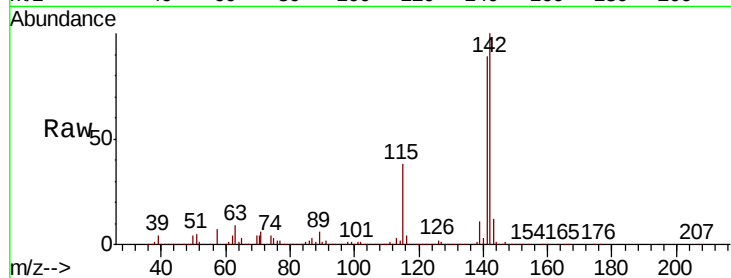
#34  
2-Methylnaphthalene  
Concen: 635.344 ng/ul  
RT: 11.88 min Scan# 1512  
Delta R.T. 0.03 min  
Lab File: BN009633.D  
Acq: 07 Feb 2020 05:59

Instrument :  
BNA\_N  
ClientSampleId :  
GAT62

Tot Ion:142 Resp:20576523  
Ion Ratio Lower Upper  
142 100  
141 88.9 71.5 107.3

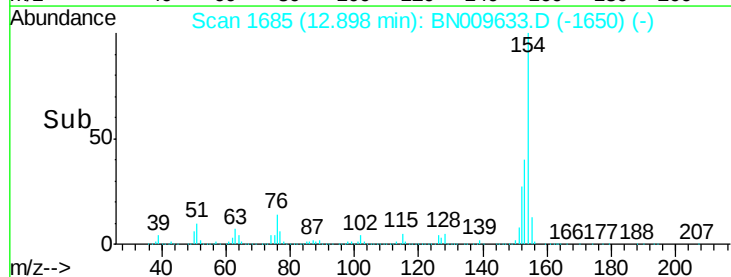
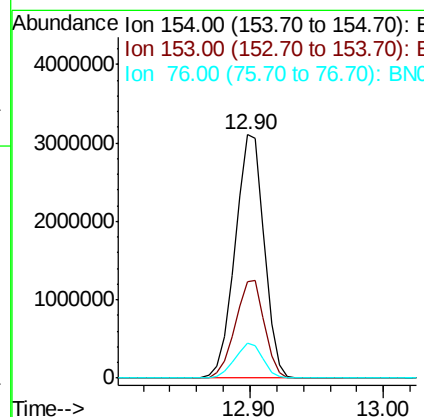
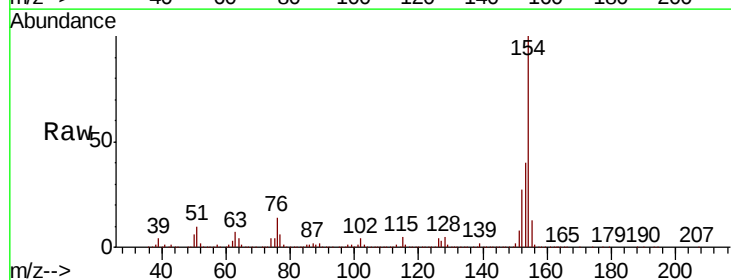
Manual Integrations  
APPROVED

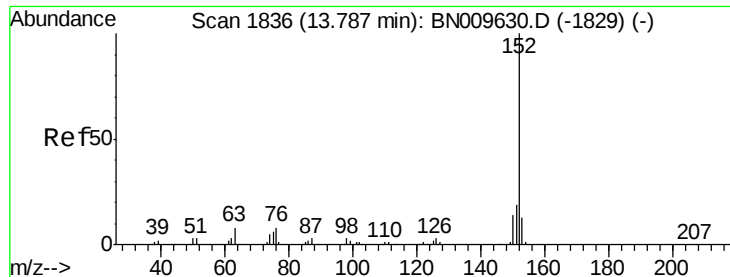
mohammad  
2/10/2020 8:20:35 AM



#40  
1,1'-Biphenyl  
Concen: 115.512 ng/ul  
RT: 12.90 min Scan# 1685  
Delta R.T. 0.01 min  
Lab File: BN009633.D  
Acq: 07 Feb 2020 05:59

Tgt Ion:154 Resp: 4696352  
Ion Ratio Lower Upper  
154 100  
153 39.7 31.2 46.8  
76 14.1 11.4 17.2





#47

Acenaphthylene

Concen: 338.333 ng/ul

RT: 13.81 min Scan# 1840

Delta R.T. 0.02 min

Lab File: BN009633.D

Acq: 07 Feb 2020 05:59

Instrument :

BNA\_N

ClientSampleId :

GAT62

Tot Ion:152 Resp:17053682

Ion Ratio Lower Upper

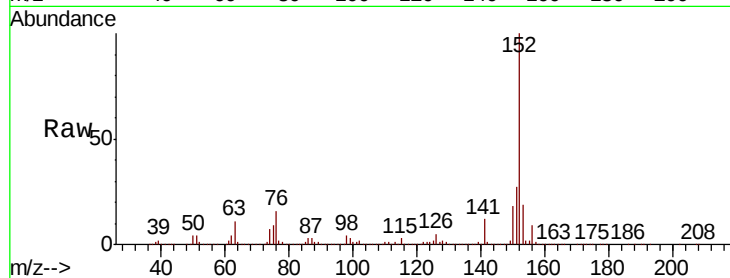
152 100

151 27.1 16.2 24.2#

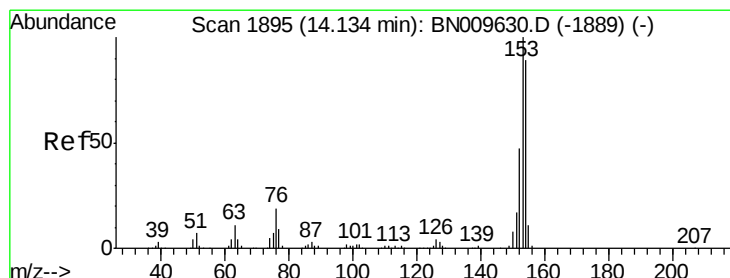
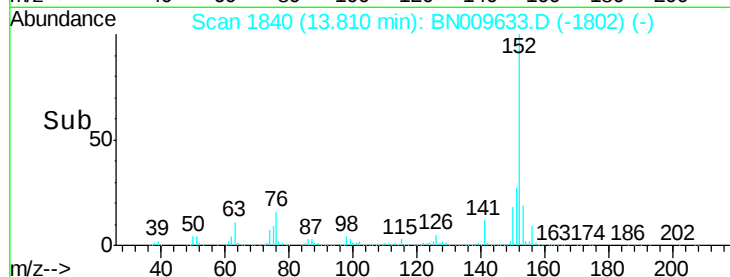
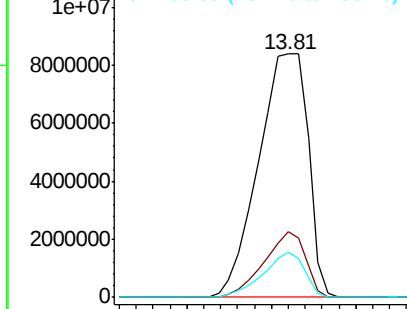
153 18.6 10.6 15.8#

Manual Integrations  
APPROVED

mohammad  
2/10/2020 8:20:35 AM



Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 151.00 (150.70 to 151.70): E  
Ion 153.00 (152.70 to 153.70): E



#49

Acenaphthene

Concen: 34.520 ng/ul

RT: 14.14 min Scan# 1896

Delta R.T. 0.01 min

Lab File: BN009633.D

Acq: 07 Feb 2020 05:59

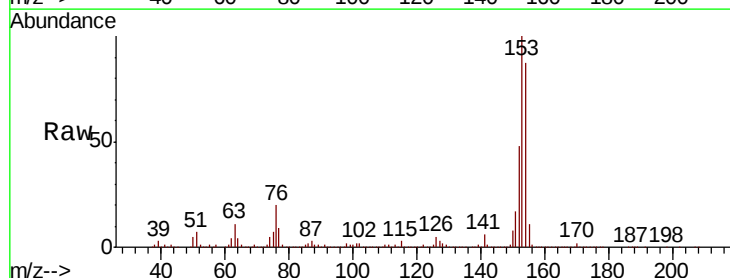
Tgt Ion:153 Resp: 1182858

Ion Ratio Lower Upper

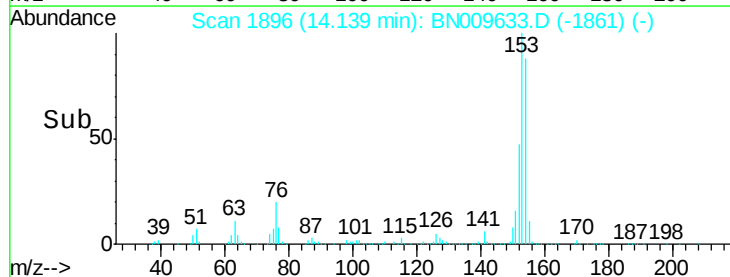
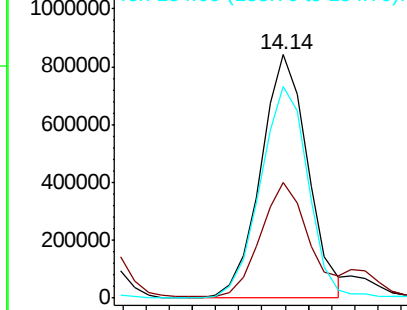
153 100

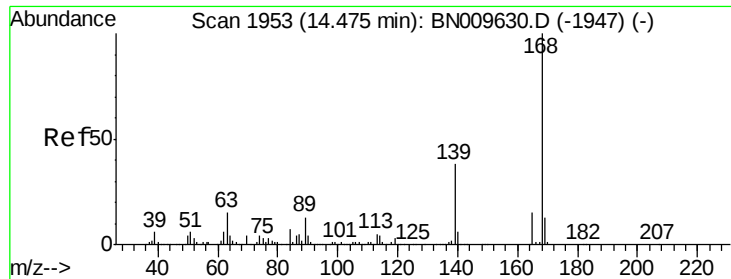
152 47.6 37.3 55.9

154 87.0 70.2 105.2



Abundance Ion 153.00 (152.70 to 153.70): E  
Ion 152.00 (151.70 to 152.70): E  
Ion 154.00 (153.70 to 154.70): E





#53

Dibenzofuran

Concen: 32.912 ng/ul

RT: 14.48 min Scan# 1954

Delta R.T. 0.01 min

Lab File: BN009633.D

Acq: 07 Feb 2020 05:59

Instrument :

BNA\_N

ClientSampleId :

GAT62

Tot Ion:168 Resp: 1570450

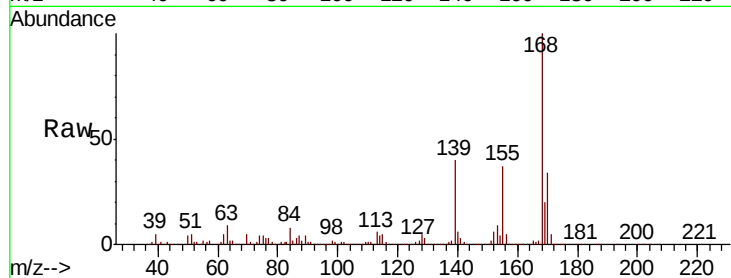
Ion Ratio Lower Upper

168 100

139 40.0 29.5 44.3

Manual Integrations  
APPROVED

mohammad  
2/10/2020 8:20:35 AM



Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E

1200000

1000000

800000

600000

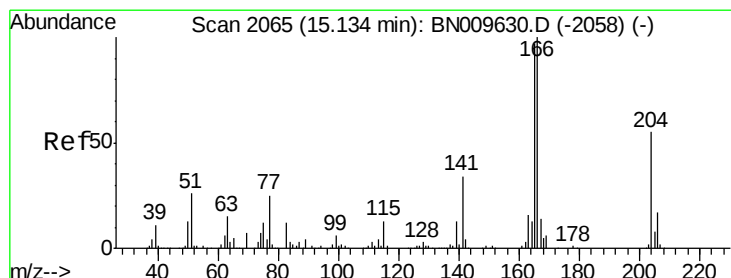
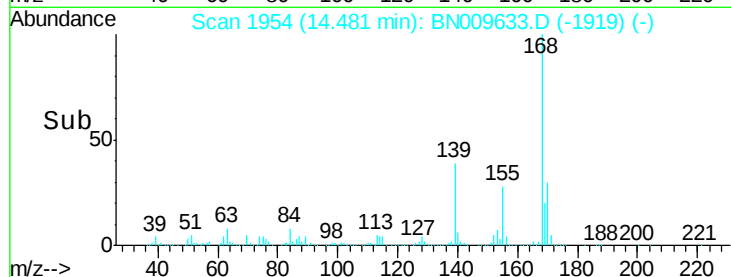
400000

200000

0

14.40 14.45 14.50

Time-->



#58

Fluorene

Concen: 202.474 ng/ul

RT: 15.15 min Scan# 2067

Delta R.T. 0.01 min

Lab File: BN009633.D

Acq: 07 Feb 2020 05:59

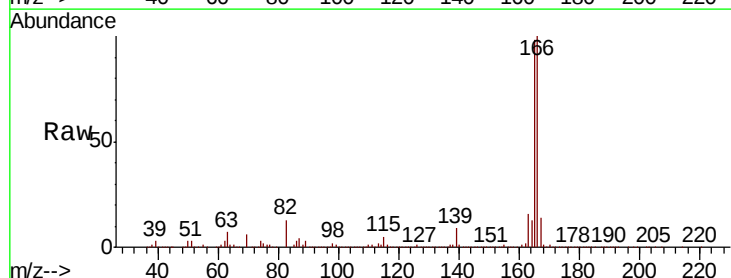
Tgt Ion:166 Resp: 8074280

Ion Ratio Lower Upper

166 100

165 97.9 76.7 115.1

167 13.9 11.1 16.7



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

6000000

5000000

4000000

3000000

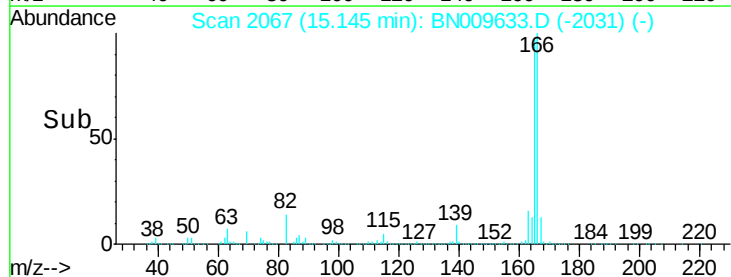
2000000

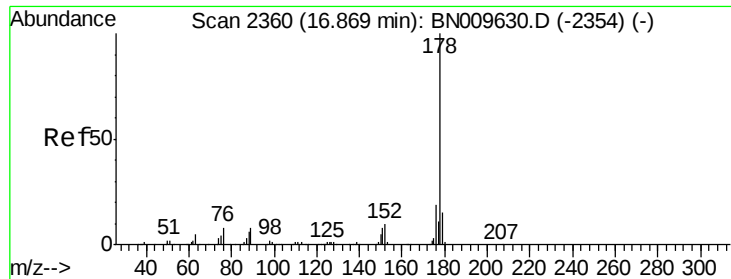
1000000

0

15.10 15.15 15.20

Time-->





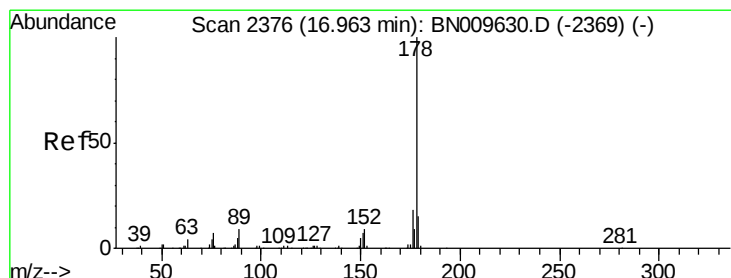
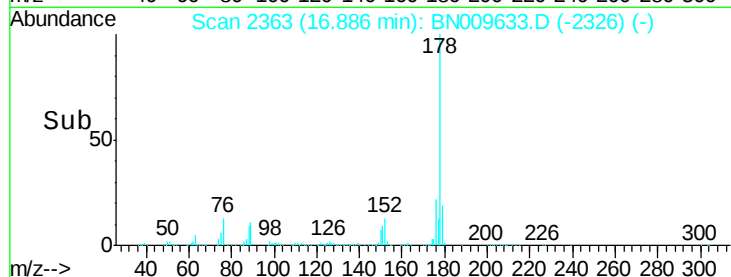
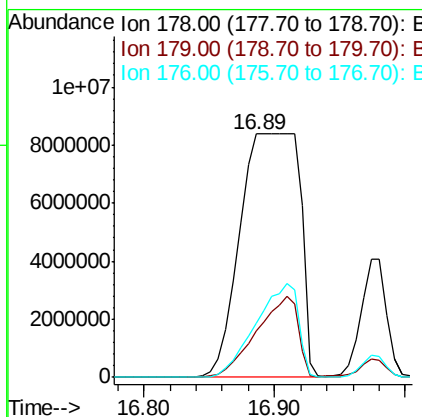
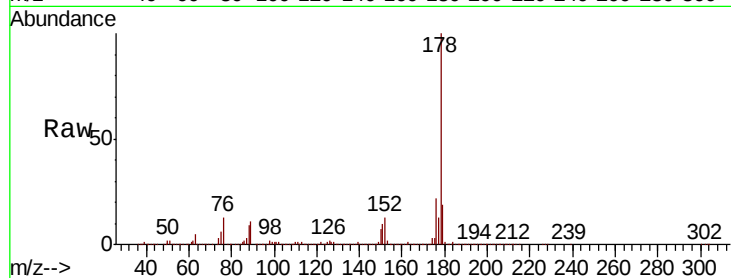
#69  
Phenanthrene  
Concen: 473.739 ng/ul  
RT: 16.89 min Scan# 2363  
Delta R.T. 0.02 min  
Lab File: BN009633.D  
Acq: 07 Feb 2020 05:59

Instrument :  
BNA\_N  
ClientSampled :  
GAT62

Tot Ion:178 Resp:26631469  
Ion Ratio Lower Upper  
178 100  
179 19.1 12.2 18.2#  
176 22.3 14.8 22.2#

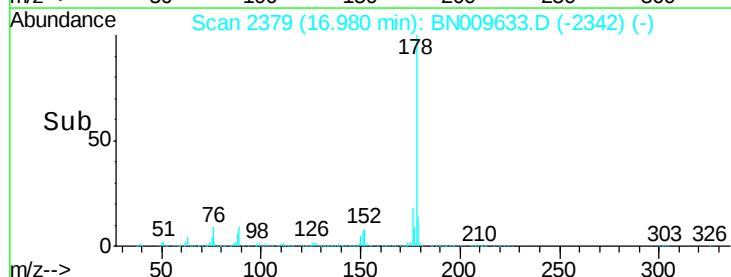
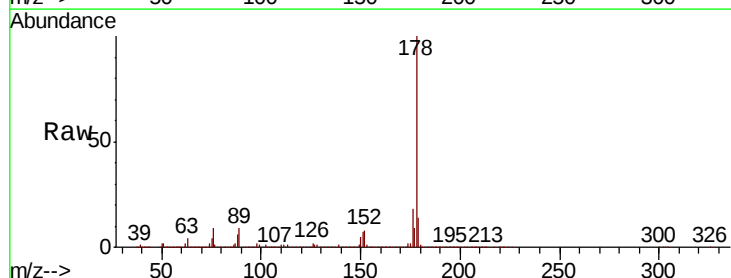
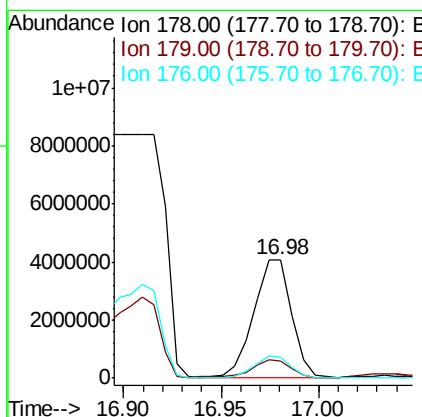
Manual Integrations  
APPROVED

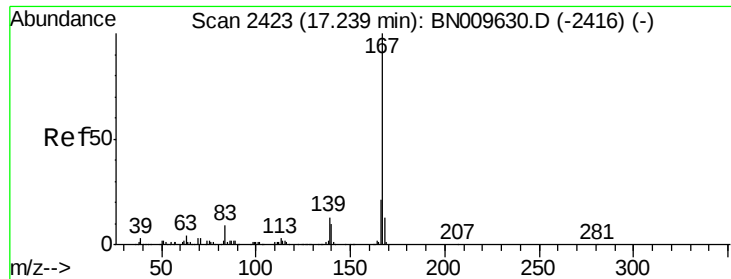
mohammad  
2/10/2020 8:20:35 AM



#71  
Anthracene  
Concen: 94.416 ng/ul  
RT: 16.98 min Scan# 2379  
Delta R.T. 0.02 min  
Lab File: BN009633.D  
Acq: 07 Feb 2020 05:59

Tgt Ion:178 Resp: 5385462  
Ion Ratio Lower Upper  
178 100  
179 14.5 12.1 18.1  
176 17.7 14.6 21.8





#74

Carbazole

Concen: 3.354 ng/ul

RT: 17.25 min Scan# 2424

Delta R.T. 0.01 min

Lab File: BN009633.D

Acq: 07 Feb 2020 05:59

Instrument :

BNA\_N

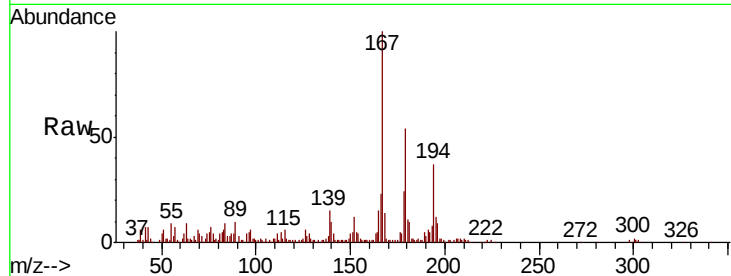
ClientSampleId :

GAT62

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 167   | Resp: | 166593 |
| Ion Ratio | Lower | Upper |        |
| 167       | 100   |       |        |
| 166       | 23.4  | 16.2  | 24.4   |
| 139       | 15.4  | 10.4  | 15.6   |

Manual Integrations  
APPROVED

mohammad  
2/10/2020 8:20:35 AM

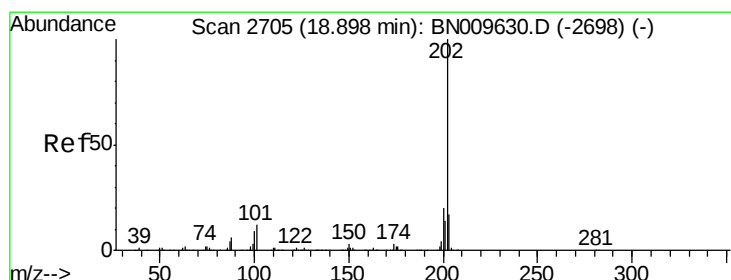
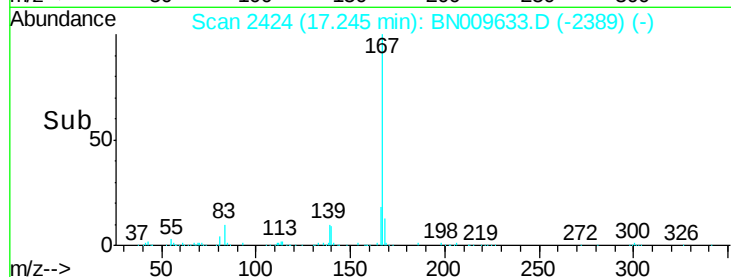
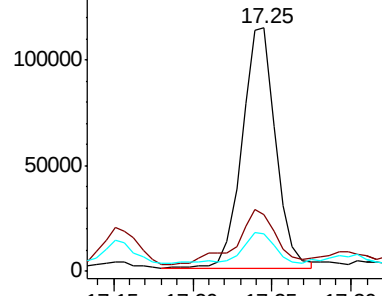


Abundance

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



#76

Fluoranthene

Concen: 240.443 ng/ul m

RT: 18.92 min Scan# 2709

Delta R.T. 0.02 min

Lab File: BN009633.D

Acq: 07 Feb 2020 05:59

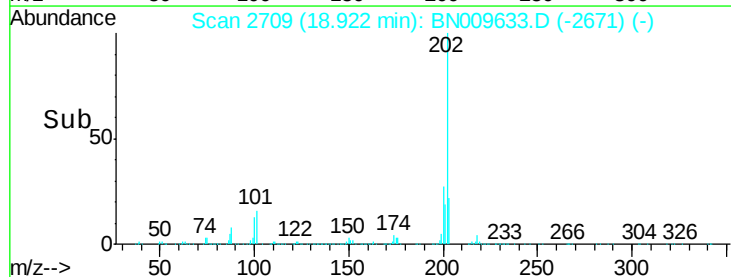
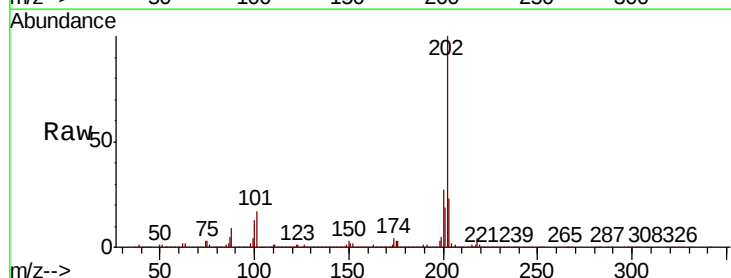
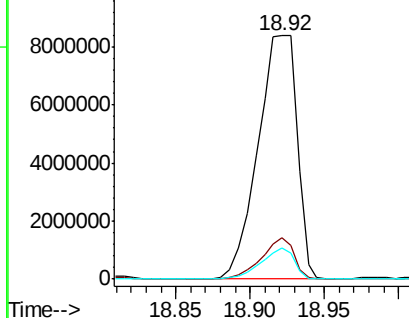
|           |       |       |          |
|-----------|-------|-------|----------|
| Tgt Ion:  | 202   | Resp: | 15426812 |
| Ion Ratio | Lower | Upper |          |
| 202       | 100   |       |          |
| 101       | 17.0  | 9.2   | 13.8#    |
| 100       | 13.0  | 6.9   | 10.3#    |

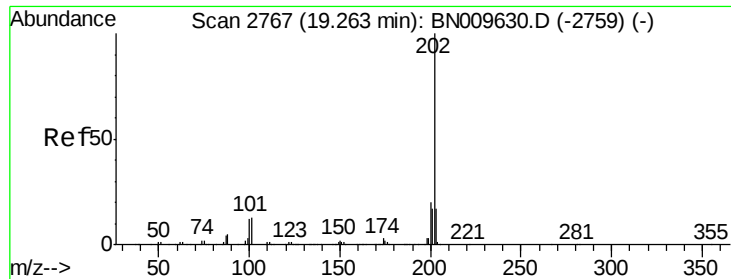
Abundance

Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B





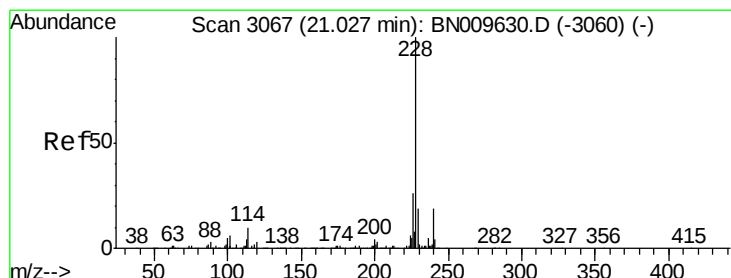
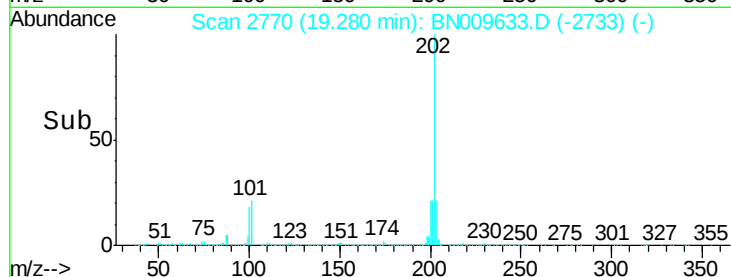
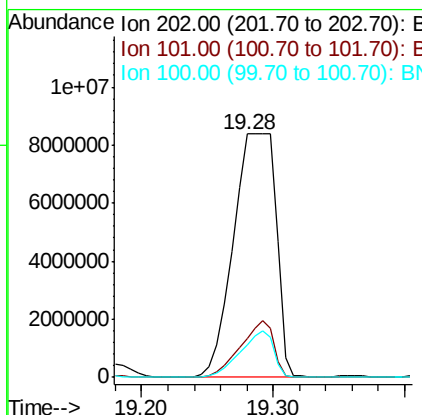
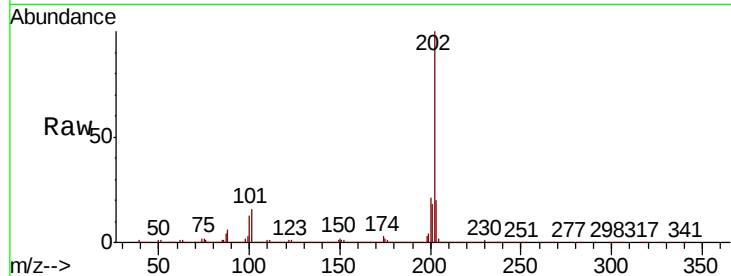
#79  
Pvrene  
Concen: 307.072 ng/ul m  
RT: 19.28 min Scan# 2770  
Delta R.T. 0.02 min  
Lab File: BN009633.D  
Acq: 07 Feb 2020 05:59

Instrument :  
BNA\_N  
ClientSampleId :  
GAT62

Tot Ion:202 Resp:19118037  
Ion Ratio Lower Upper  
202 100  
101 16.1 10.3 15.5#  
100 13.3 8.4 12.6#

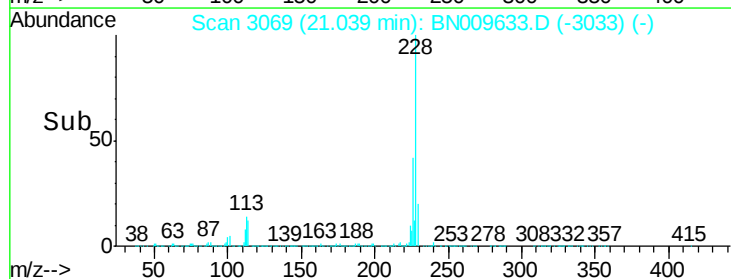
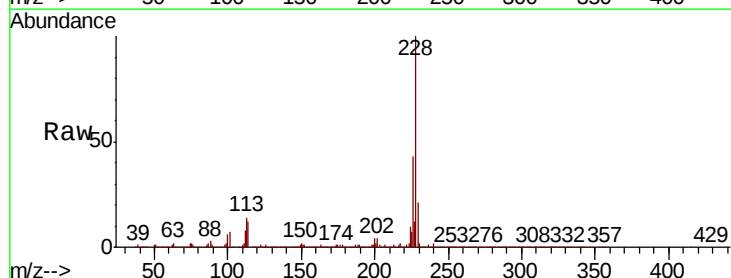
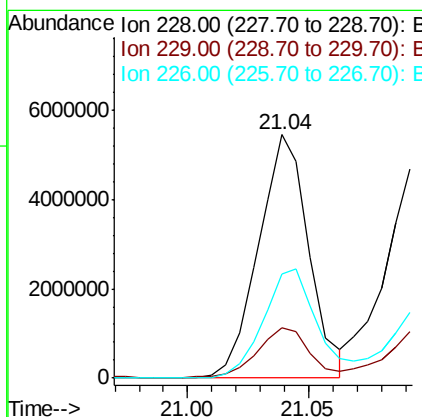
Manual Integrations  
APPROVED

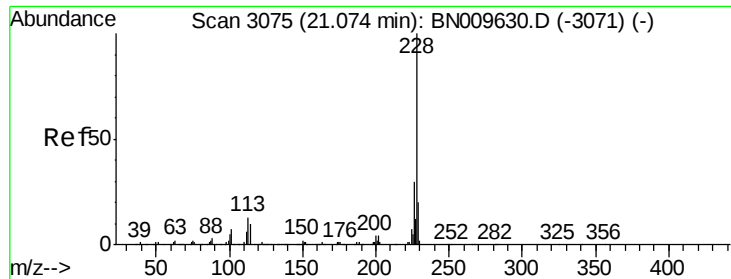
mohammad  
2/10/2020 8:20:35 AM



#82  
Benzo(a)anthracene  
Concen: 134.445 ng/ul m  
RT: 21.04 min Scan# 3069  
Delta R.T. 0.01 min  
Lab File: BN009633.D  
Acq: 07 Feb 2020 05:59

Tgt Ion:228 Resp: 7916863  
Ion Ratio Lower Upper  
228 100  
229 20.8 15.0 22.4  
226 42.6 20.9 31.3#





#84

Chrysene

Concen: 122.330 ng/ul

RT: 21.10 min Scan# 3079

Delta R.T. 0.02 min

Lab File: BN009633.D

Acq: 07 Feb 2020 05:59

Instrument :

BNA\_N

ClientSampleId :

GAT62

Tot Ion:228 Resp: 7171260

Ion Ratio Lower Upper

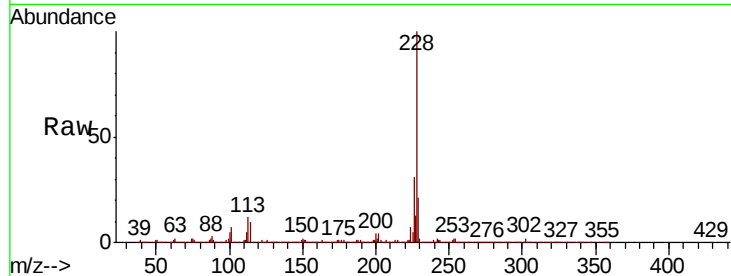
228 100

226 30.8 23.5 35.3

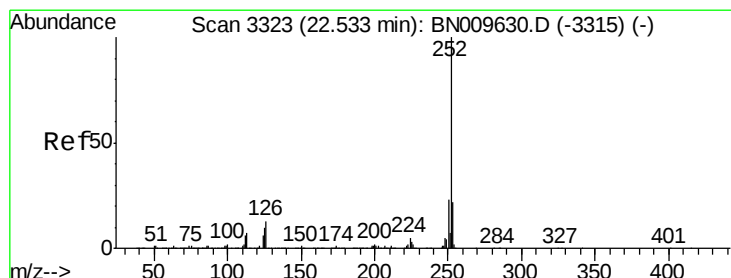
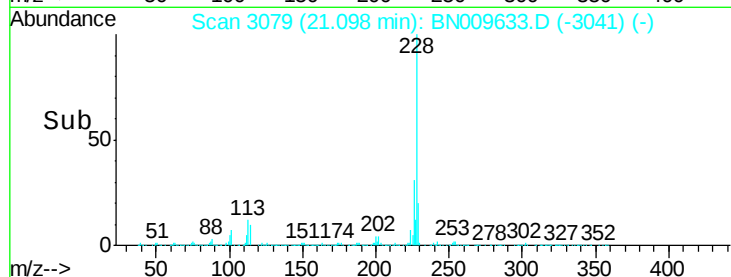
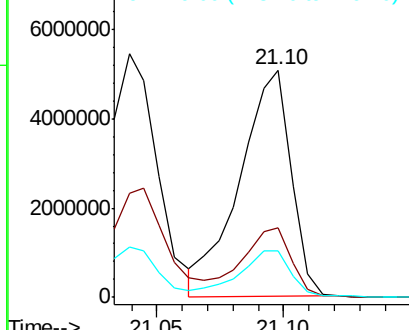
229 20.7 15.8 23.8

Manual Integrations  
APPROVED

mohammad  
2/10/2020 8:20:35 AM



Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E



#87

Benzo(b)fluoranthene

Concen: 98.387 ng/ul m

RT: 22.56 min Scan# 3328

Delta R.T. 0.03 min

Lab File: BN009633.D

Acq: 07 Feb 2020 05:59

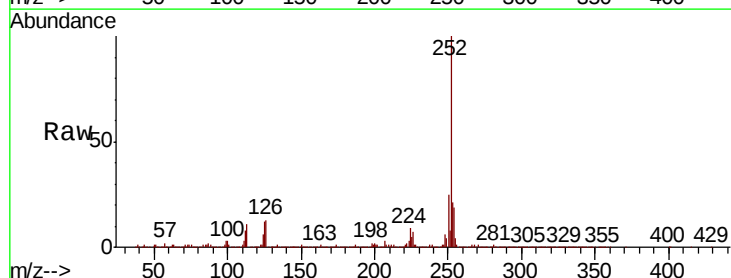
Tgt Ion:252 Resp: 5968824

Ion Ratio Lower Upper

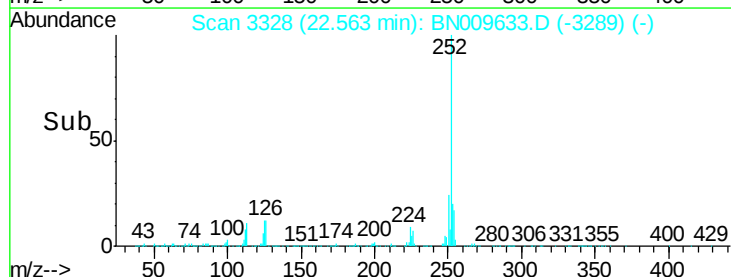
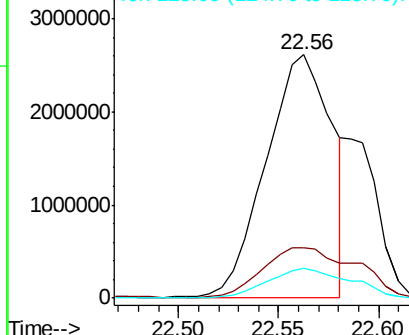
252 100

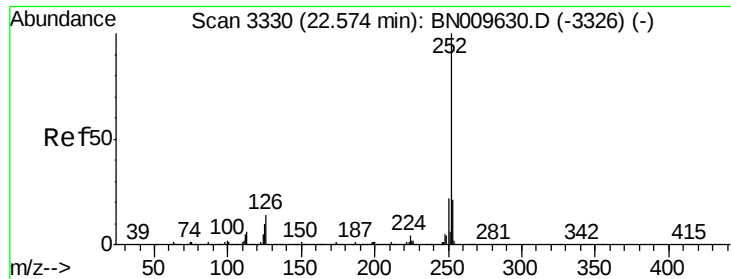
253 20.9 17.0 25.6

125 12.3 8.2 12.2#



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





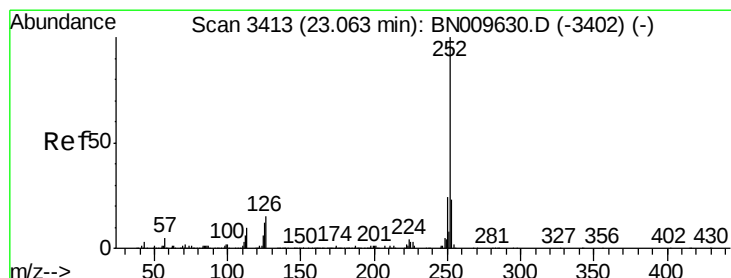
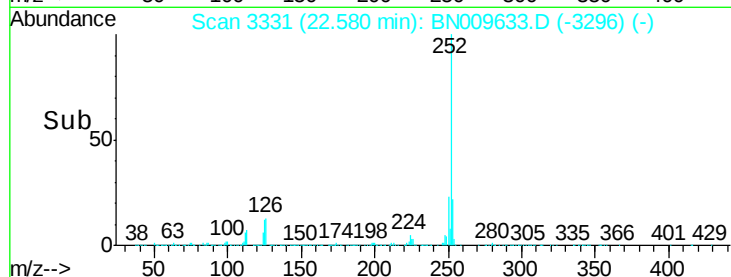
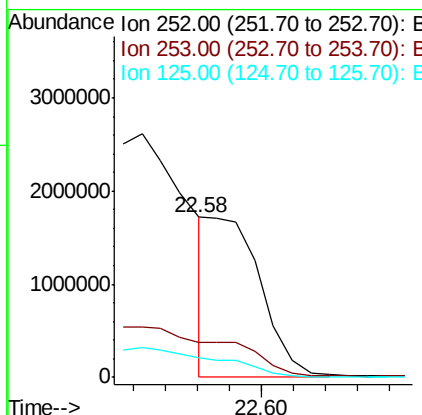
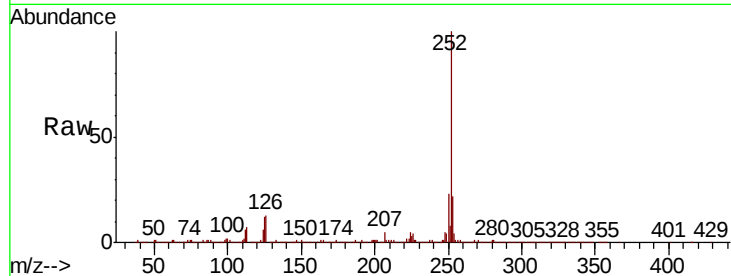
#88  
Benzo(k)fluoranthene  
Concen: 32.193 ng/ul m  
RT: 22.58 min Scan# 3331  
Delta R.T. 0.01 min  
Lab File: BN009633.D  
Acq: 07 Feb 2020 05:59

Instrument :  
BNA\_N  
ClientSampleId :  
GAT62

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.2  | 17.0  | 25.4  |
| 125     | 11.9  | 8.0   | 12.0  |

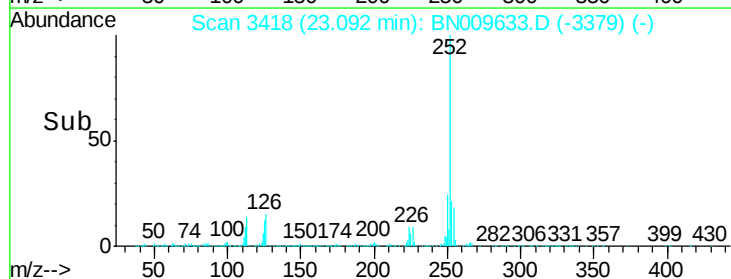
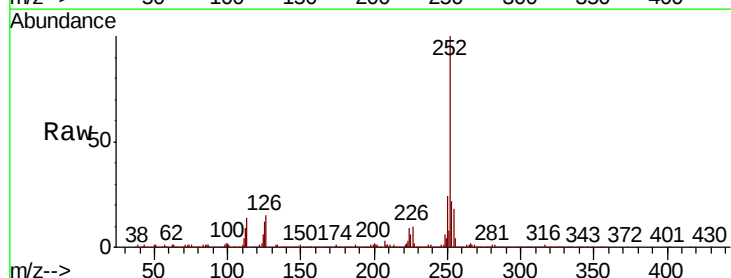
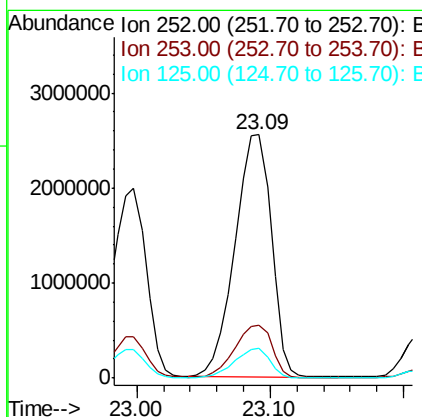
Manual Integrations  
APPROVED

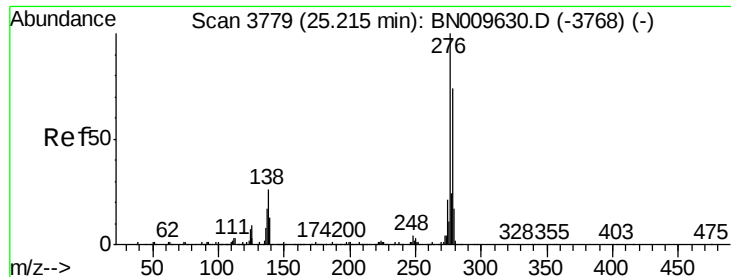
mohammad  
2/10/2020 8:20:35 AM



#90  
Benzo(a)pyrene  
Concen: 86.120 ng/ul  
RT: 23.09 min Scan# 3418  
Delta R.T. 0.03 min  
Lab File: BN009633.D  
Acq: 07 Feb 2020 05:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.8  | 15.8  | 23.8  |
| 125     | 12.3  | 8.7   | 13.1  |





#91

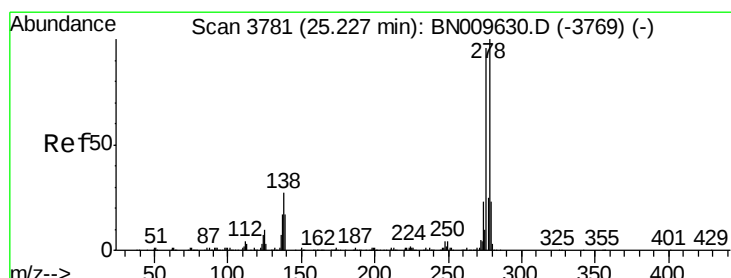
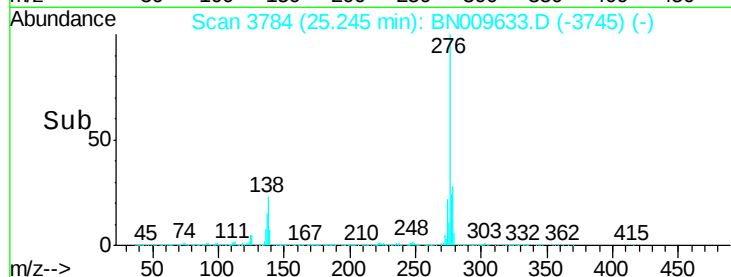
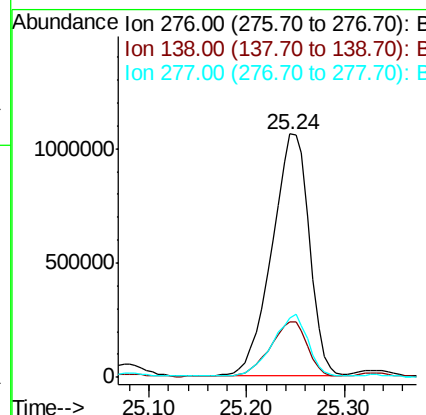
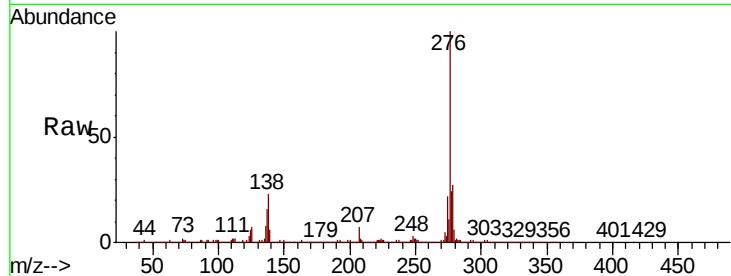
Indeno(1,2,3-cd)pyrene  
Concen: 42.319 ng/ul  
RT: 25.24 min Scan# 3784  
Delta R.T. 0.03 min  
Lab File: BN009633.D  
Acq: 07 Feb 2020 05:59

Instrument :  
BNA\_N  
ClientSampleId :  
GAT62

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 28.7  | 20.3  | 30.5  |
| 277     | 24.1  | 21.2  | 31.8  |

Manual Integrations  
APPROVED

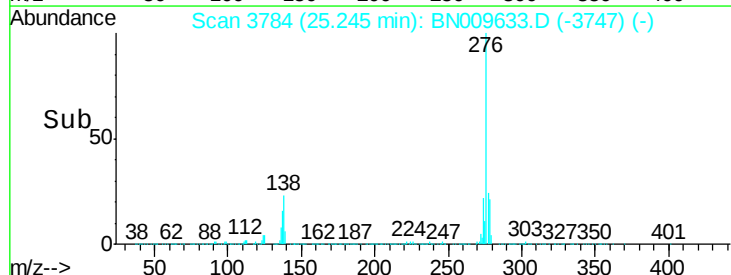
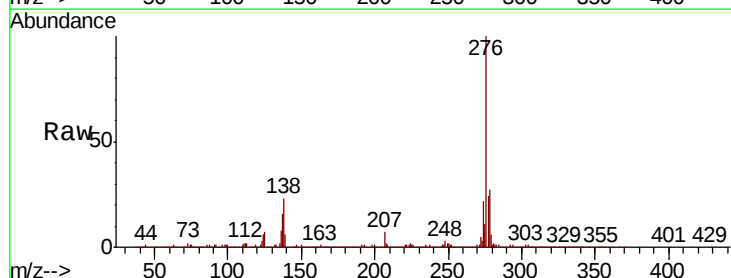
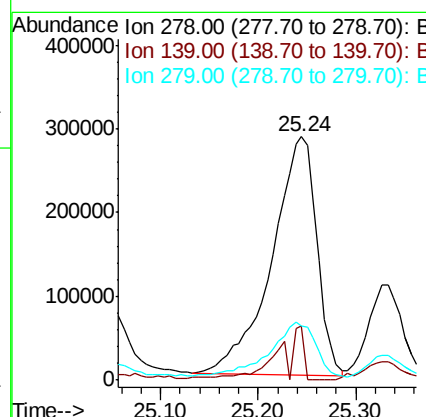
mohammad  
2/10/2020 8:20:35 AM

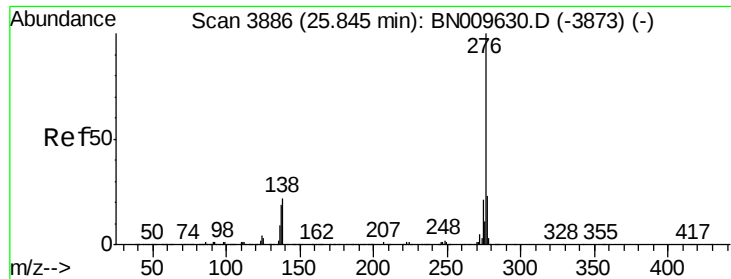


#92

Dibenzo(a,h)anthracene  
Concen: 16.228 ng/ul  
RT: 25.24 min Scan# 3784  
Delta R.T. 0.02 min  
Lab File: BN009633.D  
Acq: 07 Feb 2020 05:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 22.4  | 12.7  | 19.1# |
| 279     | 22.5  | 19.8  | 29.8  |





#93  
 Benzo(a,h,i)perylene  
 Concen: 51.390 ng/ul  
 RT: 25.88 min Scan# 3892  
 Delta R.T. 0.04 min  
 Lab File: BN009633.D  
 Acq: 07 Feb 2020 05:59

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAT62

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 23.6  | 16.0  | 24.0  |
| 277     | 25.1  | 17.0  | 25.6  |

Manual Integrations  
 APPROVED

mohammad  
 2/10/2020 8:20:35 AM

