

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121319\  
 Data File : BN008978.D  
 Acq On : 13 Dec 2019 21:58  
 Operator : JU  
 Sample : K6089-19DL 2X  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 C0BR5DL

Manual Integrations  
 APPROVED

mohammad  
 12/16/2019 12:24:13 PM

Quant Time: Dec 13 23:45:37 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111519.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Dec 13 23:22:26 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.55  | 152  | 2485     | 0.40   | ng/ul  | 0.00     |
| 2) Naphthalene-d8           | 10.31 | 136  | 11036    | 0.40   | ng/ul  | 0.00     |
| 6) Acenaphthene-d10         | 14.18 | 164  | 7159     | 0.40   | ng/ul  | 0.00     |
| 10) Phenanthrene-d10        | 16.92 | 188  | 16453    | 0.40   | ng/ul  | 0.00     |
| 16) Chrysene-d12            | 21.13 | 240  | 13813    | 0.40   | ng/ul  | 0.00     |
| 20) Perylene-d12            | 23.27 | 264  | 11908    | 0.40   | ng/ul  | 0.00     |
| System Monitoring Compounds |       |      |          |        |        |          |
| 4) 2-Methylnaphthalene-d10  | 11.90 | 152  | 2626     | 0.15   | ng/ul  | 0.00     |
| 14) Fluoranthene-d10        | 18.96 | 212  | 8069     | 0.16   | ng/ul  | 0.00     |
| Target Compounds            |       |      |          | Ovalue |        |          |
| 3) Naphthalene              | 10.36 | 128  | 4611     | 0.139  | ng/ul  | 97       |
| 5) 2-Methylnaphthalene      | 11.98 | 142  | 3493     | 0.150  | ng/ul  | 100      |
| 7) Acenaphthylene           | 13.89 | 152  | 8942     | 0.226  | ng/ul  | 98       |
| 12) Phenanthrene            | 16.97 | 178  | 13877    | 0.250  | ng/ul  | 99       |
| 13) Anthracene              | 17.06 | 178  | 6118     | 0.117  | ng/ul  | 97       |
| 15) Fluoranthene            | 18.99 | 202  | 46812    | 0.687  | ng/ul  | 100      |
| 17) Pyrene                  | 19.35 | 202  | 45833    | 0.827  | ng/ul  | 99       |
| 18) Benzo(a)anthracene      | 21.11 | 228  | 48653    | 0.876  | ng/ul  | 94       |
| 19) Chrysene                | 21.17 | 228  | 60102    | 1.102  | ng/ul  | 98       |
| 21) Benzo(b)fluoranthene    | 22.64 | 252  | 74585m   | 1.519  | ng/ul  |          |
| 22) Benzo(k)fluoranthene    | 22.68 | 252  | 27828m   | 0.571  | ng/ul  |          |
| 23) Benzo(a)pyrene          | 23.18 | 252  | 42075    | 0.913  | ng/ul  | 97       |
| 24) Indeno(1,2,3-cd)pyrene  | 25.38 | 276  | 23591    | 0.438  | ng/ul# | 92       |
| 25) Dibenzo(a,h)anthracene  | 25.39 | 278  | 6965     | 0.160  | ng/ul# | 88       |
| 26) Benzo(g,h,i)perylene    | 26.02 | 276  | 20260    | 0.449  | ng/ul  | 99       |

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

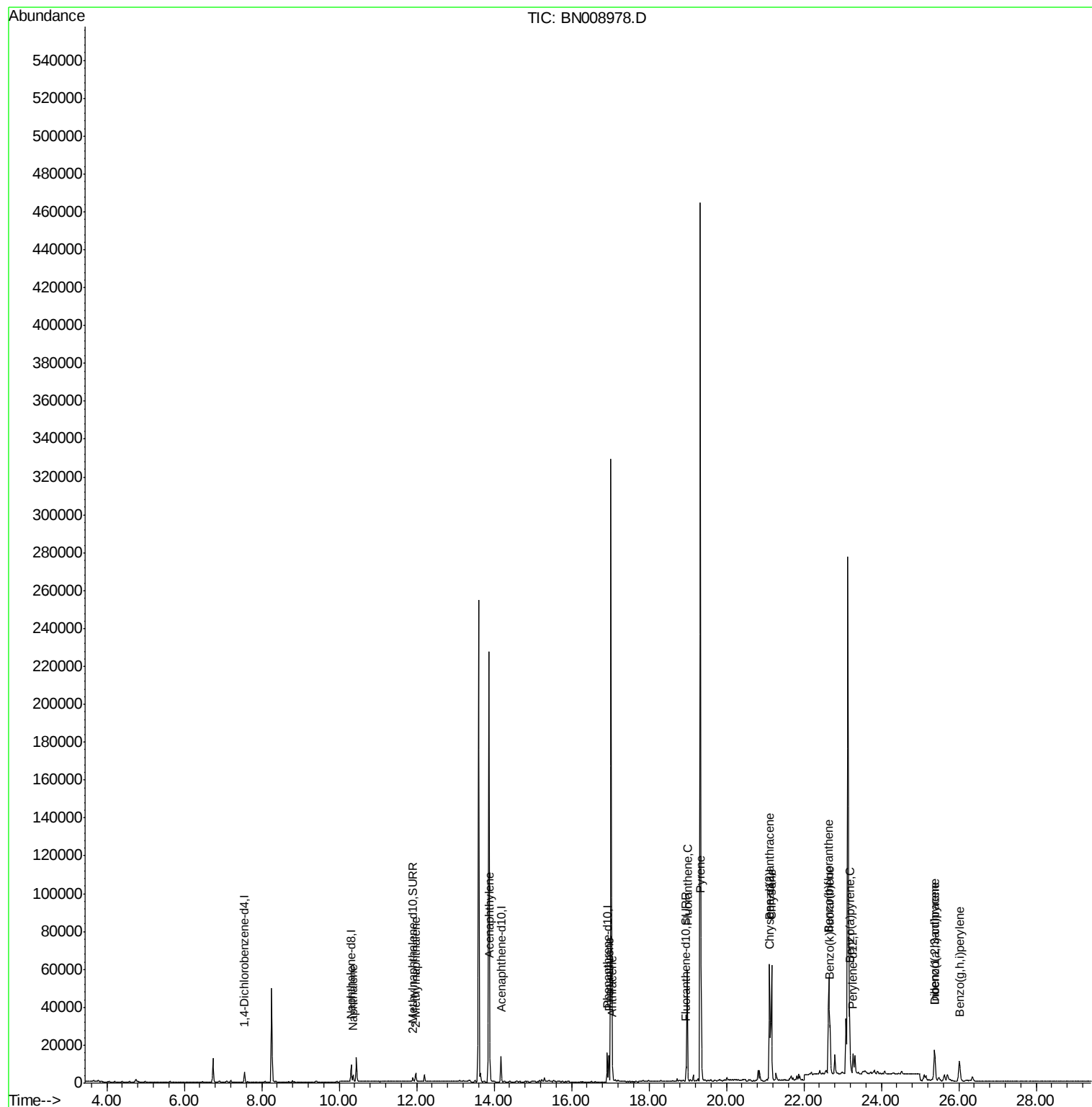
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121319\  
Data File : BN008978.D  
Acq On : 13 Dec 2019 21:58  
Operator : JU  
Sample : K6089-19DL 2X  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

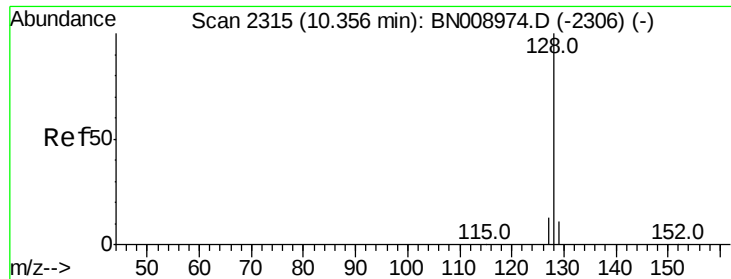
Instrument :  
BNA\_N  
ClientSampleId :  
C0BR5DL

Manual Integrations  
APPROVED

mohammad  
12/16/2019 12:24:13 PM

Quant Time: Dec 13 23:45:37 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111519.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Dec 13 23:22:26 2019  
Response via : Initial Calibration





#3

Naphthalene

Concen: 0.139 ng/ul

RT: 10.36 min Scan# 2315

Delta R.T. 0.00 min

Lab File: BN008978.D

Acq: 13 Dec 2019 21:58

Instrument :

BNA\_N

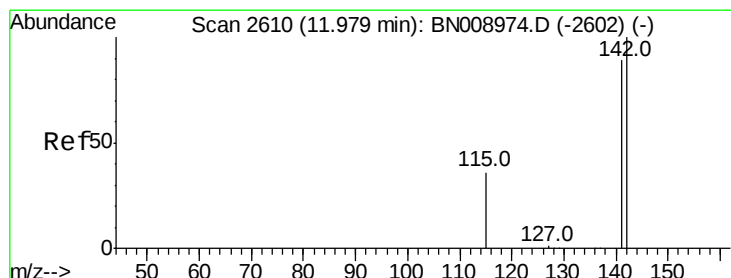
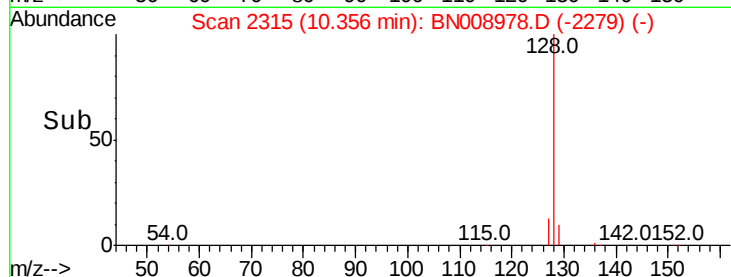
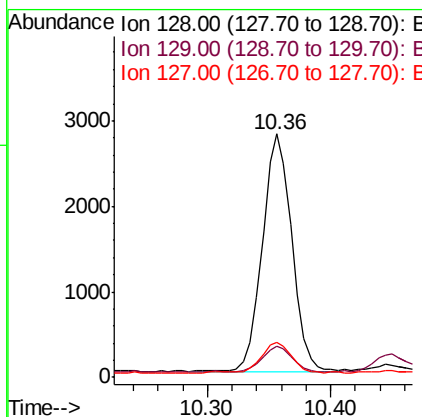
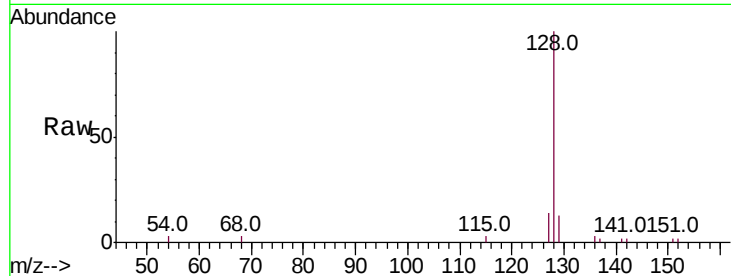
ClientSampleId :

C0BR5DL

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 128   | Resp: | 4611  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 129      | 12.7  | 9.1   | 13.7  |
| 127      | 14.3  | 10.7  | 16.1  |

Manual Integrations  
APPROVED

mohammad  
12/16/2019 12:24:13 PM



#5

2-Methylnaphthalene

Concen: 0.150 ng/ul

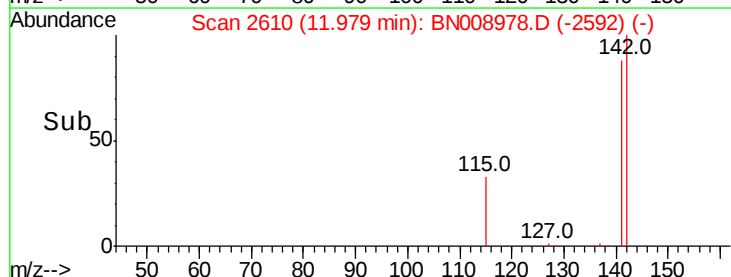
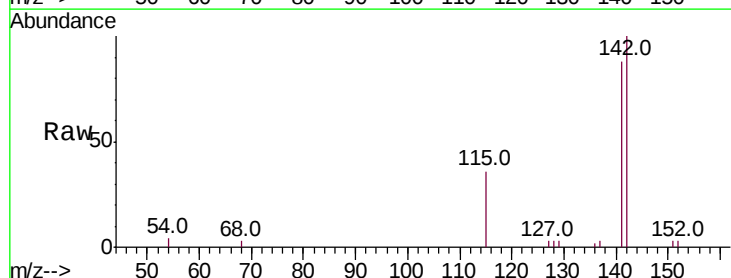
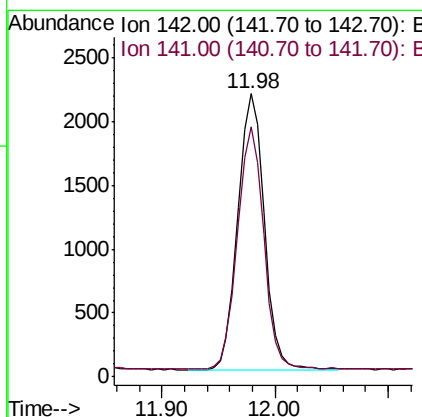
RT: 11.98 min Scan# 2610

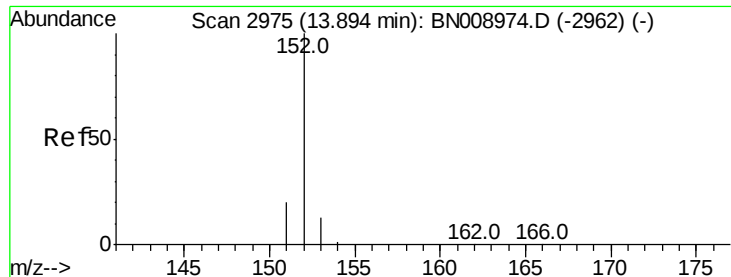
Delta R.T. 0.00 min

Lab File: BN008978.D

Acq: 13 Dec 2019 21:58

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 142   | Resp: | 3493  |
| Ion      | Ratio | Lower | Upper |
| 142      | 100   |       |       |
| 141      | 87.7  | 70.1  | 105.1 |





#7

Acenaphthylene

Concen: 0.226 ng/ul

RT: 13.89 min Scan# 2975

Delta R.T. 0.00 min

Lab File: BN008978.D

Acq: 13 Dec 2019 21:58

Instrument :

BNA\_N

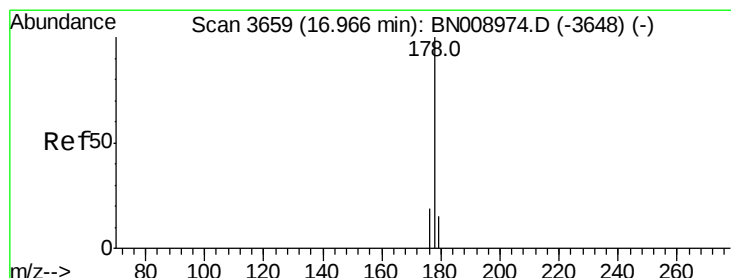
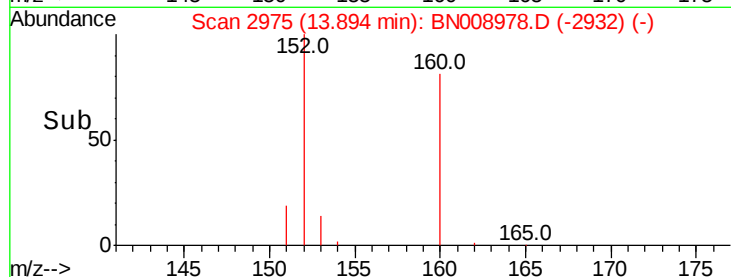
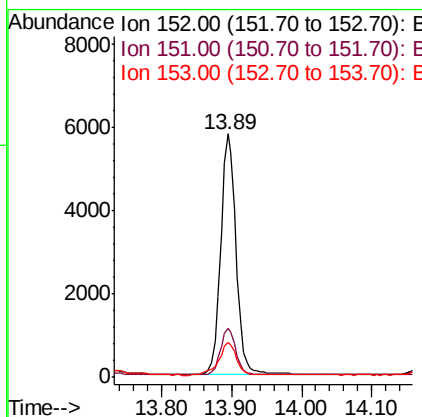
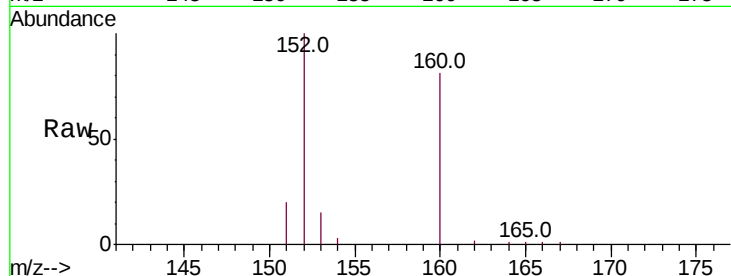
ClientSampleId :

C0BR5DL

|           |       |       |      |
|-----------|-------|-------|------|
| Tot Ion:  | 152   | Resp: | 8942 |
| Ion Ratio | Lower | Upper |      |
| 152       | 100   |       |      |
| 151       | 20.2  | 15.8  | 23.6 |
| 153       | 14.5  | 10.6  | 15.8 |

Manual Integrations  
APPROVED

mohammad  
12/16/2019 12:24:13 PM



#12

Phenanthrene

Concen: 0.250 ng/ul

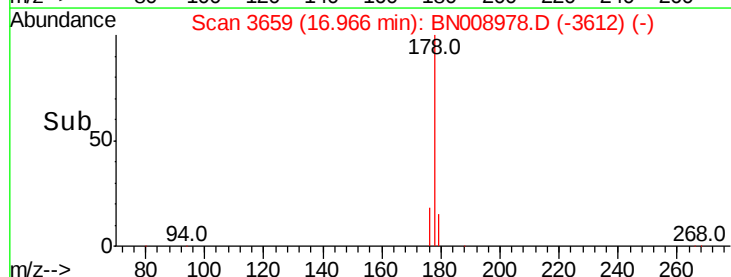
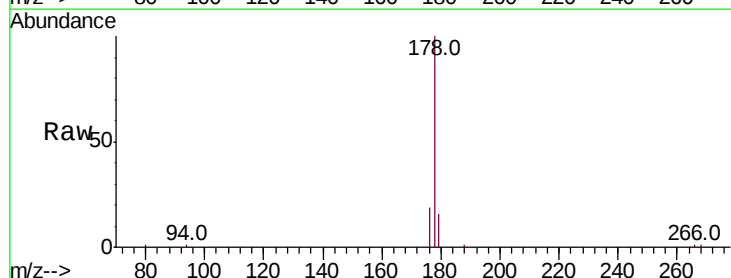
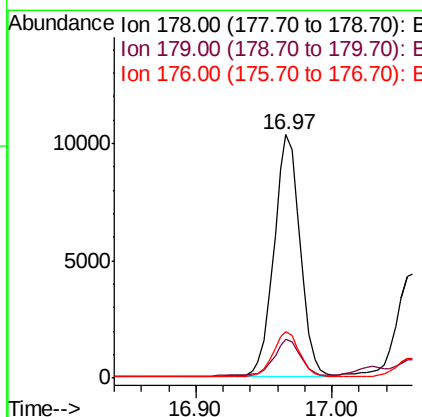
RT: 16.97 min Scan# 3659

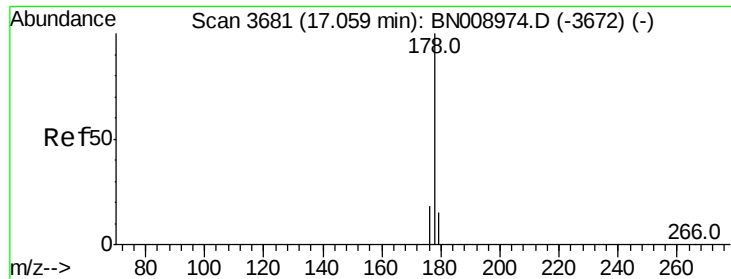
Delta R.T. 0.00 min

Lab File: BN008978.D

Acq: 13 Dec 2019 21:58

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 13877 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 179       | 16.0  | 12.6  | 18.8  |
| 176       | 18.9  | 15.3  | 22.9  |





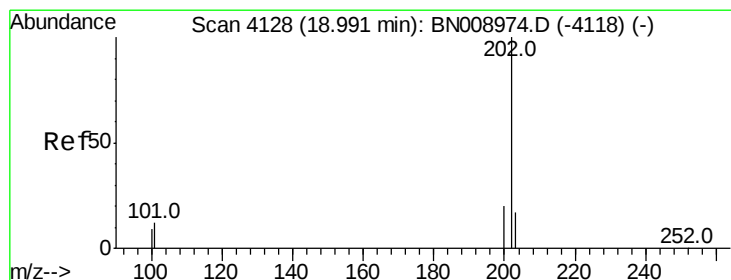
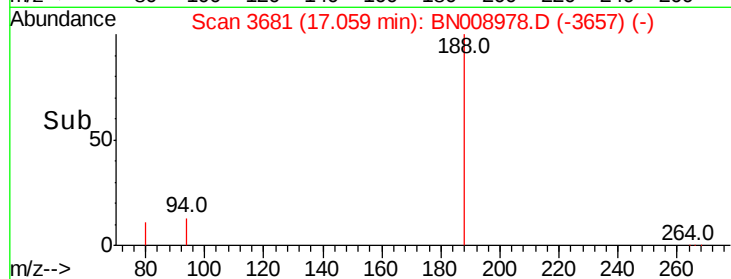
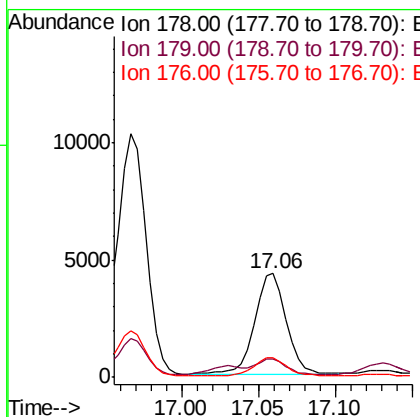
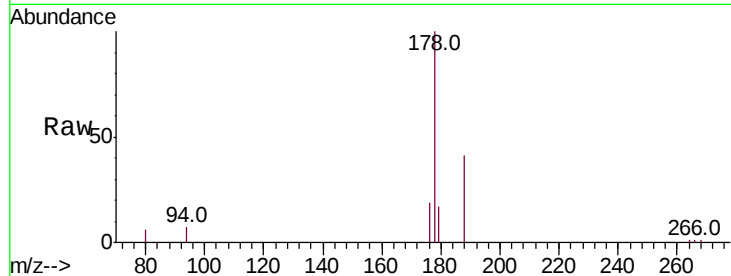
#13  
 Anthracene  
 Concen: 0.117 ng/ul  
 RT: 17.06 min Scan# 3681  
 Delta R.T. 0.00 min  
 Lab File: BN008978.D  
 Acq: 13 Dec 2019 21:58

Instrument :  
 BNA\_N  
 ClientSampleId :  
 C0BR5DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 17.4  | 12.2  | 18.4  |
| 176     | 19.1  | 14.7  | 22.1  |

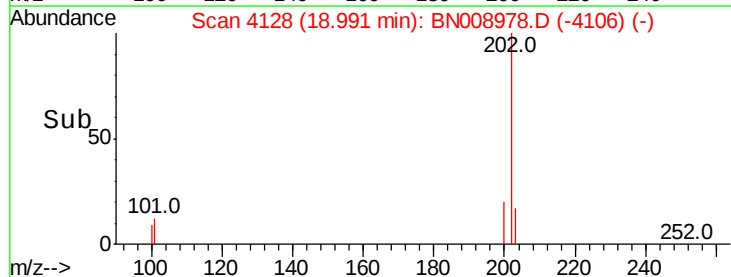
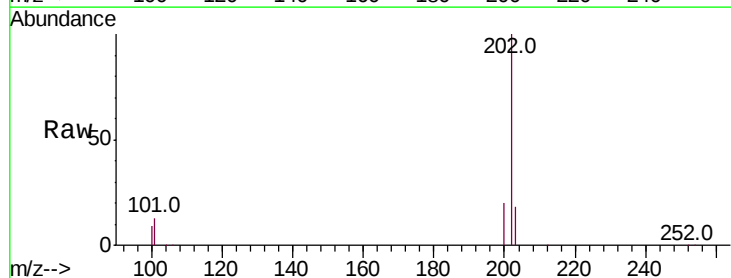
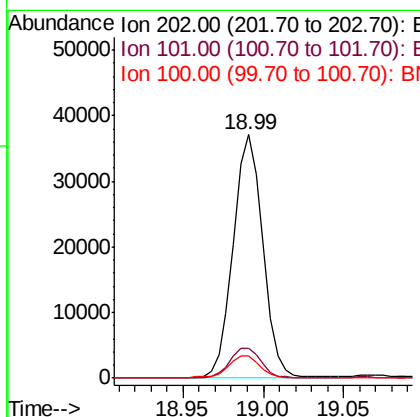
Manual Integrations  
 APPROVED

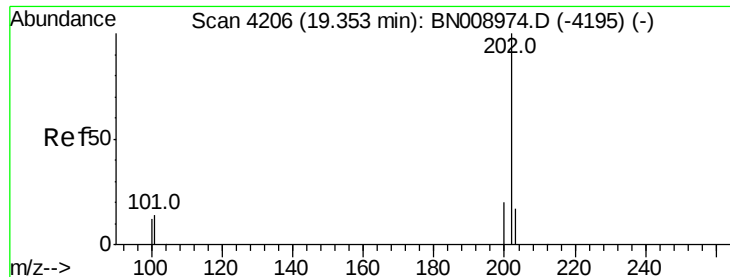
mohammad  
 12/16/2019 12:24:13 PM



#15  
 Fluoranthene  
 Concen: 0.687 ng/ul  
 RT: 18.99 min Scan# 4128  
 Delta R.T. 0.00 min  
 Lab File: BN008978.D  
 Acq: 13 Dec 2019 21:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 12.5  | 0.0   | 32.4  |
| 100     | 9.3   | 0.0   | 29.2  |





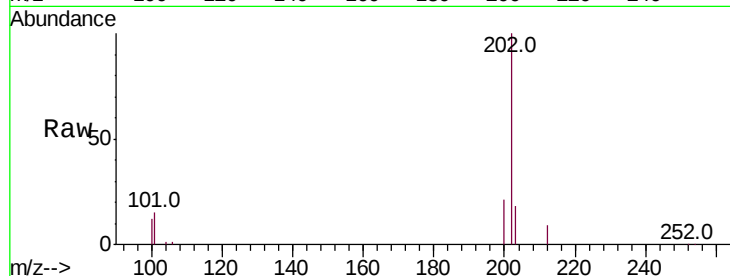
#17  
Pvrene  
Concen: 0.827 ng/ul  
RT: 19.35 min Scan# 4206  
Delta R.T. 0.00 min  
Lab File: BN008978.D  
Acq: 13 Dec 2019 21:58

Instrument :  
BNA\_N  
ClientSampleId :  
C0BR5DL

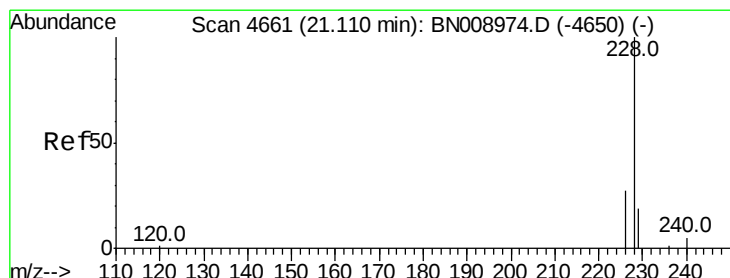
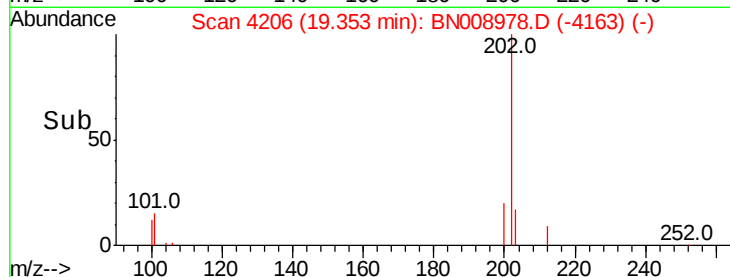
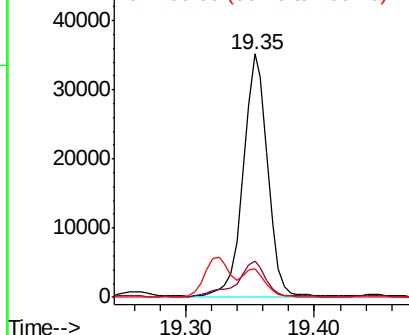
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 14.6  | 12.2  | 18.4  |
| 100     | 11.9  | 9.5   | 14.3  |

Manual Integrations  
APPROVED

mohammad  
12/16/2019 12:24:13 PM



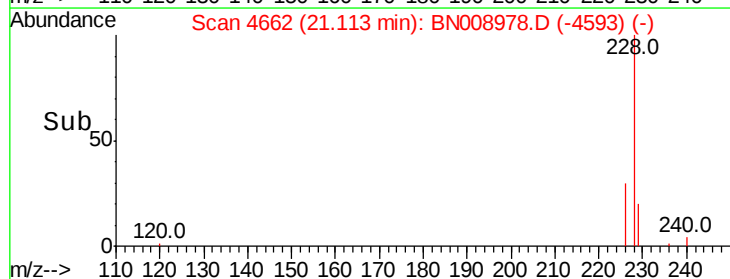
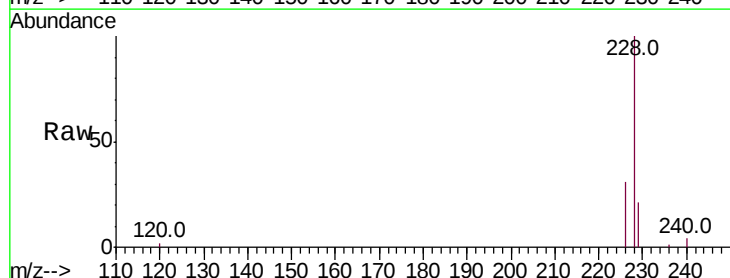
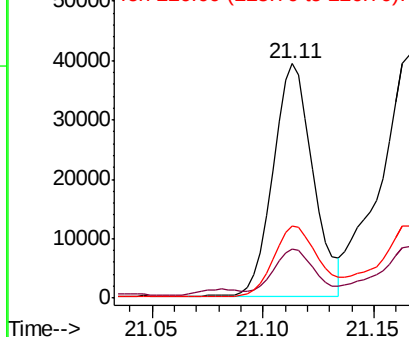
Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 100.00 (99.70 to 100.70): B

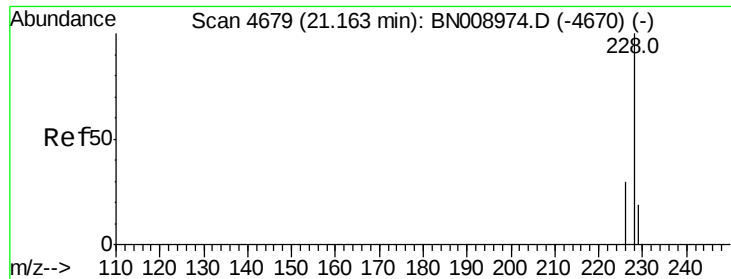


#18  
Benzo(a)anthracene  
Concen: 0.876 ng/ul  
RT: 21.11 min Scan# 4662  
Delta R.T. 0.00 min  
Lab File: BN008978.D  
Acq: 13 Dec 2019 21:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 21.0  | 15.7  | 23.5  |
| 226     | 30.8  | 21.5  | 32.3  |

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





#19

Chrysene

Concen: 1.102 ng/ul

RT: 21.17 min Scan# 4680

Delta R.T. 0.00 min

Lab File: BN008978.D

Acq: 13 Dec 2019 21:58

Instrument :

BNA\_N

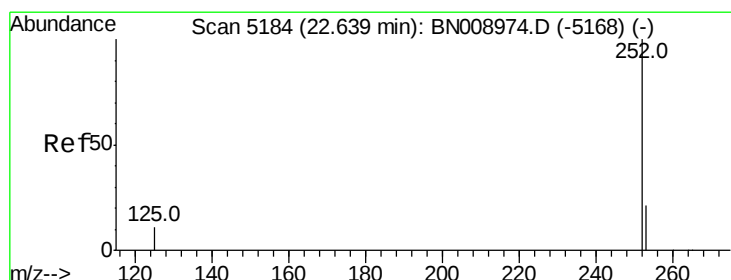
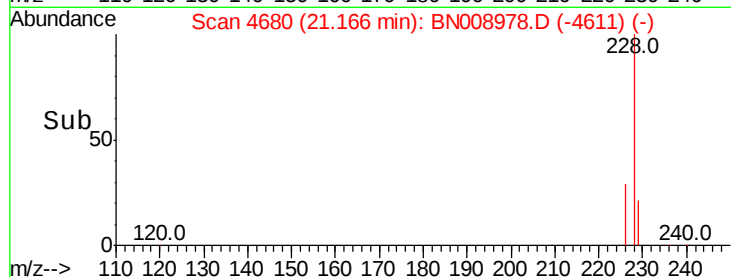
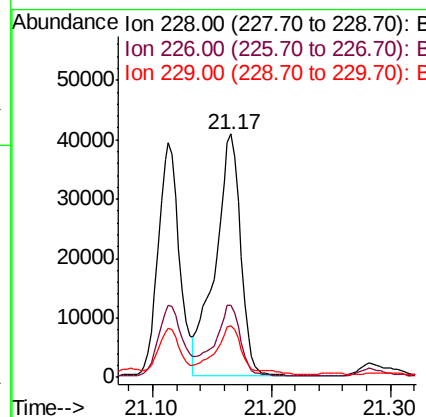
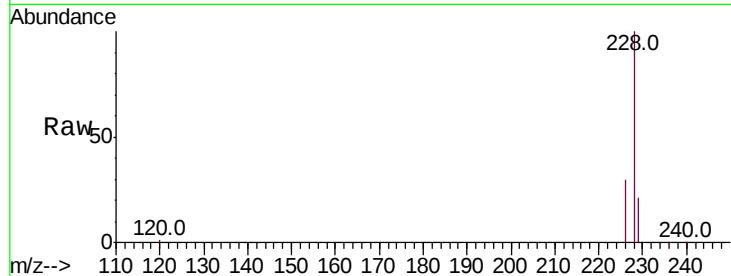
ClientSampleId :

C0BR5DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 228   | Resp: | 60102 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 29.6  | 23.8  | 35.6  |
| 229       | 21.5  | 15.6  | 23.4  |

Manual Integrations  
APPROVED

mohammad  
12/16/2019 12:24:13 PM



#21

Benzo(b)fluoranthene

Concen: 1.519 ng/ul m

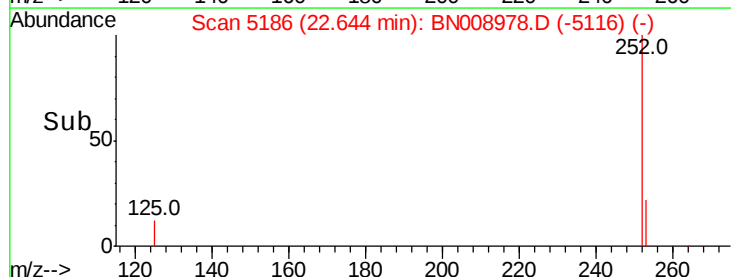
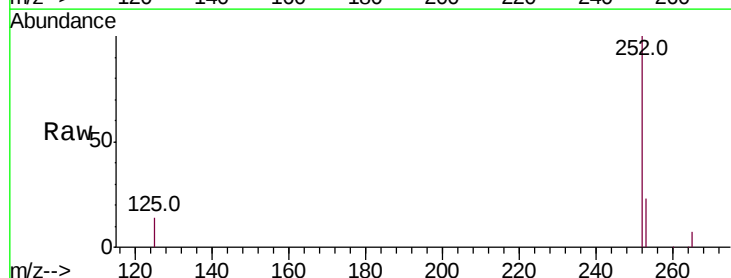
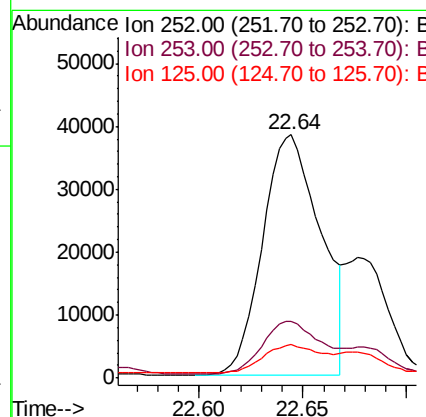
RT: 22.64 min Scan# 5186

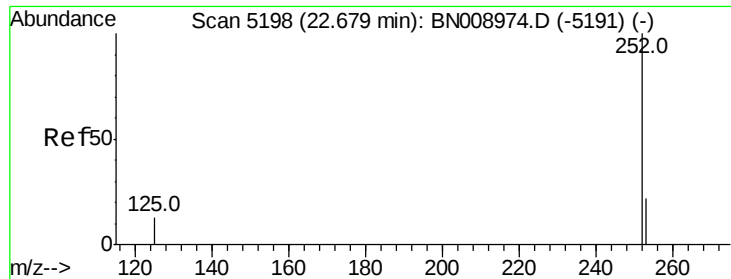
Delta R.T. 0.01 min

Lab File: BN008978.D

Acq: 13 Dec 2019 21:58

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 74585 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 23.2  | 0.0   | 48.6  |
| 125       | 13.6  | 0.0   | 31.6  |





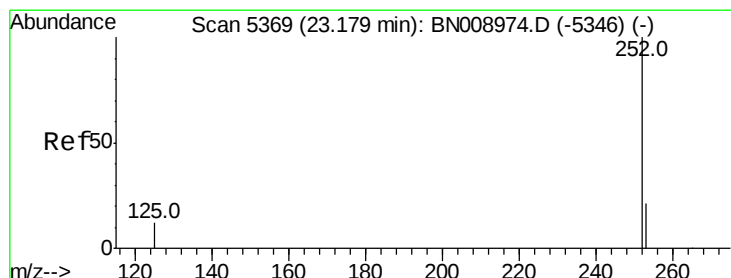
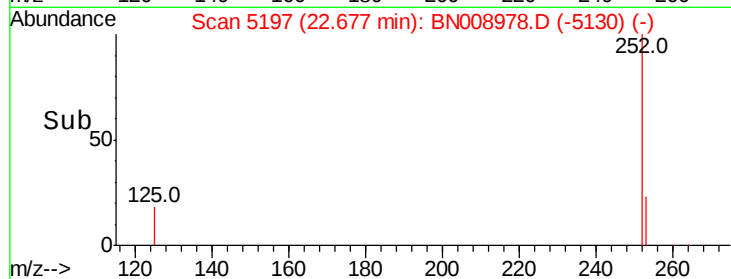
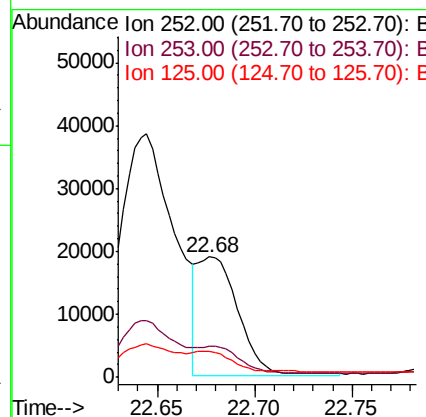
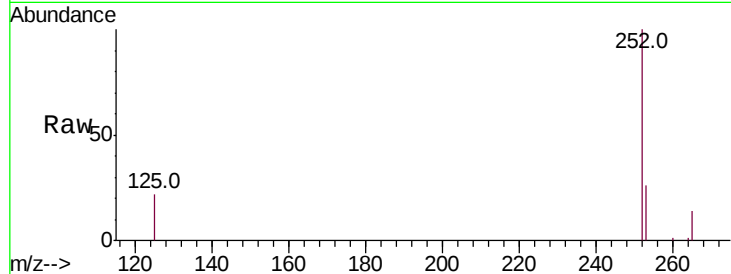
#22  
Benzo(k)fluoranthene  
Concen: 0.571 ng/ul m  
RT: 22.68 min Scan# 5197  
Delta R.T. -0.00 min  
Lab File: BN008978.D  
Acq: 13 Dec 2019 21:58

Instrument :  
BNA\_N  
ClientSampleId :  
C0BR5DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 26.0  | 19.6  | 29.4  |
| 125     | 21.7  | 13.8  | 20.6  |

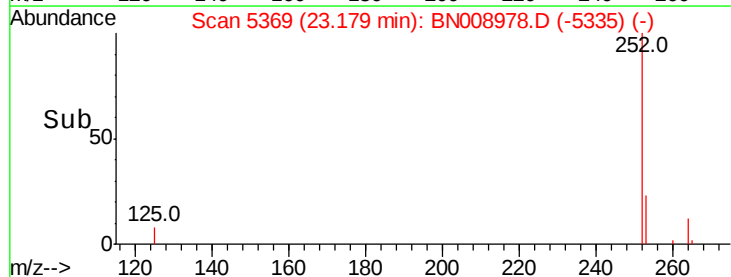
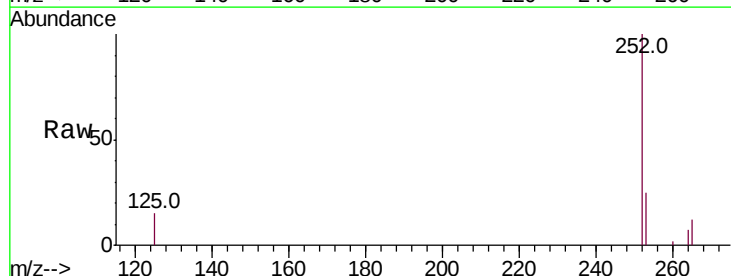
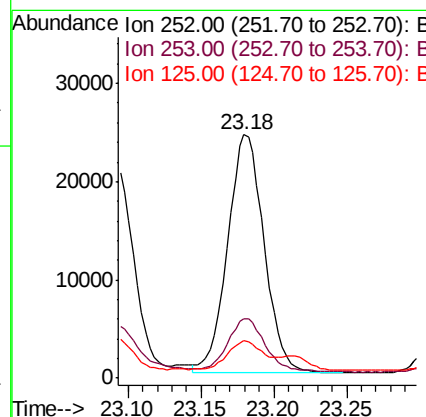
Manual Integrations  
APPROVED

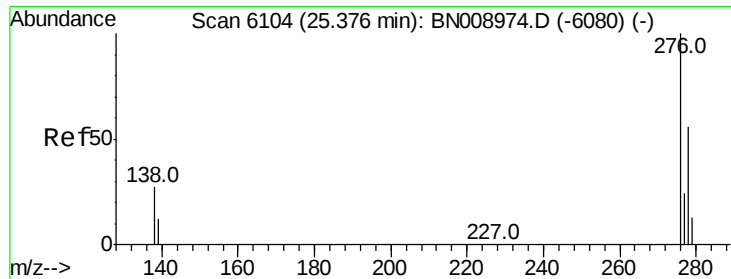
mohammad  
12/16/2019 12:24:13 PM



#23  
Benzo(a)pyrene  
Concen: 0.913 ng/ul  
RT: 23.18 min Scan# 5369  
Delta R.T. 0.00 min  
Lab File: BN008978.D  
Acq: 13 Dec 2019 21:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.5  | 19.9  | 29.9  |
| 125     | 15.3  | 14.6  | 22.0  |





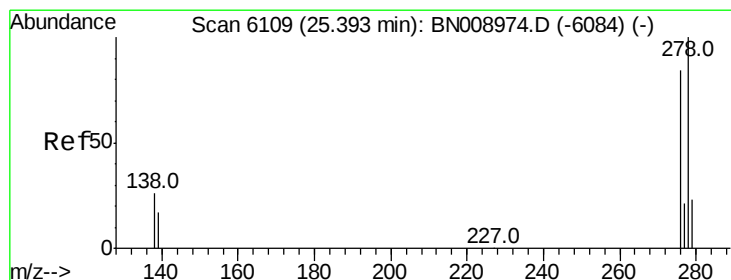
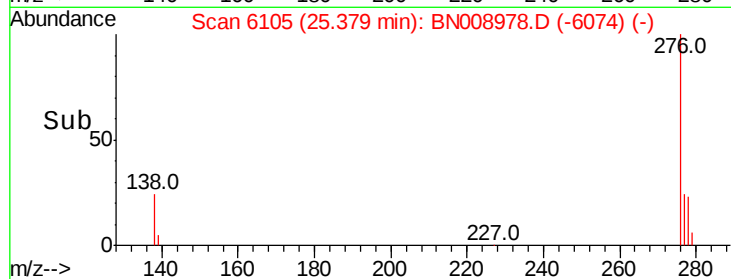
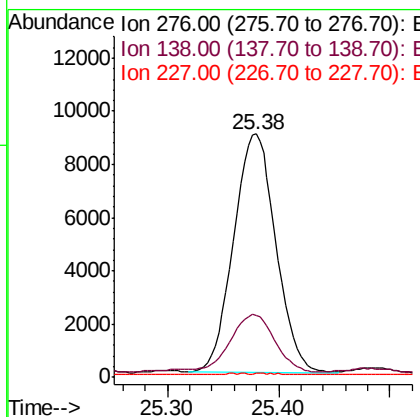
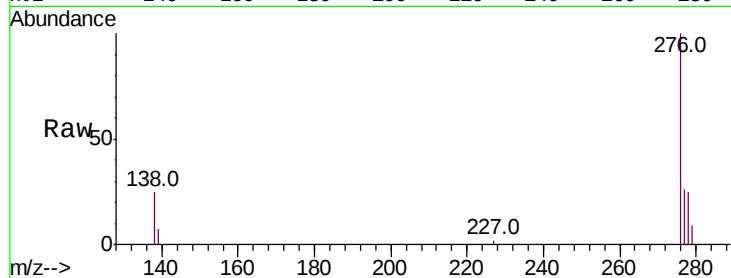
#24  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.438 ng/ul  
 RT: 25.38 min Scan# 6105  
 Delta R.T. 0.00 min  
 Lab File: BN008978.D  
 Acq: 13 Dec 2019 21:58

Instrument :  
 BNA\_N  
 ClientSampleId :  
 C0BR5DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 25.3  | 23.8  | 35.6  |
| 227     | 0.0   | 0.2   | 0.2   |

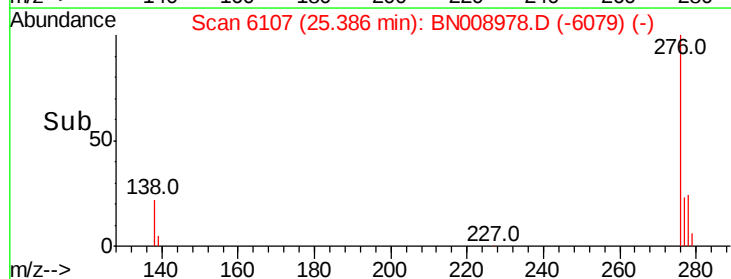
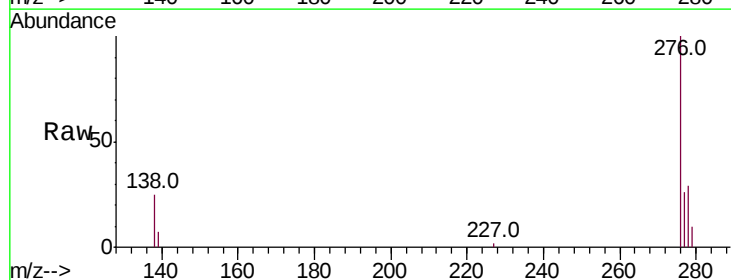
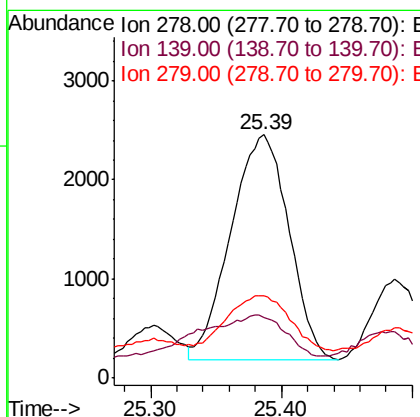
Manual Integrations  
 APPROVED

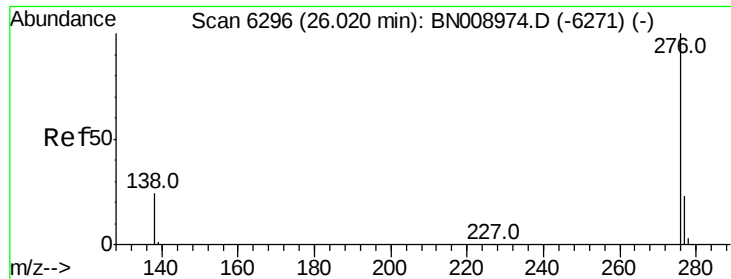
mohammad  
 12/16/2019 12:24:13 PM



#25  
 Dibenzo(a,h)anthracene  
 Concen: 0.160 ng/ul  
 RT: 25.39 min Scan# 6107  
 Delta R.T. -0.01 min  
 Lab File: BN008978.D  
 Acq: 13 Dec 2019 21:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 25.0  | 17.4  | 26.0  |
| 279     | 33.6  | 20.5  | 30.7  |





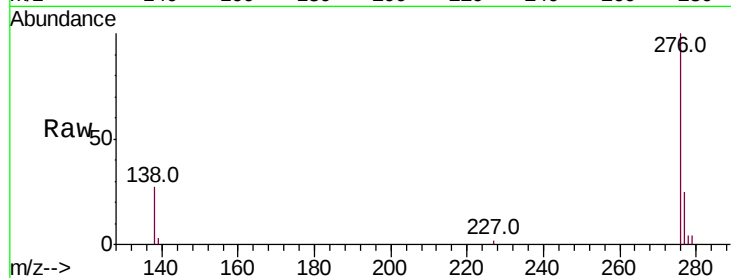
#26  
 Benzo(a,h,i)perylene  
 Concen: 0.449 ng/ul  
 RT: 26.02 min Scan# 6296  
 Delta R.T. 0.00 min  
 Lab File: BN008978.D  
 Acq: 13 Dec 2019 21:58

Instrument :  
 BNA\_N  
 ClientSampleId :  
 C0BR5DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 276   | Resp: | 20260 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 26.5  | 21.9  | 32.9  |
| 277       | 25.5  | 19.9  | 29.9  |

Manual Integrations  
 APPROVED

mohammad  
 12/16/2019 12:24:13 PM



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

