

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN052919\  
 Data File : BN005929.D  
 Acq On : 29 May 2019 14:27  
 Operator : JU/SJ  
 Sample : K2928-09MSD  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 A42C3MSD

Manual Integrations  
 APPROVED

mohammad  
 5/30/2019 1:28:25 PM

Quant Time: May 29 15:03:31 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN052819MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed May 29 02:28:30 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.73  | 152  | 534990   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.51 | 136  | 2423424  | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.37 | 164  | 1388020  | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.12 | 188  | 3022661  | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.34 | 240  | 2727303  | 20.00 | ng/ul | 0.02     |
| 85) Perylene-d12          | 23.63 | 264  | 2705987  | 20.00 | ng/ul | 0.04     |

## System Monitoring Compounds

|                                |       |     |         |       |       |      |
|--------------------------------|-------|-----|---------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.26  | 96  | 34108   | 2.81  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.89  | 99  | 634273  | 13.38 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.06  | 67  | 441309  | 16.31 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.26  | 132 | 532194  | 14.73 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.42  | 113 | 377061  | 9.85  | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.88  | 128 | 275313  | 17.70 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.60  | 143 | 269267  | 18.59 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.13 | 165 | 498789  | 14.58 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.65 | 131 | 552944  | 12.33 | ng/ul | 0.00 |
| 43) Dimethylphthalate-d6       | 13.78 | 166 | 1750538 | 17.11 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 14.06 | 160 | 2037209 | 15.92 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.56 | 143 | 216508  | 11.63 | ng/ul | 0.00 |
| 57) Fluorene-d10               | 15.36 | 176 | 1456945 | 16.98 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.48 | 200 | 146134  | 11.86 | ng/ul | 0.00 |
| 70) Anthracene-d10             | 17.22 | 188 | 2027540 | 15.76 | ng/ul | 0.00 |
| 78) Pyrene-d10                 | 19.53 | 212 | 2315730 | 16.81 | ng/ul | 0.00 |
| 89) Benzo(a)pyrene-d12         | 23.48 | 264 | 1951797 | 16.16 | ng/ul | 0.03 |

## Target Compounds

|                                |       |     |         |        | Ovalue    |
|--------------------------------|-------|-----|---------|--------|-----------|
| 6) Phenol                      | 6.92  | 94  | 722331  | 14.784 | ng/ul 90  |
| 10) 2-Chlorophenol             | 7.29  | 128 | 555736  | 15.134 | ng/ul 95  |
| 15) N-Nitroso-di-n-propylamine | 8.53  | 70  | 501389  | 16.235 | ng/ul 88  |
| 33) 4-Chloro-3-methylphenol    | 11.79 | 107 | 578119  | 14.160 | ng/ul 95  |
| 44) Dimethylphthalate          | 13.83 | 163 | 565709  | 5.531  | ng/ul 100 |
| 49) Acenaphthene               | 14.43 | 153 | 1468681 | 17.224 | ng/ul 99  |
| 52) 4-Nitrophenol              | 14.57 | 109 | 203762  | 13.959 | ng/ul 84  |
| 54) 2,4-Dinitrotoluene         | 14.73 | 165 | 495931  | 18.871 | ng/ul 94  |
| 68) Pentachlorophenol          | 16.77 | 266 | 252538  | 14.232 | ng/ul 98  |
| 69) Phenanthrene               | 17.16 | 178 | 569642  | 3.804  | ng/ul 99  |
| 76) Fluoranthene               | 19.19 | 202 | 748461  | 4.682  | ng/ul# 92 |
| 79) Pyrene                     | 19.56 | 202 | 3709927 | 21.474 | ng/ul# 93 |
| 82) Benzo(a)anthracene         | 21.33 | 228 | 452199  | 2.638  | ng/ul# 90 |
| 84) Chrysene                   | 21.38 | 228 | 665630  | 4.163  | ng/ul# 93 |
| 87) Benzo(b)fluoranthene       | 22.94 | 252 | 576199  | 3.791  | ng/ul# 96 |
| 88) Benzo(k)fluoranthene       | 22.99 | 252 | 165010m | 1.181  | ng/ul     |
| 90) Benzo(a)pyrene             | 23.53 | 252 | 345915  | 2.413  | ng/ul# 92 |
| 91) Indeno(1,2,3-cd)pyrene     | 25.90 | 276 | 187975  | 1.118  | ng/ul# 91 |
| 93) Benzo(g,h,i)perylene       | 26.60 | 276 | 154957  | 1.094  | ng/ul# 91 |

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

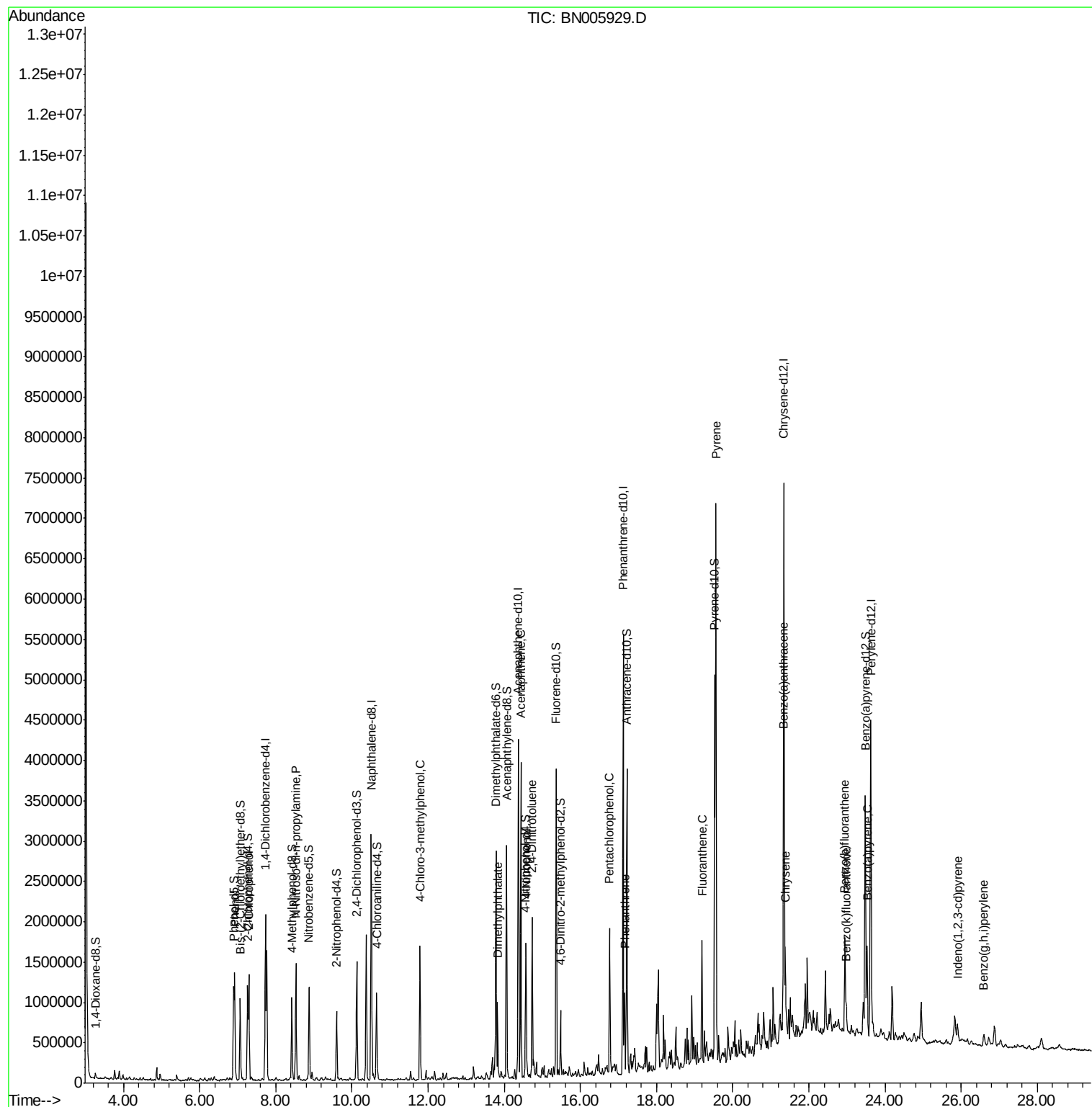
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN052919\  
Data File : BN005929.D  
Acq On : 29 May 2019 14:27  
Operator : JU/SJ  
Sample : K2928-09MSD  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

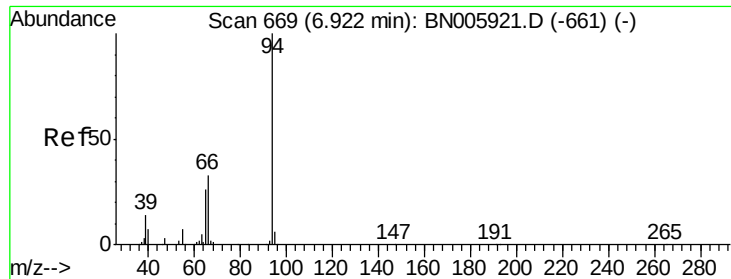
Instrument :  
BNA\_N  
ClientSampleId :  
A42C3MSD

Manual Integrations  
APPROVED

mohammad  
5/30/2019 1:28:25 PM

Quant Time: May 29 15:03:31 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN052819MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Wed May 29 02:28:30 2019  
Response via : Initial Calibration





#6

Phenol

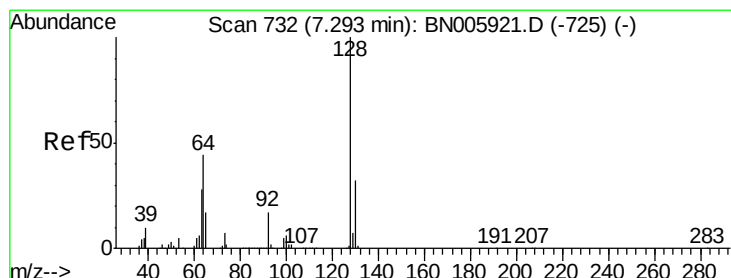
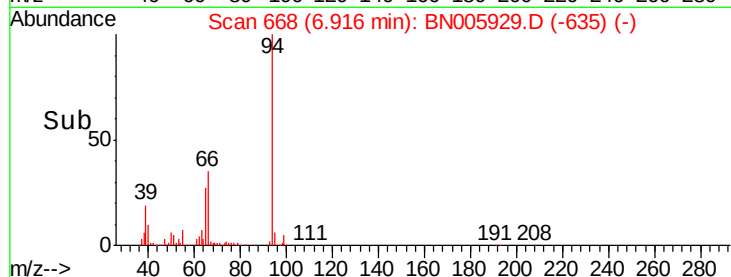
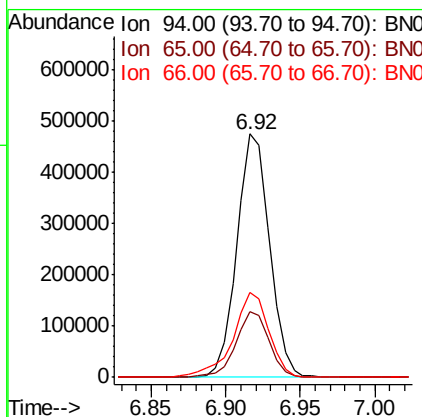
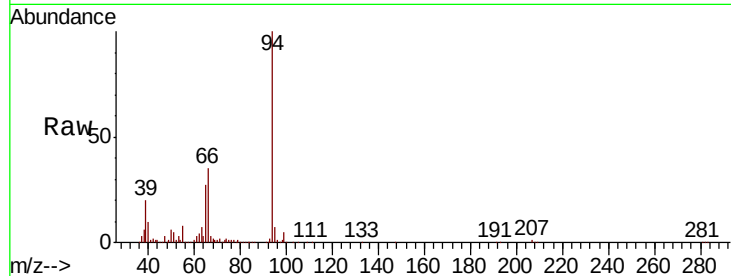
Concen: 14.784 ng/ul  
 RT: 6.92 min Scan# 668  
 Delta R.T. -0.01 min  
 Lab File: BN005929.D  
 Acq: 29 May 2019 14:27

Instrument :  
 BNA\_N  
 ClientSampleId :  
 A42C3MSD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 94      | 100   |       |       |
| 65      | 26.9  | 24.2  | 36.4  |
| 66      | 34.6  | 33.8  | 50.6  |

Manual Integrations  
 APPROVED

mohammad  
 5/30/2019 1:28:25 PM

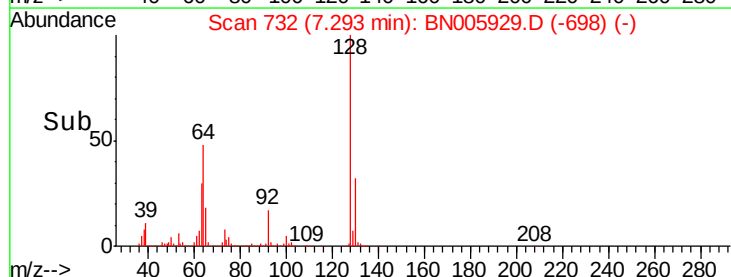
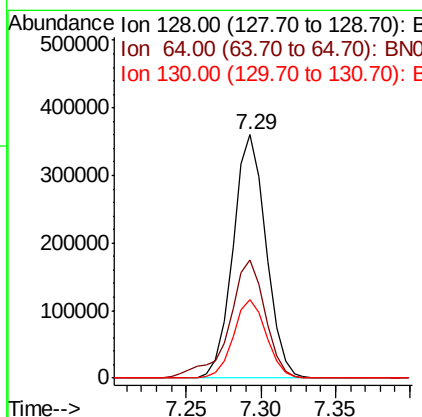
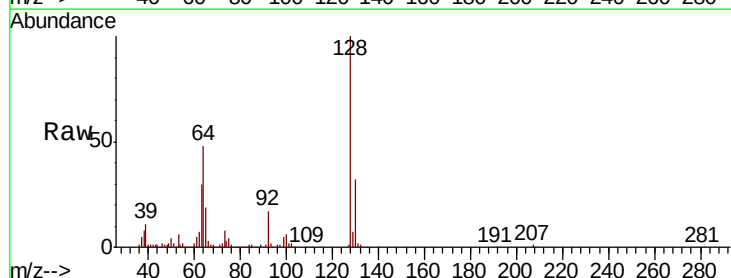


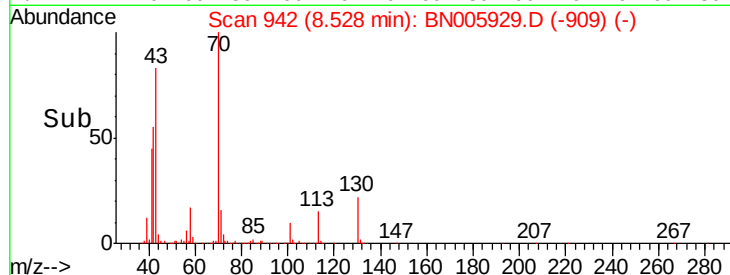
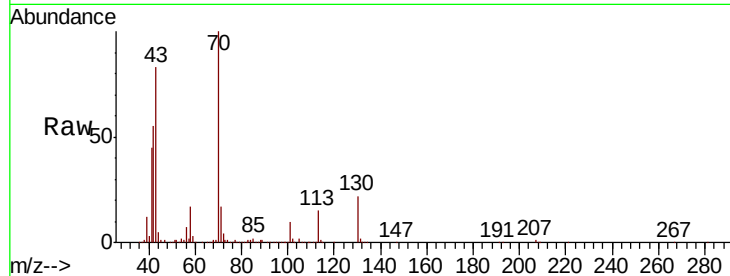
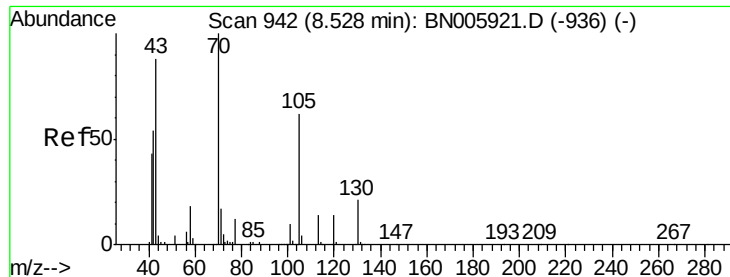
#10

2-Chlorophenol

Concen: 15.134 ng/ul  
 RT: 7.29 min Scan# 732  
 Delta R.T. -0.00 min  
 Lab File: BN005929.D  
 Acq: 29 May 2019 14:27

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 64      | 48.3  | 42.3  | 63.5  |
| 130     | 32.2  | 26.5  | 39.7  |





#15

N-Nitroso-di-n-propylamine

Concen: 16.235 ng/ul

RT: 8.53 min Scan# 942

Delta R.T. -0.01 min

Lab File: BN005929.D

Acq: 29 May 2019 14:27

| Tot Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 70      | 100  |       |       |       |
| 42      | 54.9 | 53.8  | 80.8  |       |
| 101     | 10.3 | 7.7   | 11.5  |       |
| 130     | 21.7 | 15.0  | 22.4  |       |

Instrument :

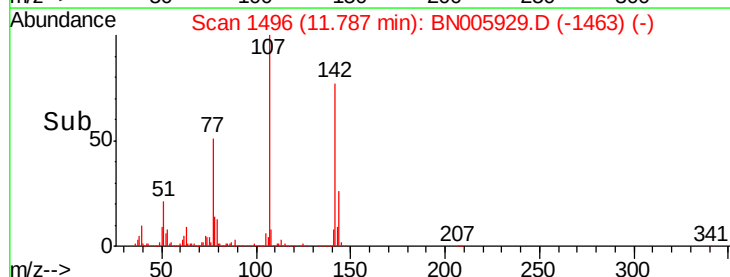
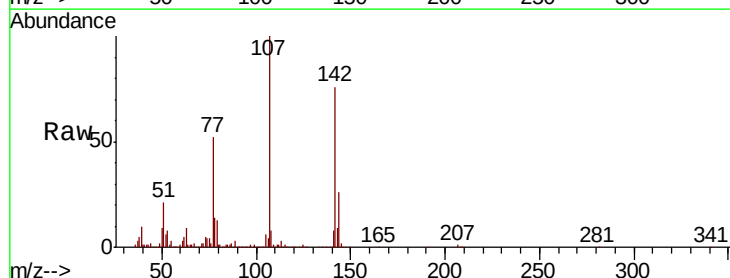
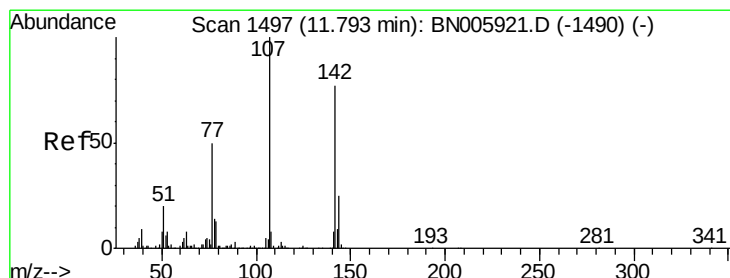
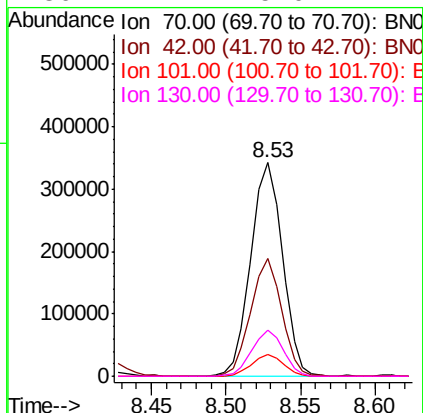
BNA\_N

ClientSampled :

A42C3MSD

Manual Integrations  
APPROVED

mohammad  
5/30/2019 1:28:25 PM



#33

4-Chloro-3-methylphenol

Concen: 14.160 ng/ul

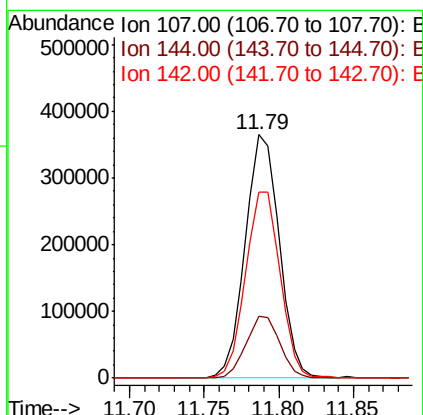
RT: 11.79 min Scan# 1496

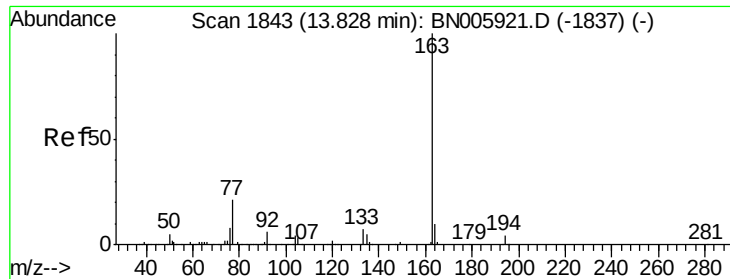
Delta R.T. -0.01 min

Lab File: BN005929.D

Acq: 29 May 2019 14:27

| Tgt Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 107     | 100  |       |       |       |
| 144     | 25.6 | 19.4  | 29.0  |       |
| 142     | 76.4 | 57.7  | 86.5  |       |





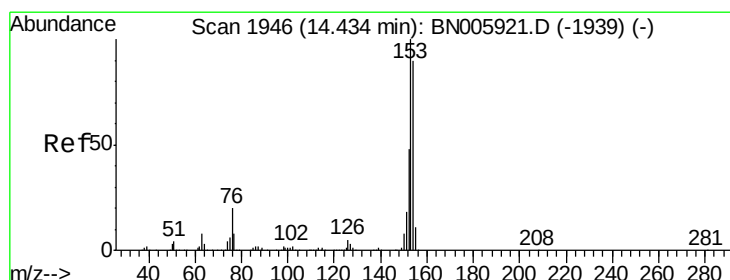
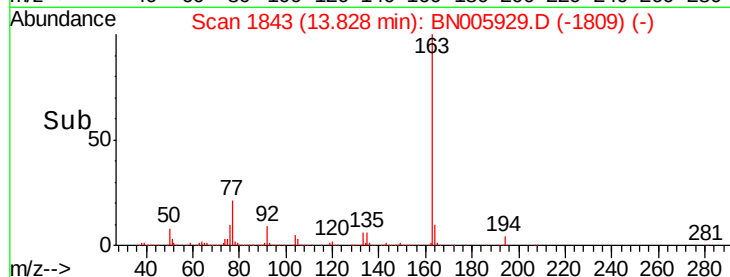
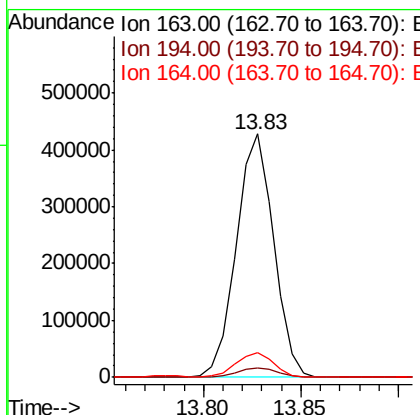
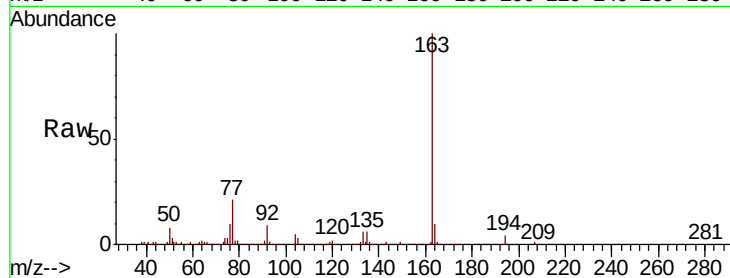
#44  
Dimethylphthalate  
Concen: 5.531 ng/ul  
RT: 13.83 min Scan# 1843  
Delta R.T. -0.00 min  
Lab File: BN005929.D  
Acq: 29 May 2019 14:27

Instrument :  
BNA\_N  
ClientSampleId :  
A42C3MSD

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 163     | 100   | 565709 |       |       |
| 194     | 4.1   |        | 3.4   | 5.0   |
| 164     | 10.0  |        | 8.1   | 12.1  |

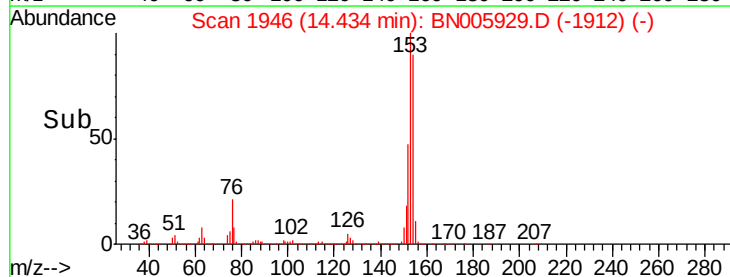
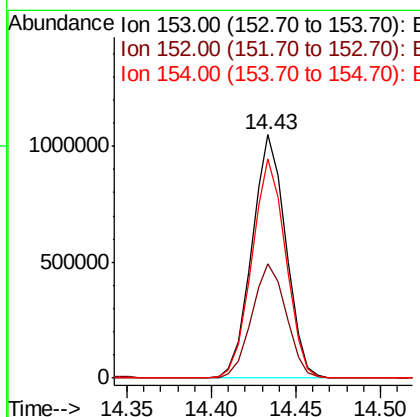
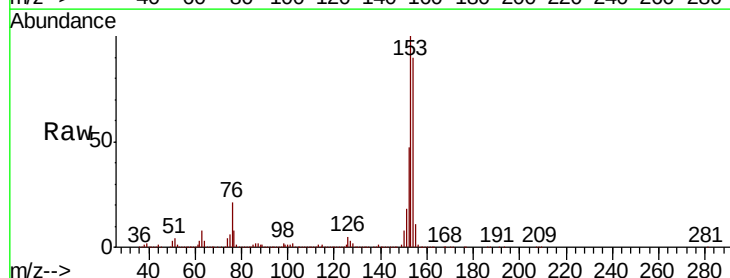
Manual Integrations  
APPROVED

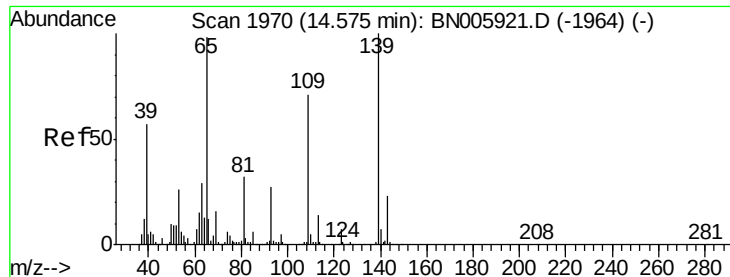
mohammad  
5/30/2019 1:28:25 PM



#49  
Acenaphthene  
Concen: 17.224 ng/ul  
RT: 14.43 min Scan# 1946  
Delta R.T. -0.00 min  
Lab File: BN005929.D  
Acq: 29 May 2019 14:27

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 153     | 100   | 1468681 |       |       |
| 152     | 46.8  |         | 37.4  | 56.0  |
| 154     | 89.9  |         | 71.2  | 106.8 |





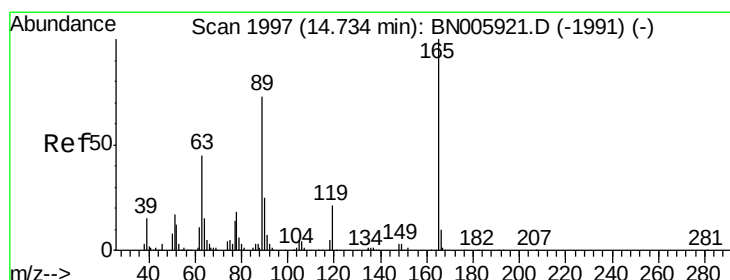
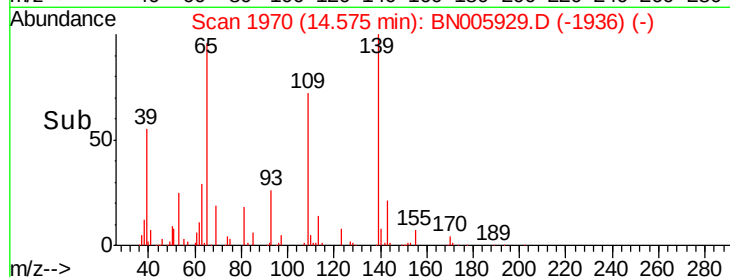
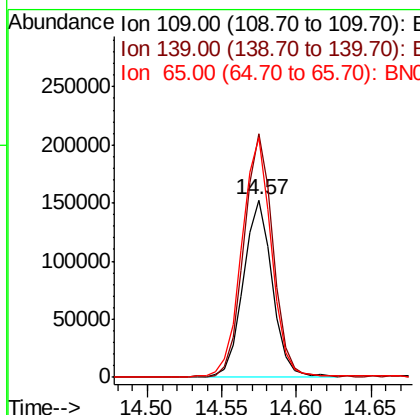
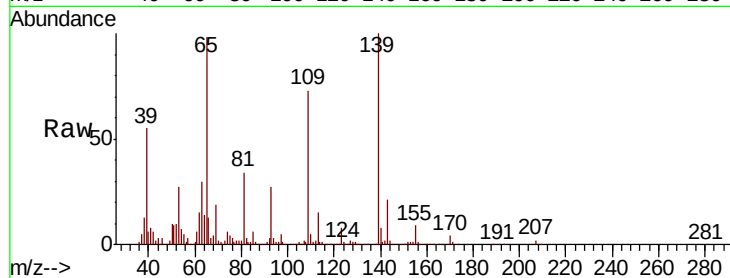
#52  
4-Nitrophenol  
Concen: 13.959 ng/ul  
RT: 14.57 min Scan# 1970  
Delta R.T. -0.00 min  
Lab File: BN005929.D  
Acq: 29 May 2019 14:27

Instrument :  
BNA\_N  
ClientSampled :  
A42C3MSD

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 109     | 100   | 203762 |       |       |
| 139     | 137.3 | 92.3   | 138.5 |       |
| 65      | 135.1 | 97.5   | 146.3 |       |

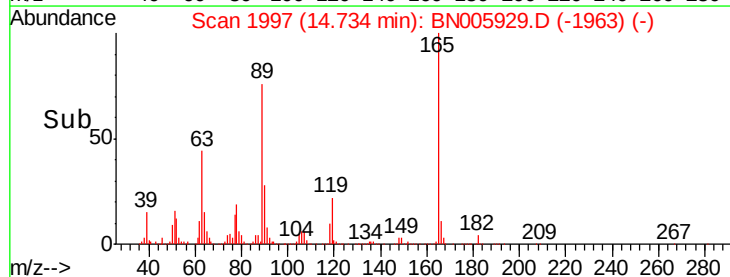
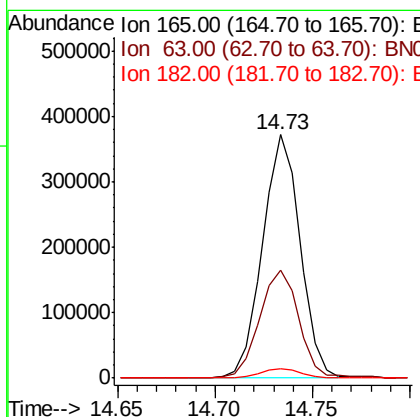
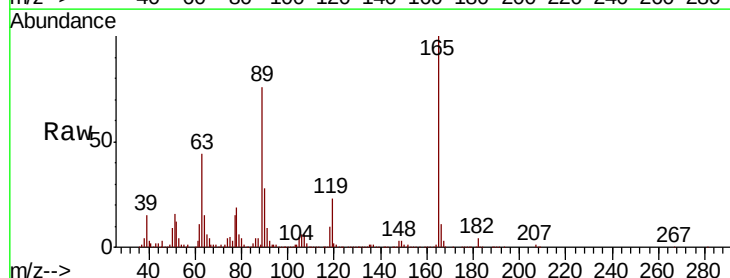
Manual Integrations  
APPROVED

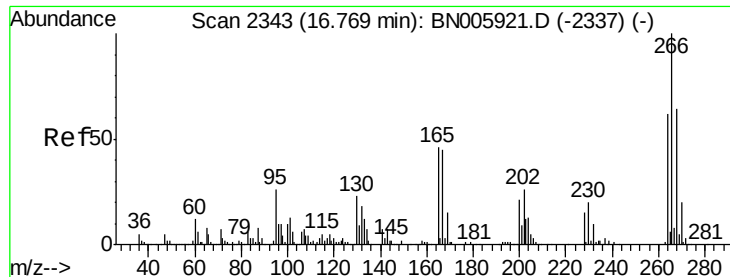
mohammad  
5/30/2019 1:28:25 PM



#54  
2,4-Dinitrotoluene  
Concen: 18.871 ng/ul  
RT: 14.73 min Scan# 1997  
Delta R.T. -0.00 min  
Lab File: BN005929.D  
Acq: 29 May 2019 14:27

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 165     | 100   | 495931 |       |       |
| 63      | 44.5  | 38.9   | 58.3  |       |
| 182     | 3.8   | 2.6    | 3.8   |       |





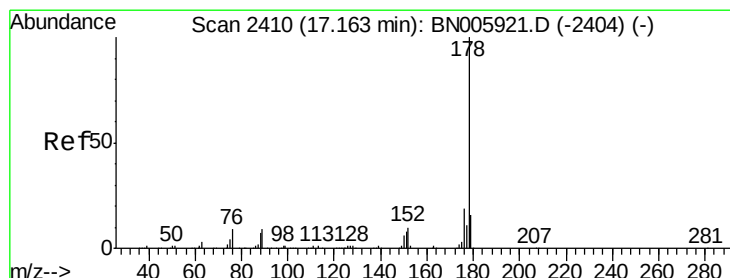
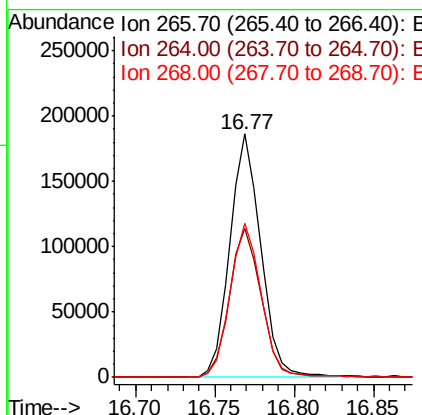
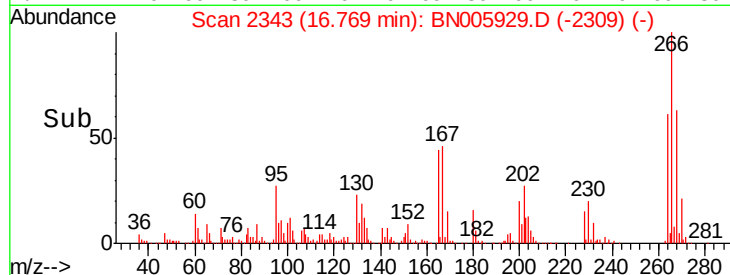
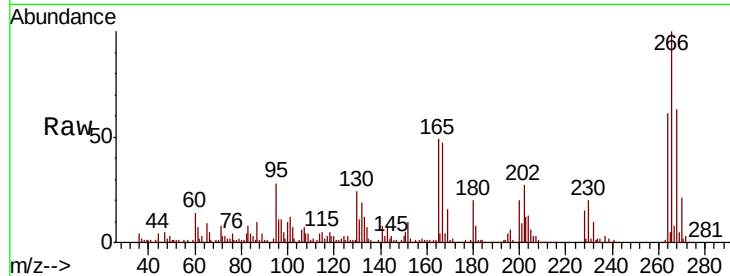
#68  
 Pentachlorophenol  
 Concen: 14.232 ng/ul  
 RT: 16.77 min Scan# 2343  
 Delta R.T. -0.00 min  
 Lab File: BN005929.D  
 Acq: 29 May 2019 14:27

Instrument :  
 BNA\_N  
 ClientSampled :  
 A42C3MSD

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 266   | Resp: | 252538 |
| Ion Ratio | Lower | Upper |        |
| 266       | 100   |       |        |
| 264       | 61.3  | 49.7  | 74.5   |
| 268       | 63.1  | 52.4  | 78.6   |

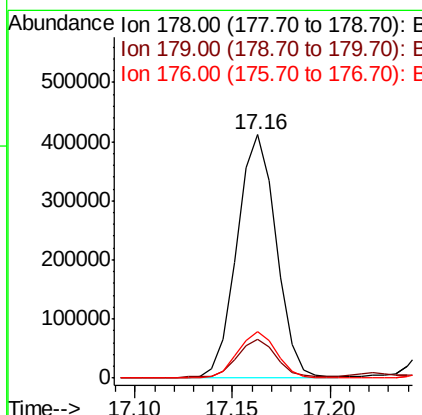
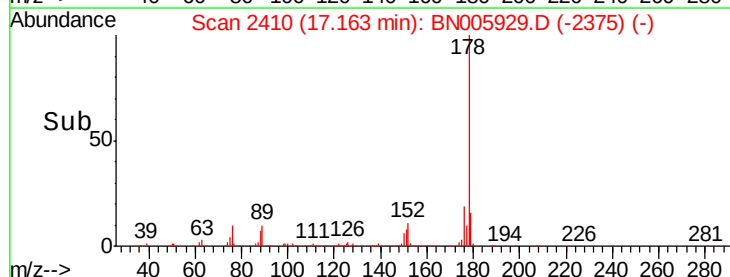
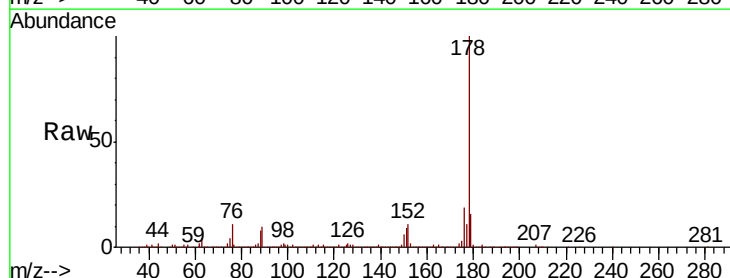
Manual Integrations  
 APPROVED

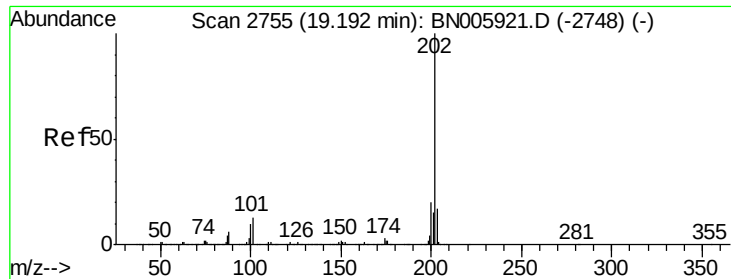
mohammad  
 5/30/2019 1:28:25 PM



#69  
 Phenanthrene  
 Concen: 3.804 ng/ul  
 RT: 17.16 min Scan# 2410  
 Delta R.T. 0.01 min  
 Lab File: BN005929.D  
 Acq: 29 May 2019 14:27

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 178   | Resp: | 569642 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 179       | 15.9  | 12.2  | 18.4   |
| 176       | 19.1  | 15.1  | 22.7   |





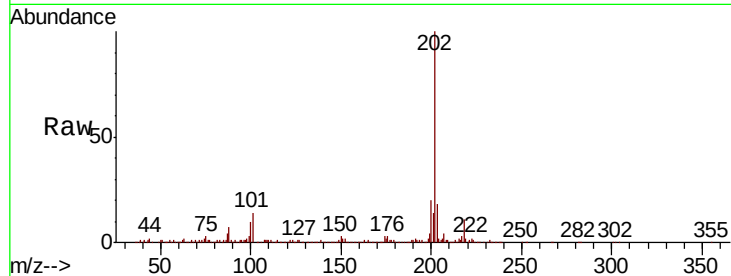
#76  
Fluoranthene  
Concen: 4.682 ng/ul  
RT: 19.19 min Scan# 2754  
Delta R.T. -0.00 min  
Lab File: BN005929.D  
Acq: 29 May 2019 14:27

Instrument :  
BNA\_N  
ClientSampleId :  
A42C3MSD

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 14.3  | 8.6        | 12.8# |
| 100     | 9.8   | 6.3        | 9.5#  |

Manual Integrations  
APPROVED

mohammad  
5/30/2019 1:28:25 PM

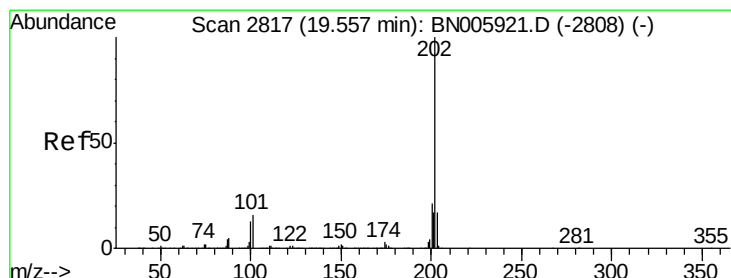
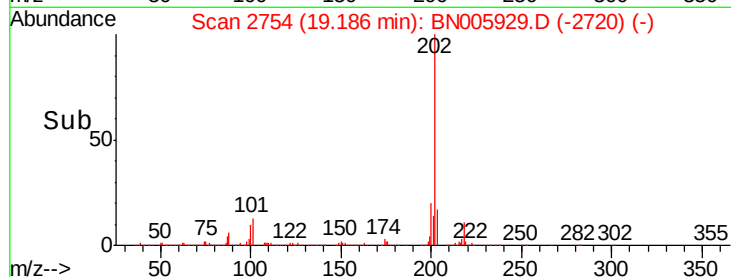
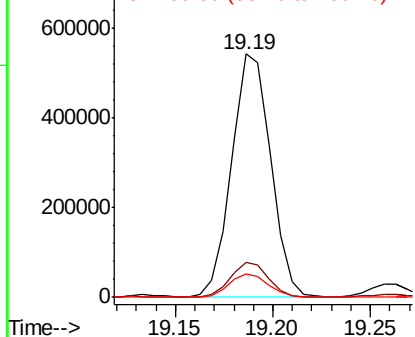


Abundance

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



#79  
Pyrene  
Concen: 21.474 ng/ul  
RT: 19.56 min Scan# 2817  
Delta R.T. 0.01 min  
Lab File: BN005929.D  
Acq: 29 May 2019 14:27

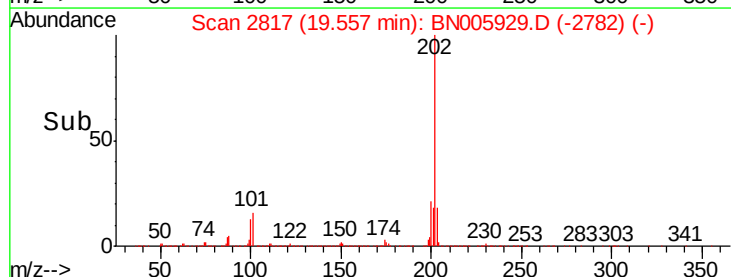
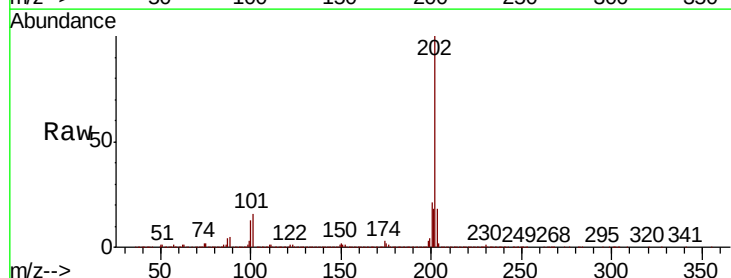
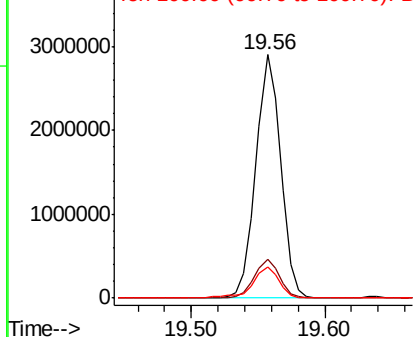
| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 15.7  | 10.3       | 15.5# |
| 100     | 12.6  | 7.9        | 11.9# |

Abundance

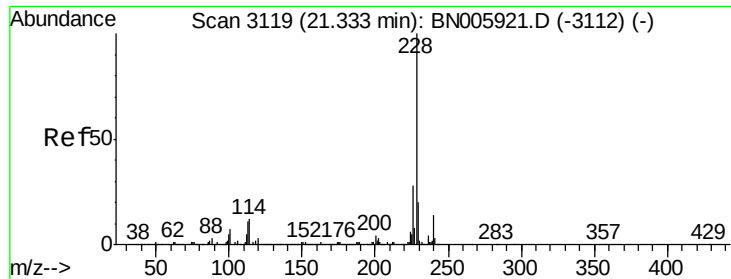
Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B







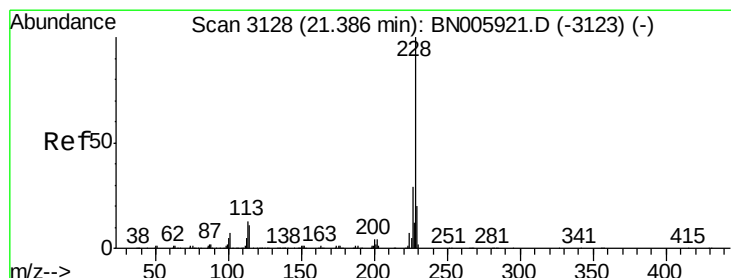
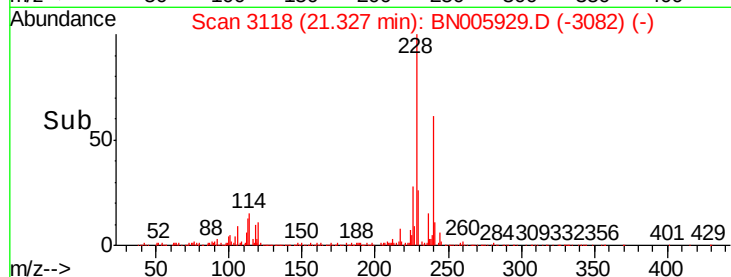
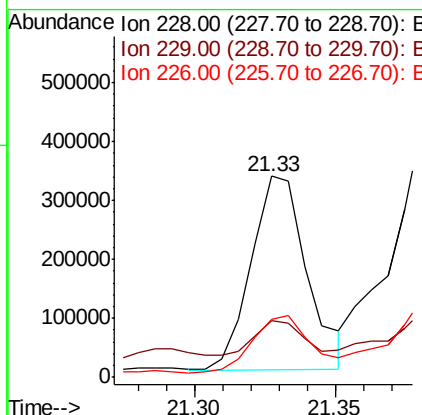
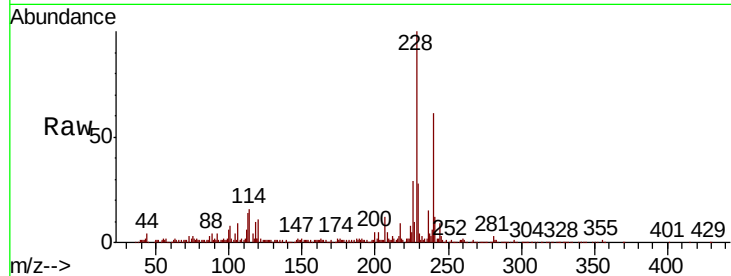
#82  
Benzo(a)anthracene  
Concen: 2.638 ng/ul  
RT: 21.33 min Scan# 3118  
Delta R.T. 0.01 min  
Lab File: BN005929.D  
Acq: 29 May 2019 14:27

Instrument :  
BNA\_N  
ClientSampled :  
A42C3MSD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 28.3  | 15.8  | 23.6# |
| 226     | 28.9  | 21.4  | 32.2  |

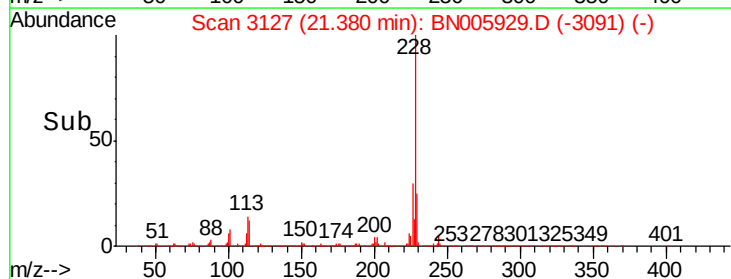
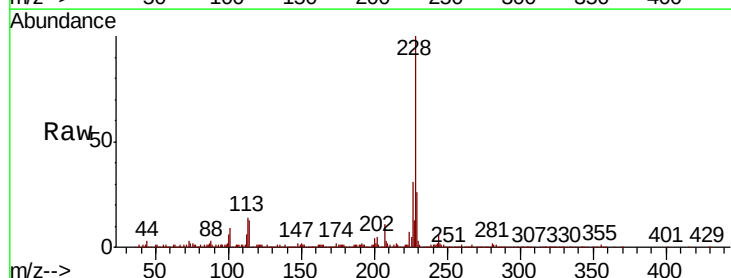
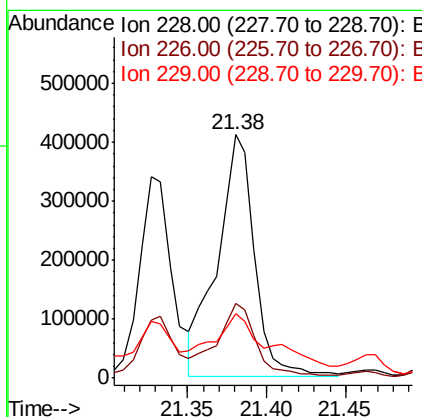
Manual Integrations  
APPROVED

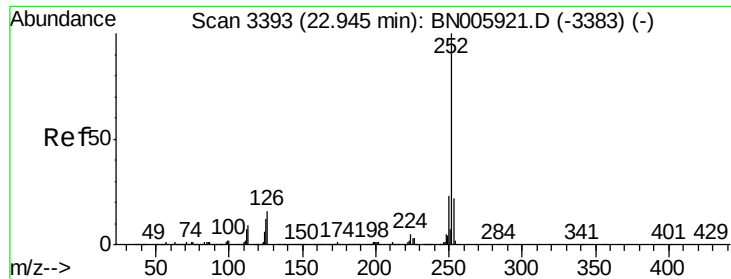
mohammad  
5/30/2019 1:28:25 PM



#84  
Chrysene  
Concen: 4.163 ng/ul  
RT: 21.38 min Scan# 3127  
Delta R.T. 0.01 min  
Lab File: BN005929.D  
Acq: 29 May 2019 14:27

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.6  | 24.0  | 36.0  |
| 229     | 26.4  | 15.4  | 23.0# |





#87

Benzo(b)fluoranthene

Concen: 3.791 ng/ul

RT: 22.94 min Scan# 3393

Delta R.T. 0.03 min

Lab File: BN005929.D

Acq: 29 May 2019 14:27

Instrument :

BNA\_N

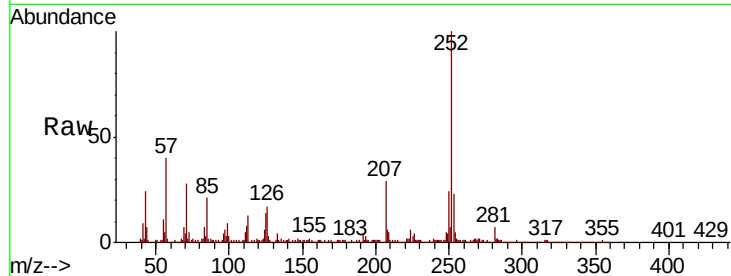
ClientSampleId :

A42C3MSD

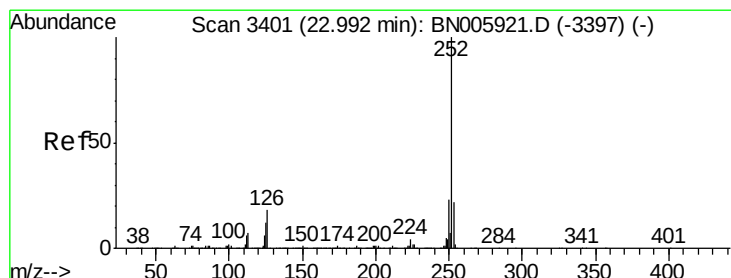
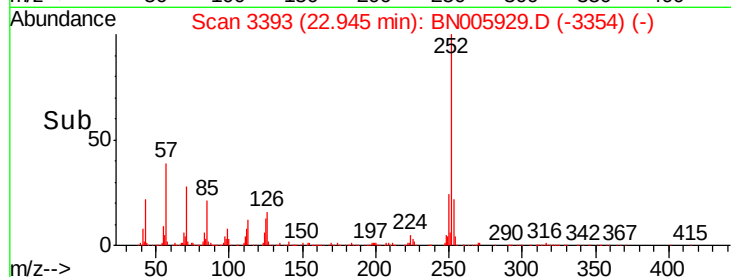
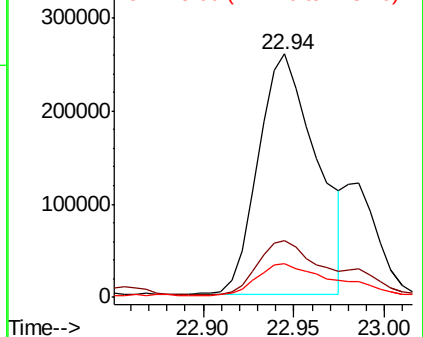
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 576199 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.1  | 17.7  | 26.5   |
| 125       | 14.1  | 8.4   | 12.6#  |

Manual Integrations  
APPROVED

mohammad  
5/30/2019 1:28:25 PM



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: 1.181 ng/ul m

RT: 22.99 min Scan# 3400

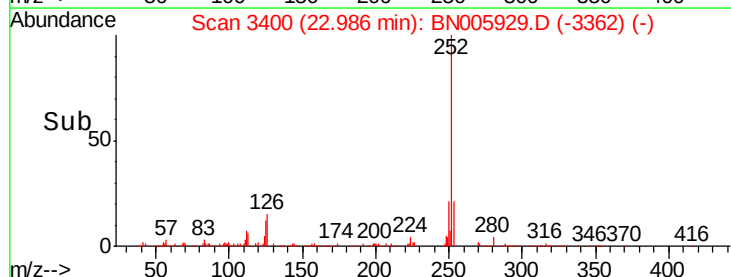
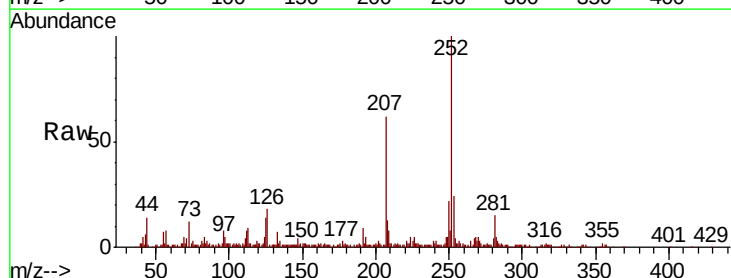
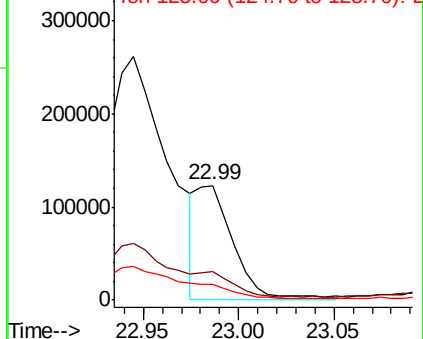
Delta R.T. 0.02 min

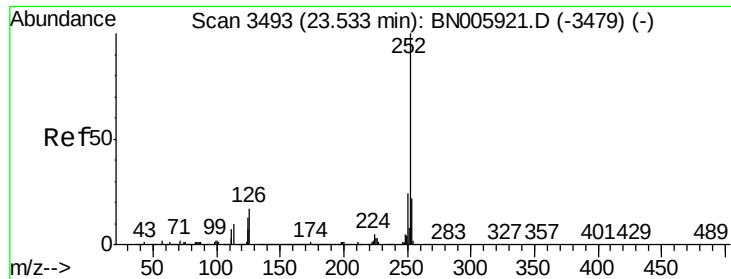
Lab File: BN005929.D

Acq: 29 May 2019 14:27

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 165010 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 24.5  | 17.4  | 26.0   |
| 125       | 14.1  | 7.5   | 11.3#  |

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





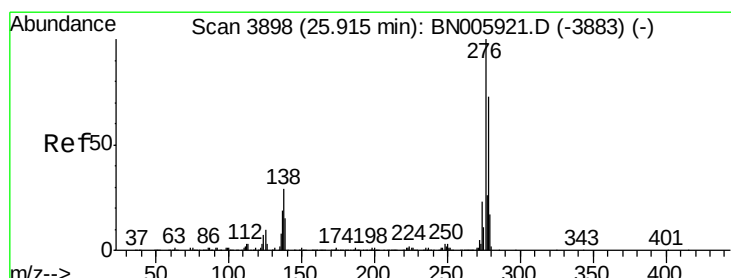
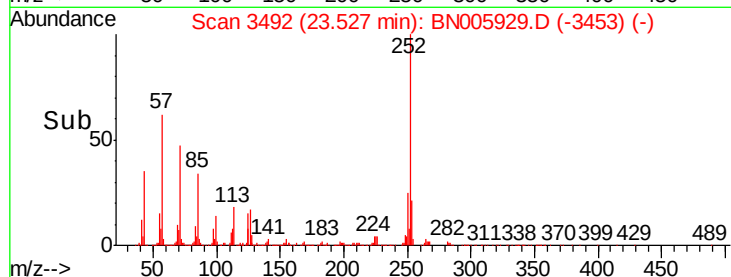
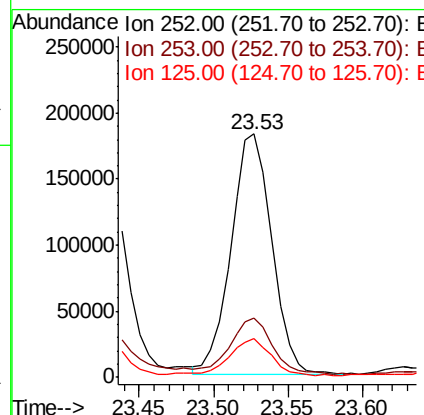
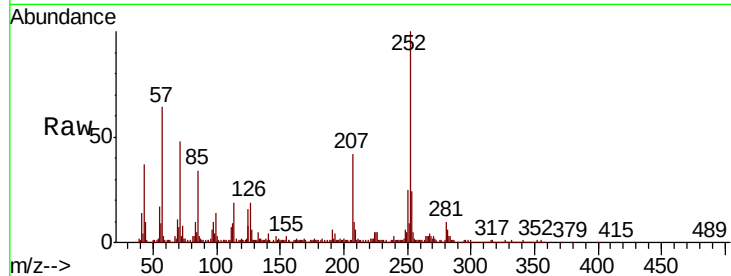
#90  
Benzo(a)pyrene  
Concen: 2.413 ng/ul  
RT: 23.53 min Scan# 3492  
Delta R.T. 0.03 min  
Lab File: BN005929.D  
Acq: 29 May 2019 14:27

Instrument :  
BNA\_N  
ClientSampleId :  
A42C3MSD

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 24.1  | 17.3       | 25.9  |
| 125     | 16.0  | 8.6        | 13.0  |

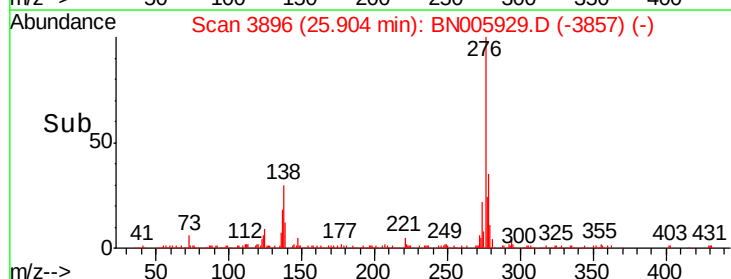
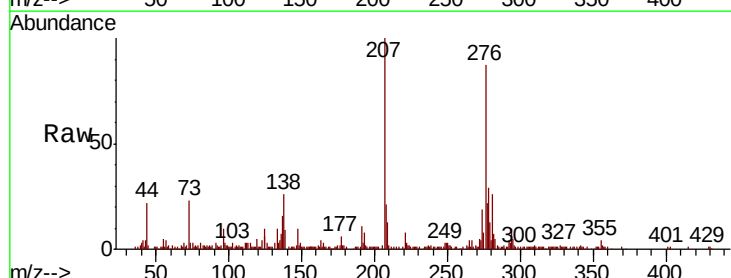
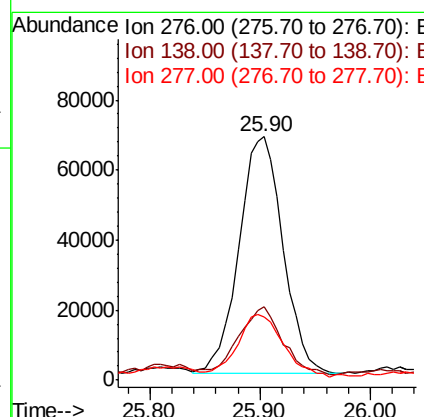
Manual Integrations  
APPROVED

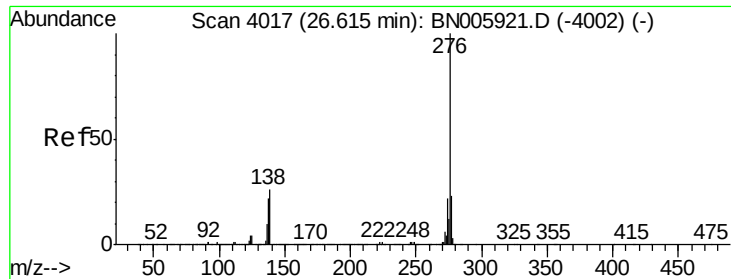
mohammad  
5/30/2019 1:28:25 PM



#91  
Indeno(1,2,3-cd)pyrene  
Concen: 1.118 ng/ul  
RT: 25.90 min Scan# 3896  
Delta R.T. 0.03 min  
Lab File: BN005929.D  
Acq: 29 May 2019 14:27

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 276     | 100   |            |       |
| 138     | 30.3  | 17.9       | 26.9  |
| 277     | 25.7  | 19.7       | 29.5  |





#93

Benzo(a,h,i)perylene

Concen: 1.094 ng/ul

RT: 26.60 min Scan# 4014

Delta R.T. 0.03 min

Lab File: BN005929.D

Acq: 29 May 2019 14:27

Instrument :

BNA\_N

ClientSampleId :

A42C3MSD

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 154957 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 26.4  | 16.7  | 25.1#  |
| 277       | 25.6  | 18.2  | 27.2   |

Manual Integrations  
APPROVED

mohammad  
5/30/2019 1:28:25 PM

