

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM080320\  
 Data File : BM026981.D  
 Acq On : 03 Aug 2020 16:45  
 Operator : JU/CG  
 Sample : L3424-14 5X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 C0S89

Manual Integrations  
 APPROVED

mohammad  
 8/5/2020 10:26:09 AM

Quant Time: Aug 03 17:19:01 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM072720MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Aug 03 10:21:18 2020  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.66  | 152  | 109911   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.43 | 136  | 437862   | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.29 | 164  | 268093   | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.03 | 188  | 534803   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.23 | 240  | 502355   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 23.44 | 264  | 504203   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |      |       |      |
|--------------------------------|-------|-----|--------|------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.22  | 96  | 1588   | 0.66 | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.84  | 99  | 42606  | 4.42 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.00  | 67  | 29752  | 4.56 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.20  | 132 | 33468  | 4.64 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.36  | 113 | 34450  | 4.65 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.80  | 128 | 16028  | 4.71 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.52  | 143 | 16817  | 5.39 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.06 | 165 | 34216  | 4.59 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.57 | 131 | 23084  | 2.60 | ng/ul | 0.00 |
| 44) Dimethylphthalate-d6       | 13.70 | 166 | 104862 | 4.99 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 13.98 | 160 | 129738 | 4.85 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.49 | 143 | 11316  | 3.18 | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.29 | 176 | 86677  | 4.74 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.40 | 200 | 8190   | 3.44 | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.13 | 188 | 133799 | 5.01 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.43 | 212 | 135400 | 5.05 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 23.30 | 264 | 134270 | 4.72 | ng/ul | 0.00 |

## Target Compounds

|                            |       |     |          |               | Ovalue |
|----------------------------|-------|-----|----------|---------------|--------|
| 28) Naphthalene            | 10.49 | 128 | 141319   | 5.777 ng/ul   | 96     |
| 34) 2-Methylnaphthalene    | 12.10 | 142 | 42957    | 2.484 ng/ul   | 97     |
| 48) Acenaphthylene         | 14.01 | 152 | 276165   | 10.160 ng/ul  | 100    |
| 50) Acenaphthene           | 14.36 | 153 | 24848    | 1.327 ng/ul   | 93     |
| 54) Dibenzofuran           | 14.69 | 168 | 109605   | 4.223 ng/ul   | 99     |
| 59) Fluorene               | 15.34 | 166 | 37441    | 1.713 ng/ul   | 99     |
| 70) Phenanthrene           | 17.07 | 178 | 392757   | 12.099 ng/ul  | 99     |
| 72) Anthracene             | 17.17 | 178 | 628940   | 18.849 ng/ul  | 99     |
| 75) Carbazole              | 17.43 | 167 | 116606   | 3.953 ng/ul   | 100    |
| 77) Fluoranthene           | 19.10 | 202 | 1421347  | 37.082 ng/ul  | 99     |
| 80) Pyrene                 | 19.46 | 202 | 1882707  | 51.512 ng/ul  | 96     |
| 83) Benzo(a)anthracene     | 21.21 | 228 | 1058217  | 30.562 ng/ul  | 94     |
| 85) Chrysene               | 21.26 | 228 | 1806335  | 53.495 ng/ul  | 98     |
| 88) Benzo(b)fluoranthene   | 22.79 | 252 | 3678007  | 101.972 ng/ul | 99     |
| 89) Benzo(k)fluoranthene   | 22.83 | 252 | 1190183m | 34.388 ng/ul  |        |
| 91) Benzo(a)pyrene         | 23.34 | 252 | 1117634  | 34.339 ng/ul  | 99     |
| 92) Indeno(1,2,3-cd)pyrene | 25.66 | 276 | 1460122  | 36.163 ng/ul  | 96     |
| 93) Dibenzo(a,h)anthracene | 25.66 | 278 | 379683   | 11.118 ng/ul# | 86     |
| 94) Benzo(g,h,i)perylene   | 26.33 | 276 | 391582   | 11.729 ng/ul  | 99     |

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

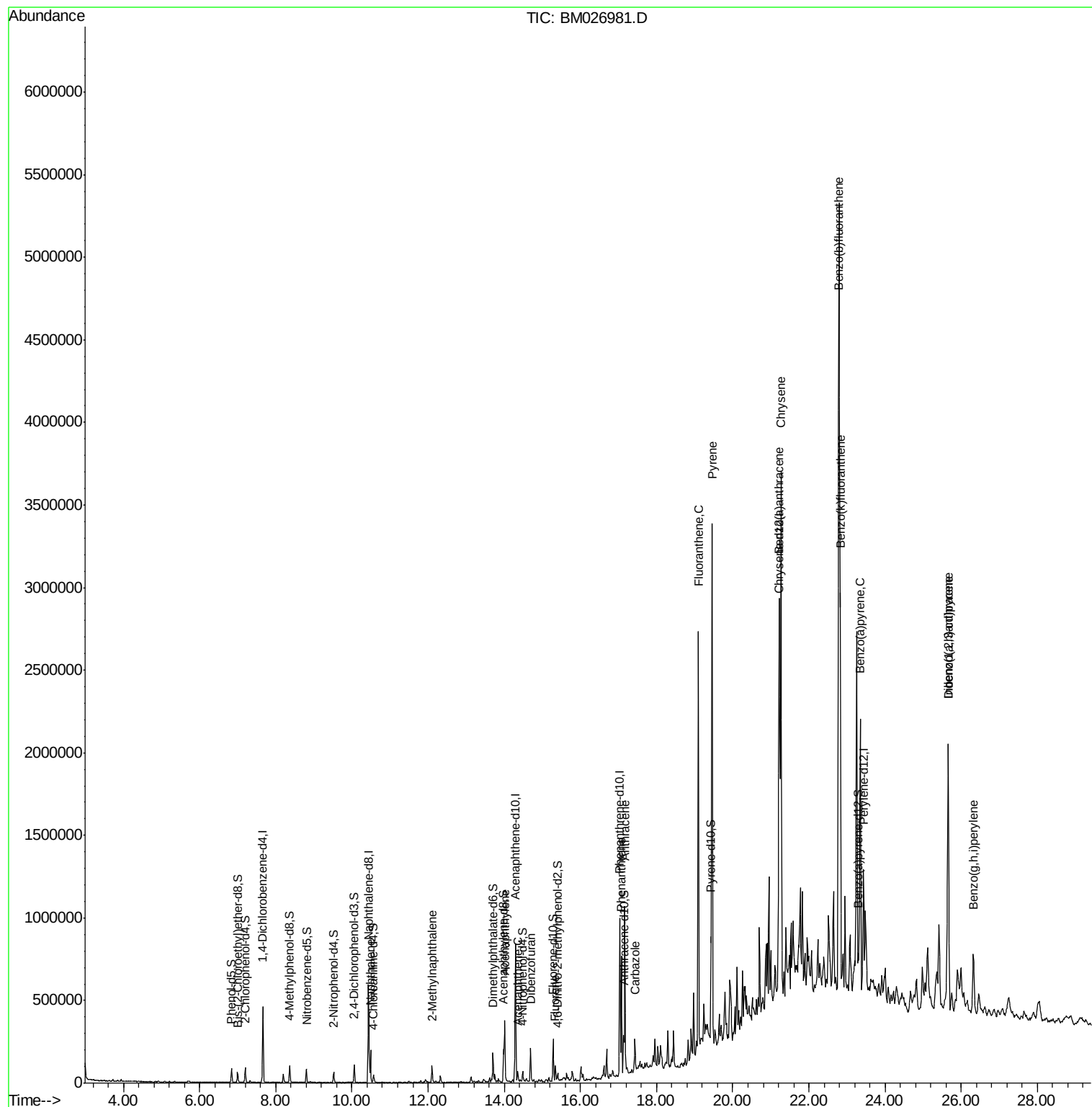
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM080320\  
Data File : BM026981.D  
Acq On : 03 Aug 2020 16:45  
Operator : JU/CG  
Sample : L3424-14 5X  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

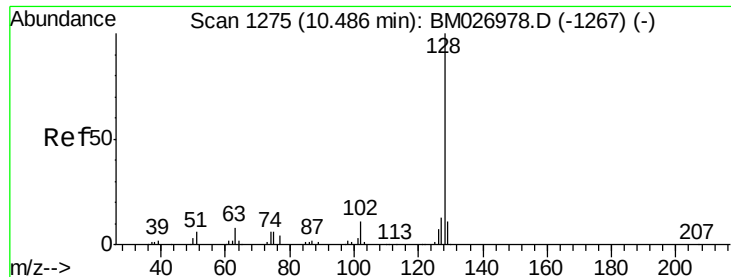
Instrument :  
BNA\_M  
ClientSampleId :  
C0S89

Quant Time: Aug 03 17:19:01 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM072720MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Mon Aug 03 10:21:18 2020  
Response via : Initial Calibration

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#28

Naphthalene

Concen: 5.777 ng/ul

RT: 10.49 min Scan# 1275

Delta R.T. 0.00 min

Lab File: BM026981.D

Acq: 03 Aug 2020 16:45

Instrument :

BNA\_M

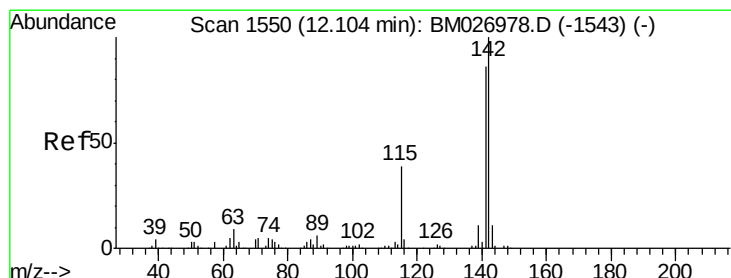
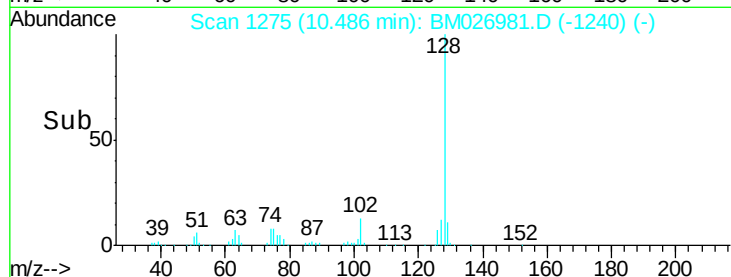
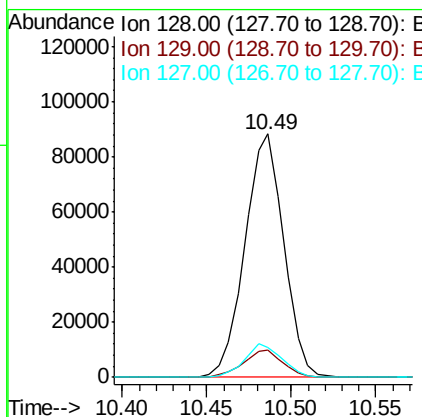
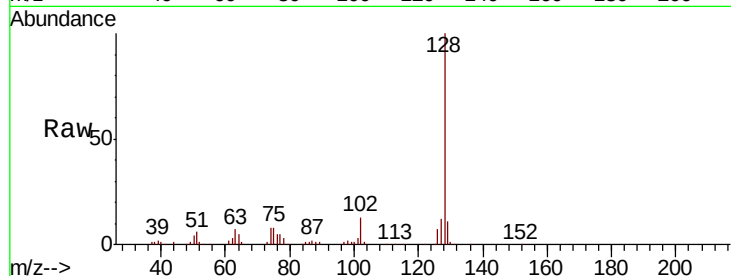
ClientSampleId :

C0S89

|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 128  | Resp: | 141319 |
| Ion Ratio |      | Lower | Upper  |
| 128       | 100  |       |        |
| 129       | 11.4 | 8.3   | 12.5   |
| 127       | 12.0 | 11.0  | 16.6   |

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#34

2-Methylnaphthalene

Concen: 2.484 ng/ul

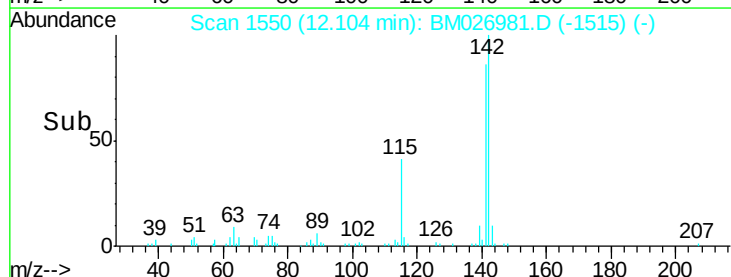
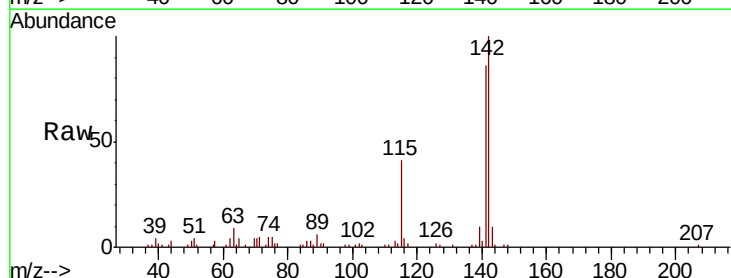
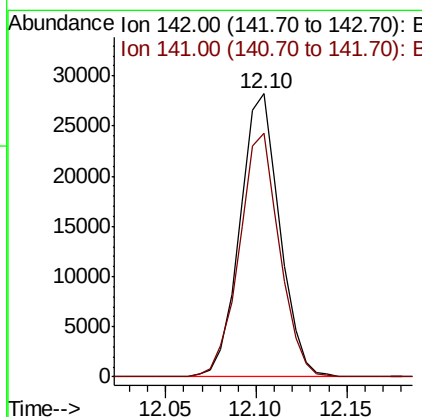
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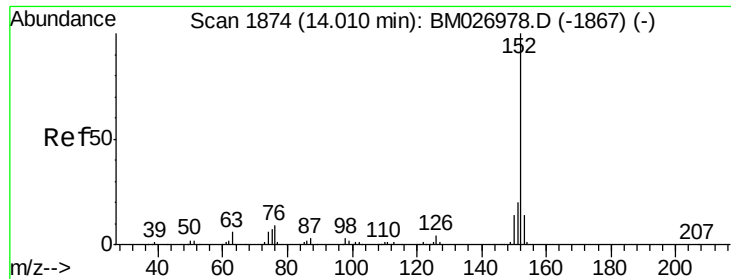
Delta R.T. 0.00 min

Lab File: BM026981.D

Acq: 03 Aug 2020 16:45

|           |      |       |       |
|-----------|------|-------|-------|
| Tgt Ion:  | 142  | Resp: | 42957 |
| Ion Ratio |      | Lower | Upper |
| 142       | 100  |       |       |
| 141       | 86.1 | 71.1  | 106.7 |





#48

Acenaphthylene

Concen: 10.160 ng/ul

RT: 14.01 min Scan# 1874

Delta R.T. -0.00 min

Lab File: BM026981.D

Acq: 03 Aug 2020 16:45

Instrument :

BNA\_M

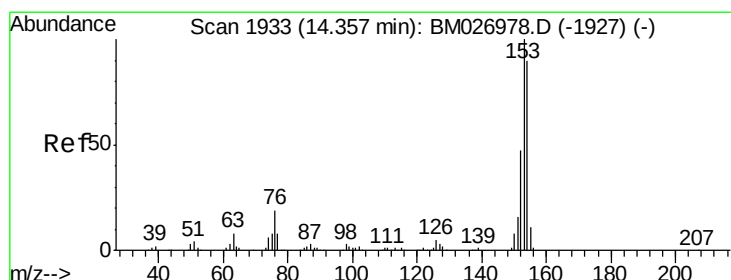
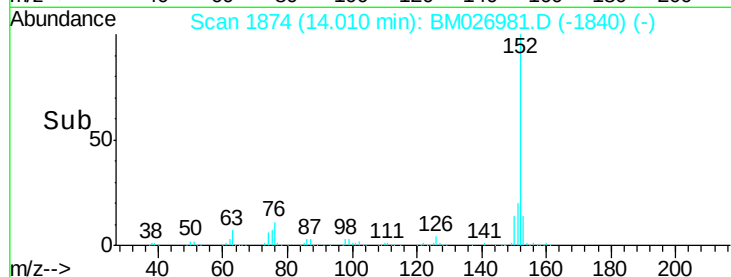
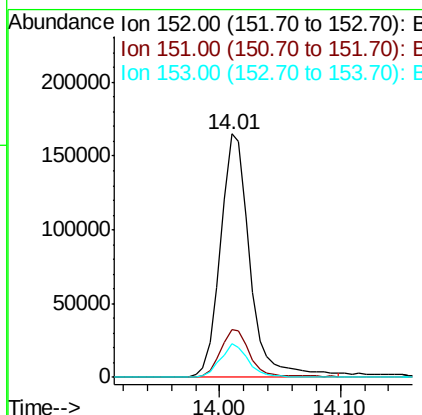
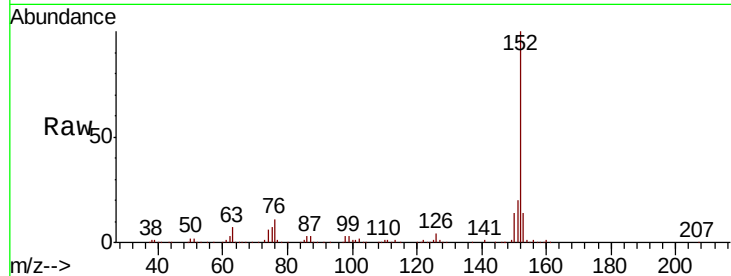
ClientSampleId :

C0S89

| Tot Ion   | 152   | Resp  | 276165 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 151       | 19.5  | 15.8  | 23.6   |
| 153       | 13.7  | 10.7  | 16.1   |

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#50

Acenaphthene

Concen: 1.327 ng/ul

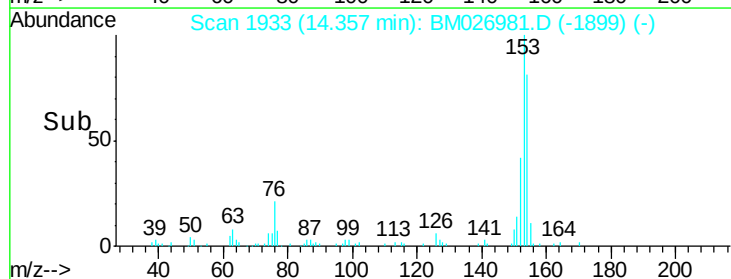
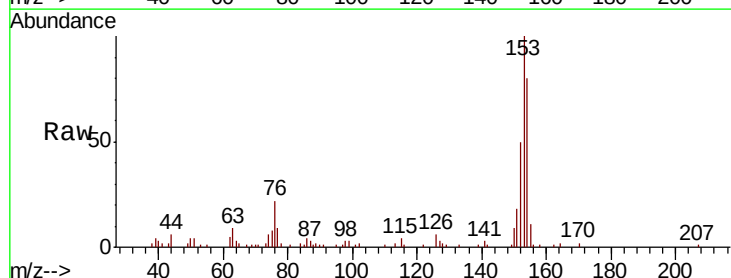
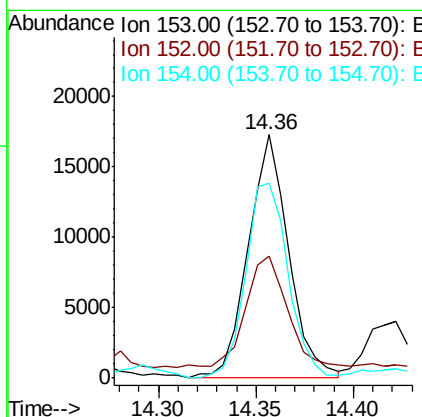
RT: 14.36 min Scan# 1933

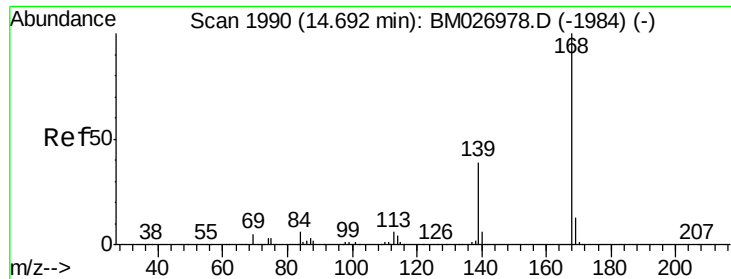
Delta R.T. -0.00 min

Lab File: BM026981.D

Acq: 03 Aug 2020 16:45

| Tgt Ion   | 153   | Resp  | 24848 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 49.9  | 37.8  | 56.6  |
| 154       | 80.3  | 70.5  | 105.7 |





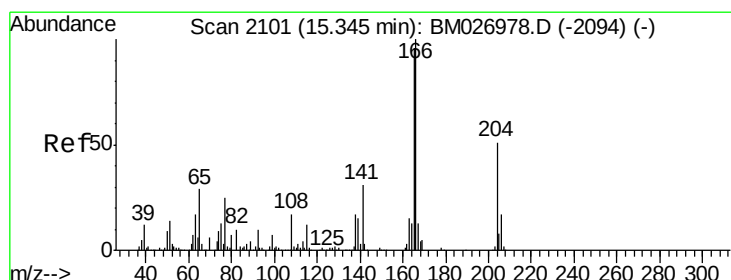
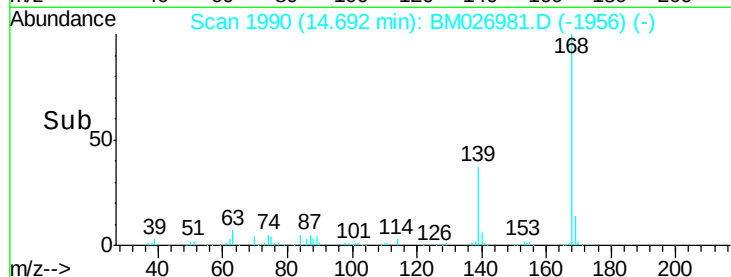
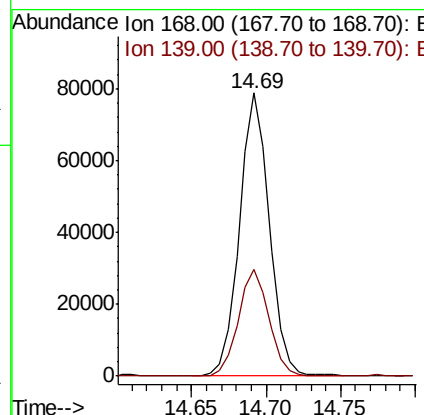
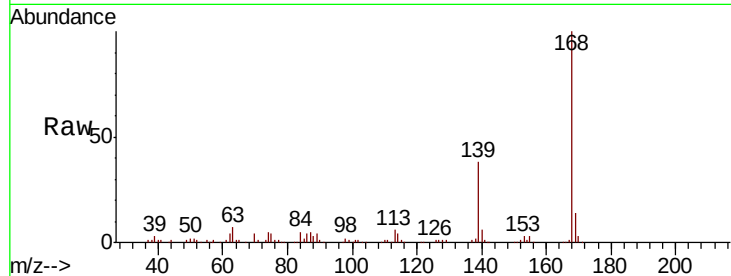
#54  
Dibenzenofuran  
Concen: 4.223 ng/ul  
RT: 14.69 min Scan# 1990  
Delta R.T. -0.00 min  
Lab File: BM026981.D  
Acq: 03 Aug 2020 16:45

Instrument :  
BNA\_M  
ClientSampleId :  
C0S89

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 168     | 100   |       |       |
| 139     | 37.6  | 30.8  | 46.2  |

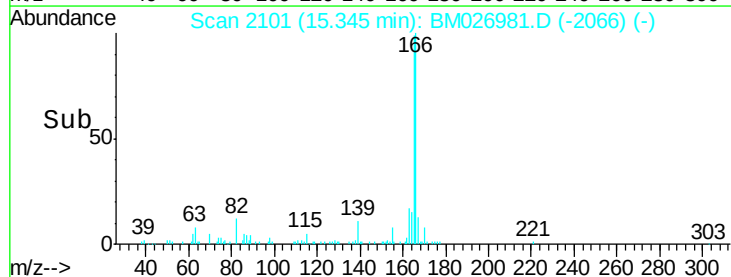
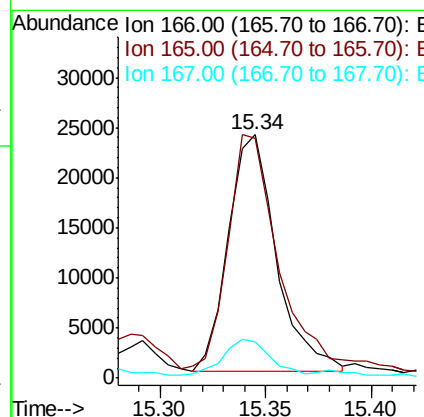
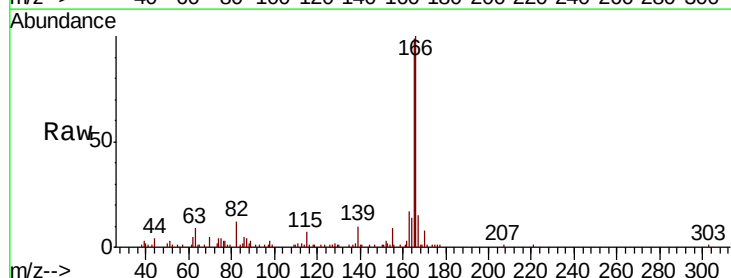
Manual Integrations  
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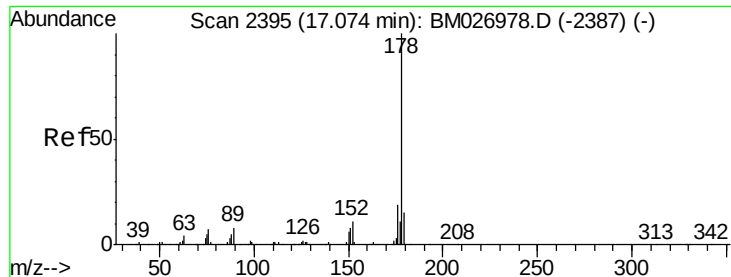
mohammad  
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#59  
Fluorene  
Concen: 1.713 ng/ul  
RT: 15.34 min Scan# 2101  
Delta R.T. 0.00 min  
Lab File: BM026981.D  
Acq: 03 Aug 2020 16:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 98.6  | 78.2  | 117.2 |
| 167     | 15.0  | 10.3  | 15.5  |





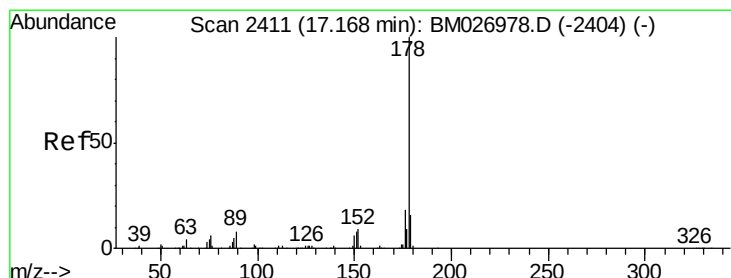
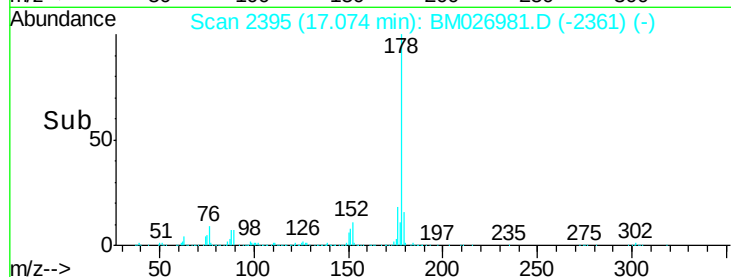
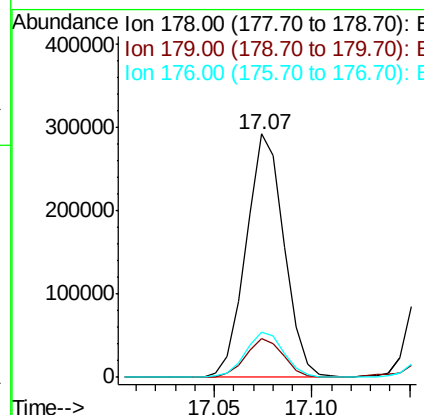
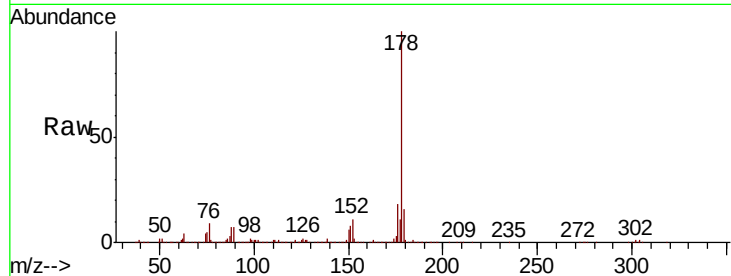
#70  
Phenanthrene  
Concen: 12.099 ng/ul  
RT: 17.07 min Scan# 2395  
Delta R.T. -0.00 min  
Lab File: BM026981.D  
Acq: 03 Aug 2020 16:45

Instrument :  
BNA\_M  
ClientSampleId :  
C0S89

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:178 | Resp: | 392757    |
| Ion Ratio   | Lower | Upper     |
| 178         | 100   |           |
| 179         | 15.9  | 12.0 18.0 |
| 176         | 18.4  | 14.7 22.1 |

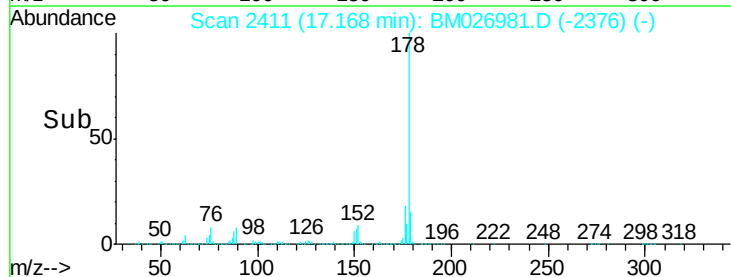
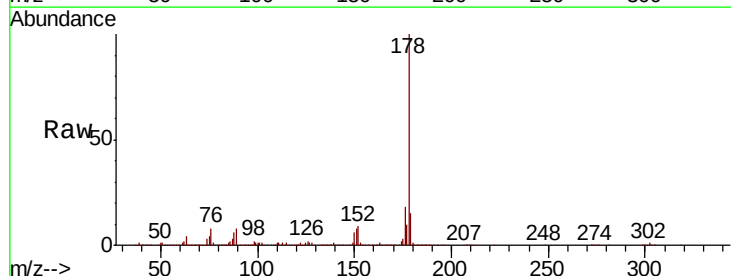
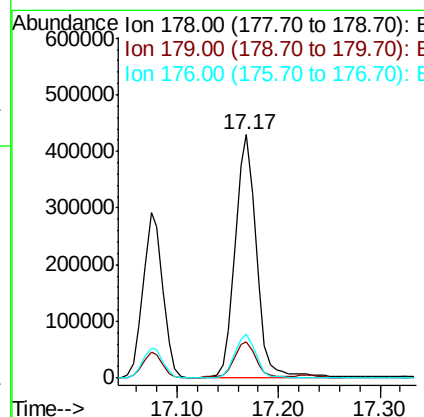
Manual Integrations  
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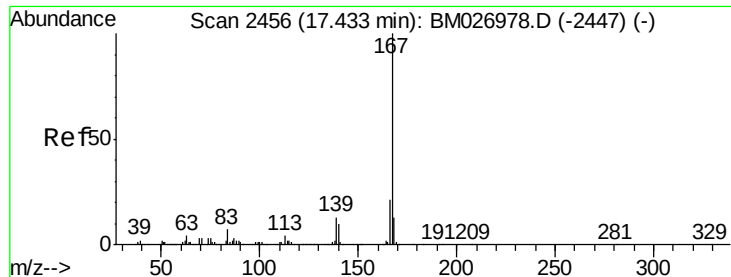
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8/5/2020 10:26:09 AM



#72  
Anthracene  
Concen: 18.849 ng/ul  
RT: 17.17 min Scan# 2411  
Delta R.T. 0.00 min  
Lab File: BM026981.D  
Acq: 03 Aug 2020 16:45

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:178 | Resp: | 628940    |
| Ion Ratio   | Lower | Upper     |
| 178         | 100   |           |
| 179         | 15.1  | 11.8 17.6 |
| 176         | 18.2  | 15.0 22.6 |





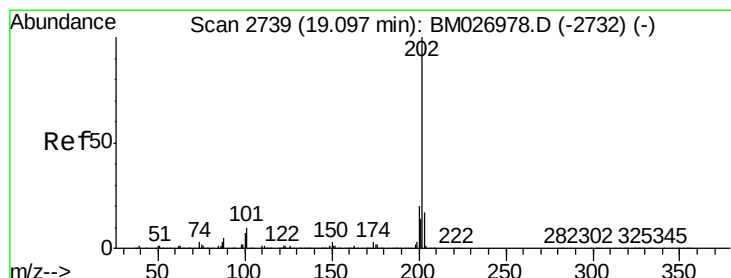
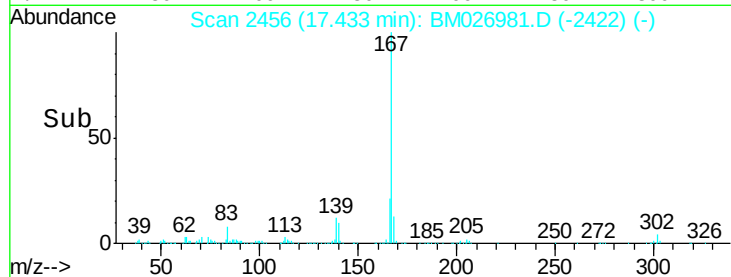
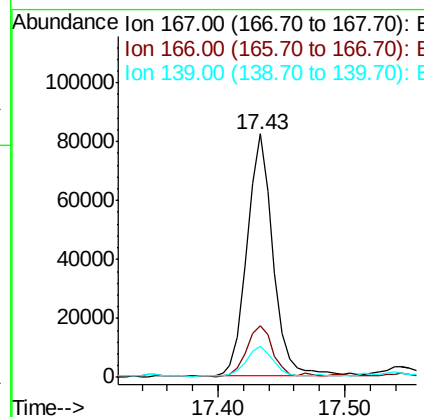
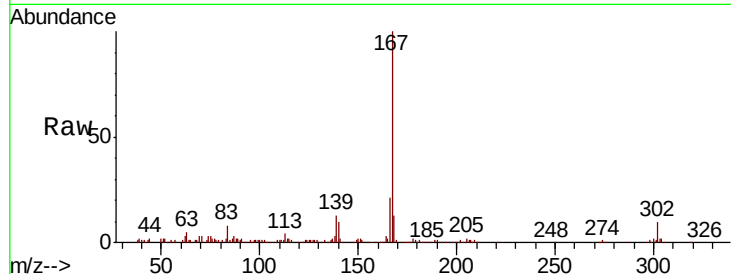
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 Carbazole  
 Concen: 3.953 ng/ul  
 RT: 17.43 min Scan# 2456  
 Delta R.T. -0.00 min  
 Lab File: BM026981.D  
 Acq: 03 Aug 2020 16:45

Instrument :  
 BNA\_M  
 ClientSampleID :  
 C0S89

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 21.2  | 17.1  | 25.7  |
| 139     | 12.6  | 10.1  | 15.1  |

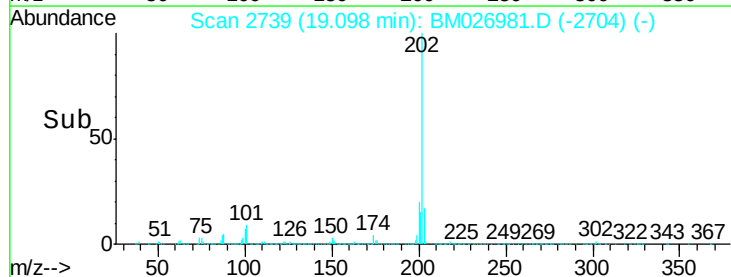
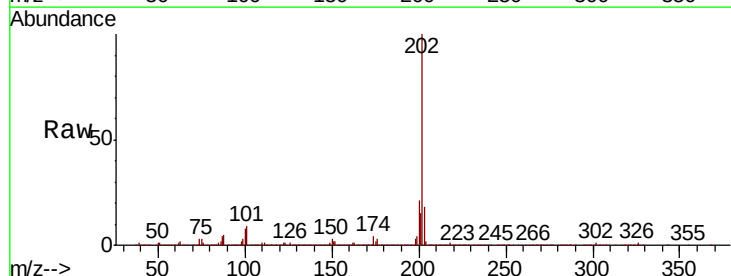
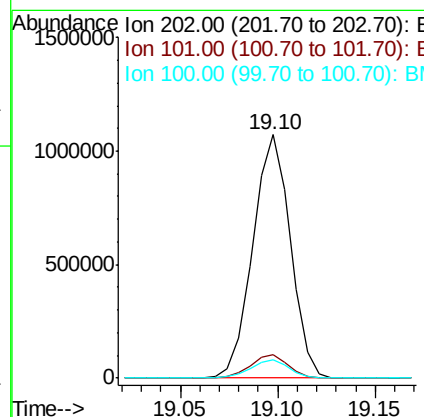
Manual Integrations  
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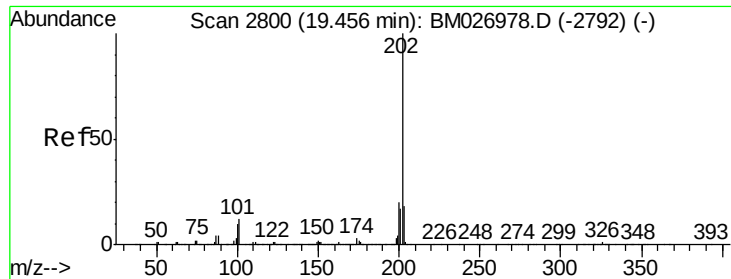
mohammad  
 8/5/2020 10:26:09 AM



#77  
 Fluoranthene  
 Concen: 37.082 ng/ul  
 RT: 19.10 min Scan# 2739  
 Delta R.T. 0.00 min  
 Lab File: BM026981.D  
 Acq: 03 Aug 2020 16:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 9.5   | 7.7   | 11.5  |
| 100     | 7.5   | 6.2   | 9.4   |





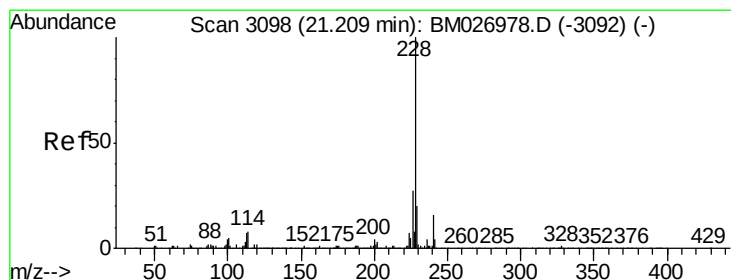
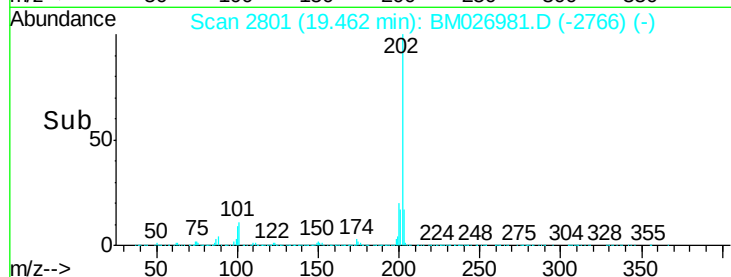
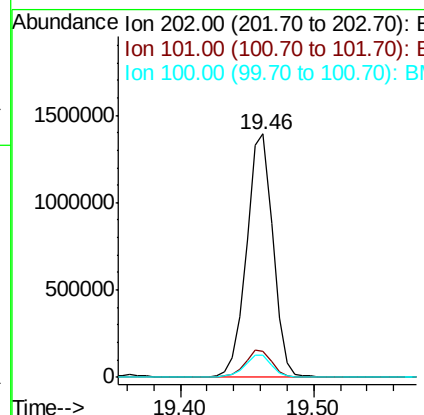
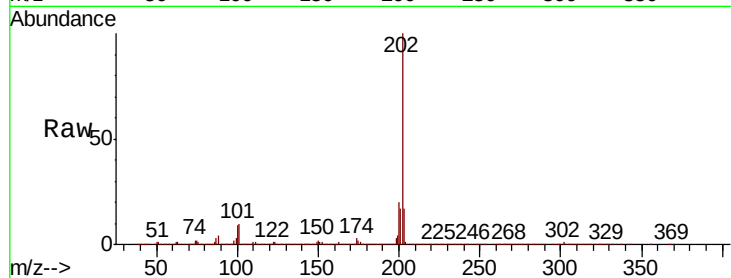
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Pvrene  
Concen: 51.512 ng/ul  
RT: 19.46 min Scan# 2801  
Delta R.T. 0.00 min  
Lab File: BM026981.D  
Acq: 03 Aug 2020 16:45

Instrument :  
BNA\_M  
ClientSampleId :  
C0S89

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 10.5  | 9.4   | 14.2  |
| 100     | 8.9   | 8.2   | 12.4  |

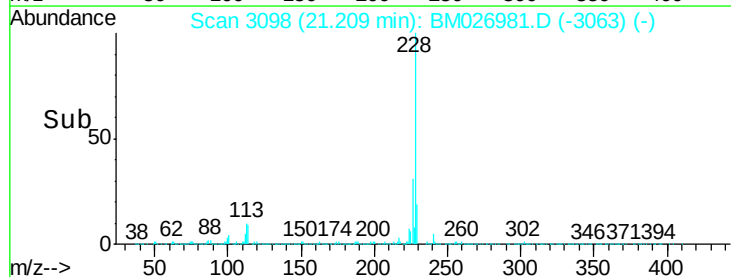
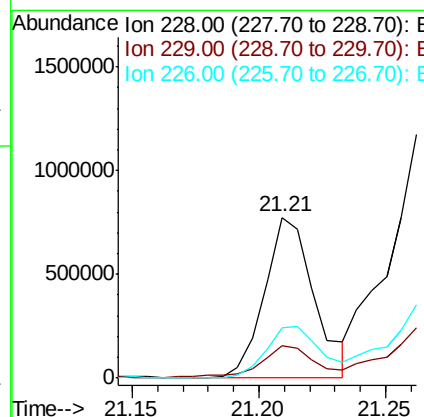
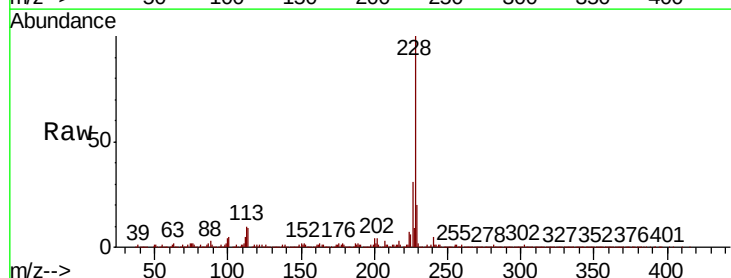
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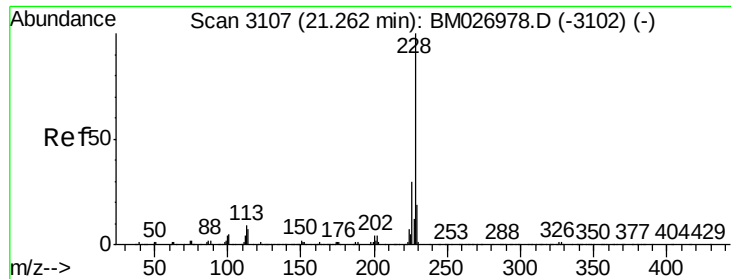


#83  
Benzo(a)anthracene  
Concen: 30.562 ng/ul  
RT: 21.21 min Scan# 3098  
Delta R.T. 0.00 min  
Lab File: BM026981.D  
Acq: 03 Aug 2020 16:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 19.9  | 15.4  | 23.2  |
| 226     | 31.0  | 20.9  | 31.3  |







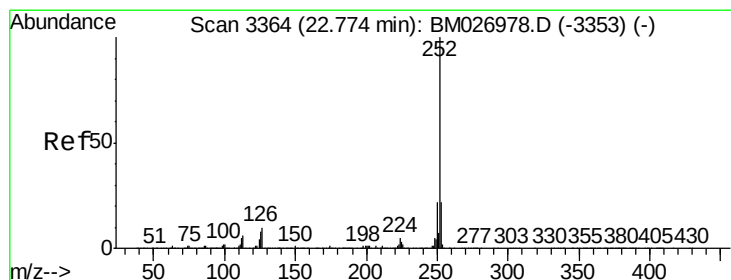
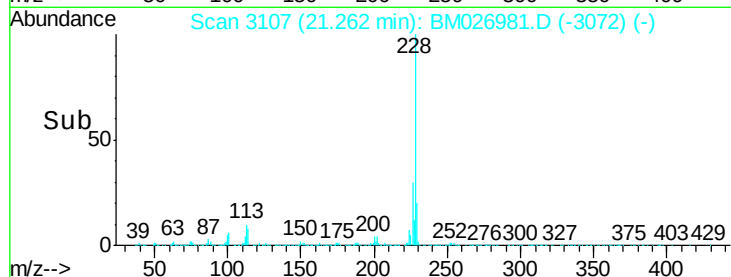
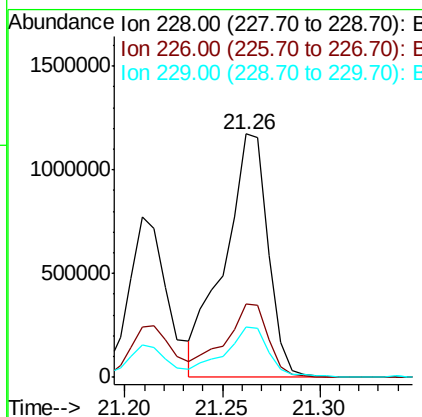
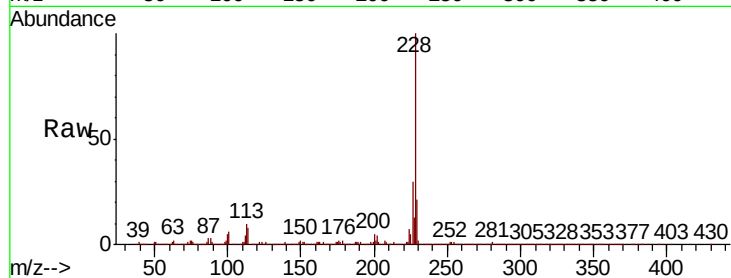
#85  
Chrysene  
Concen: 53.495 ng/ul  
RT: 21.26 min Scan# 3107  
Delta R.T. 0.00 min  
Lab File: BM026981.D  
Acq: 03 Aug 2020 16:45

Instrument :  
BNA\_M  
ClientSampleId :  
C0S89

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.9  | 23.2  | 34.8  |
| 229     | 20.5  | 15.5  | 23.3  |

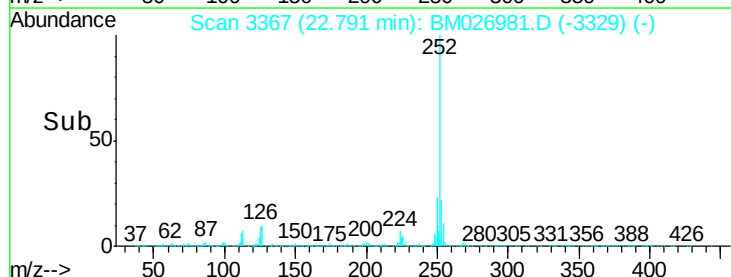
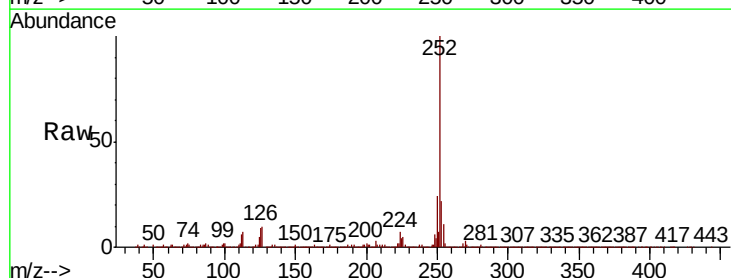
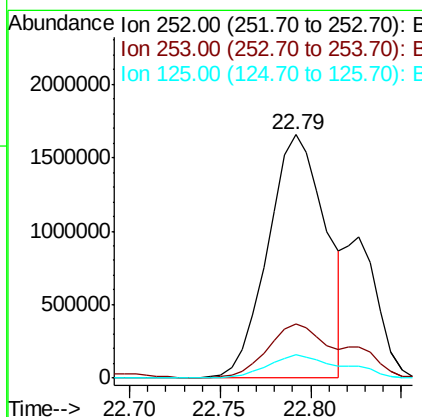
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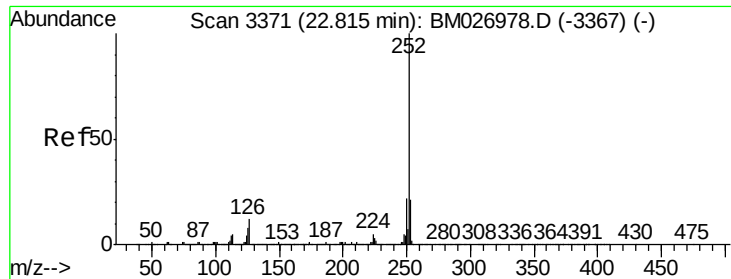
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#88  
Benzo(b)fluoranthene  
Concen: 101.972 ng/ul  
RT: 22.79 min Scan# 3367  
Delta R.T. 0.02 min  
Lab File: BM026981.D  
Acq: 03 Aug 2020 16:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.3  | 17.6  | 26.4  |
| 125     | 9.4   | 6.6   | 10.0  |





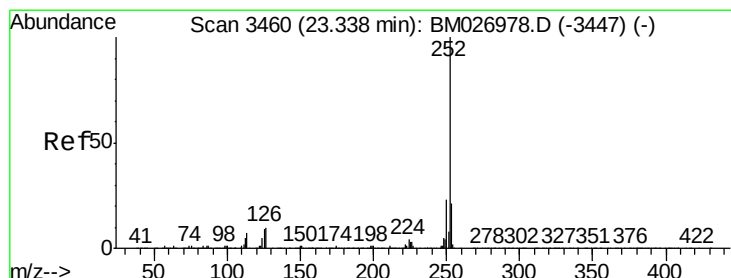
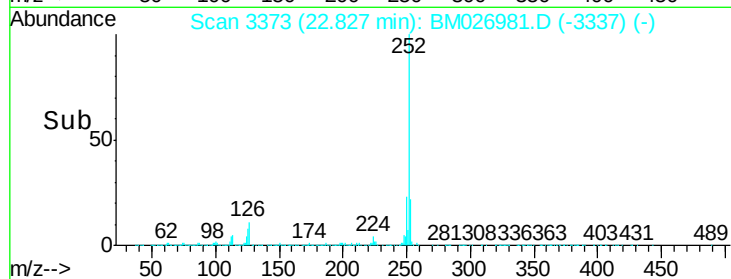
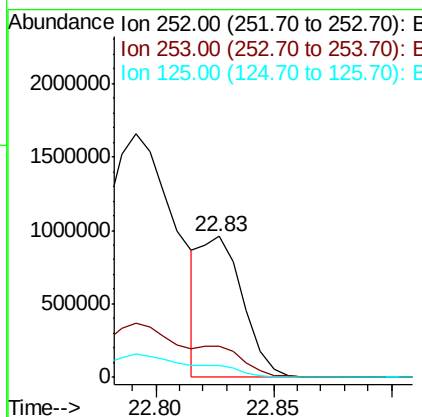
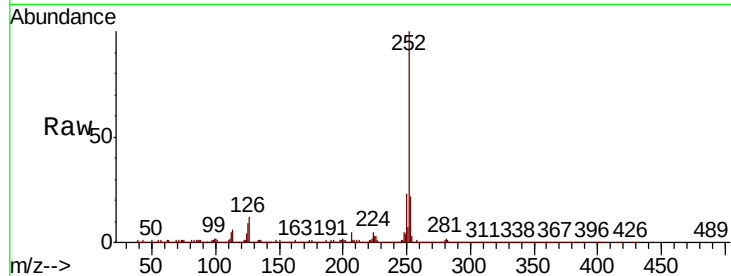
#89  
Benzo(k)fluoranthene  
Concen: 34.388 ng/ul  
RT: 22.83 min Scan# 3373  
Delta R.T. 0.01 min  
Lab File: BM026981.D  
Acq: 03 Aug 2020 16:45

Instrument :  
BNA\_M  
ClientSampleId :  
C0S89

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.5  | 17.4  | 26.2  |
| 125     | 8.5   | 7.3   | 10.9  |

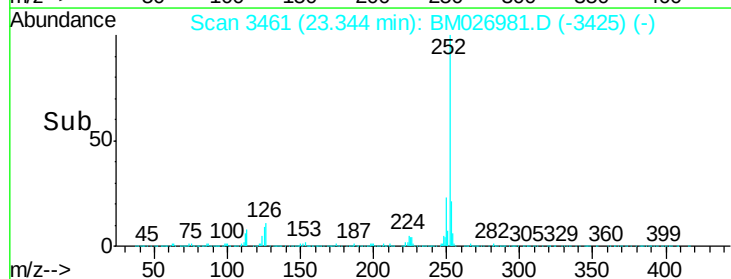
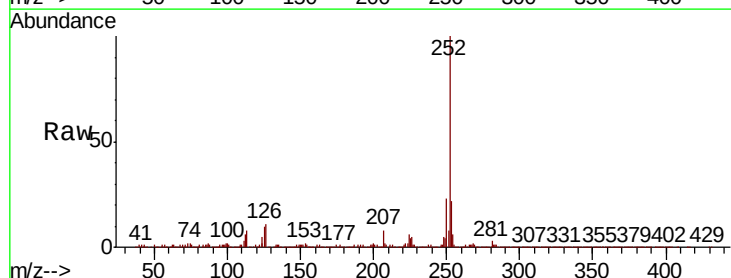
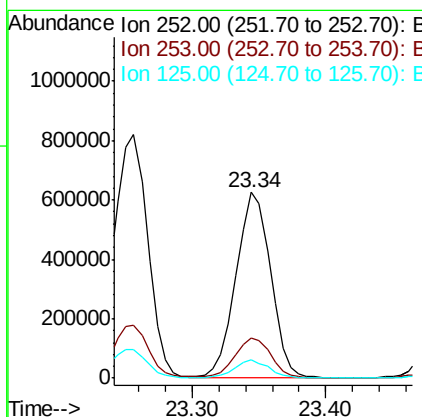
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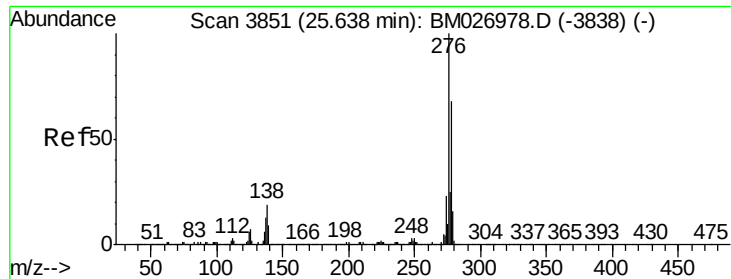
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#91  
Benzo(a)pyrene  
Concen: 34.339 ng/ul  
RT: 23.34 min Scan# 3461  
Delta R.T. 0.01 min  
Lab File: BM026981.D  
Acq: 03 Aug 2020 16:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.9  | 17.7  | 26.5  |
| 125     | 9.6   | 8.2   | 12.2  |





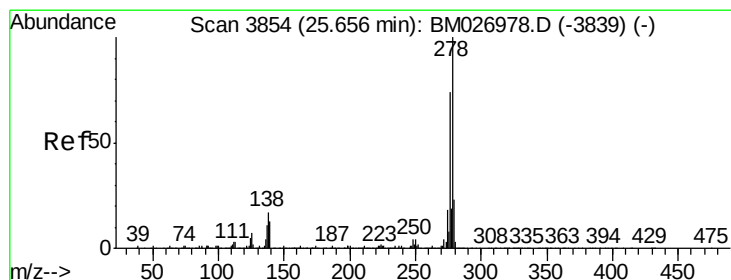
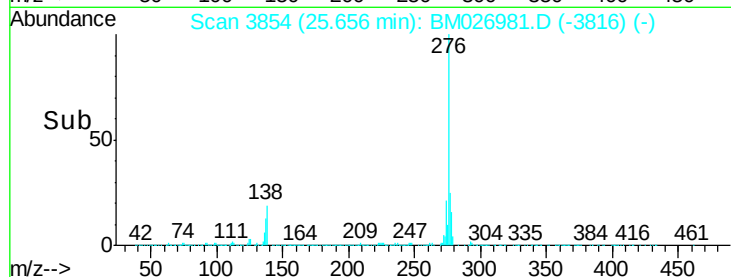
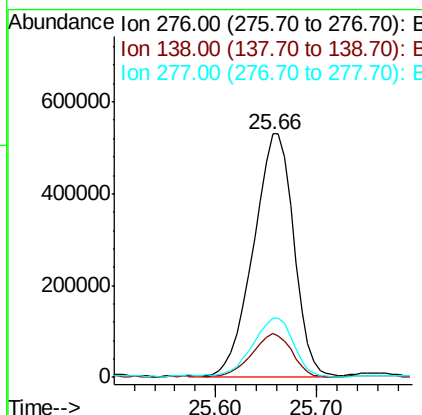
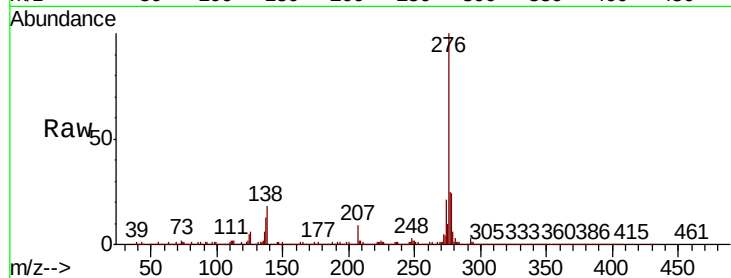
#92  
Indeno(1,2,3-cd)pyrene  
Concen: 36.163 ng/ul  
RT: 25.66 min Scan# 3854  
Delta R.T. 0.02 min  
Lab File: BM026981.D  
Acq: 03 Aug 2020 16:45

Instrument :  
BNA\_M  
ClientSampleId :  
C0S89

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 18.1  | 17.0  | 25.4  |
| 277     | 24.6  | 20.6  | 30.8  |

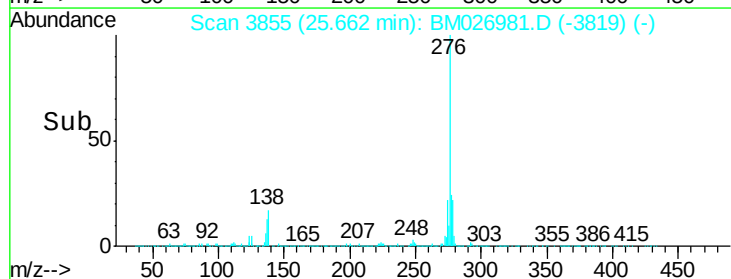
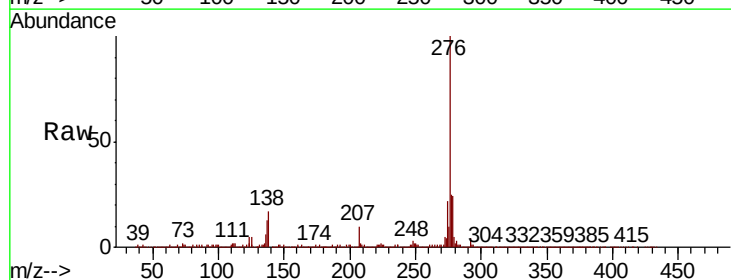
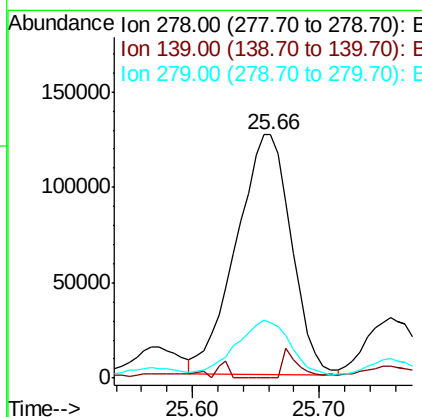
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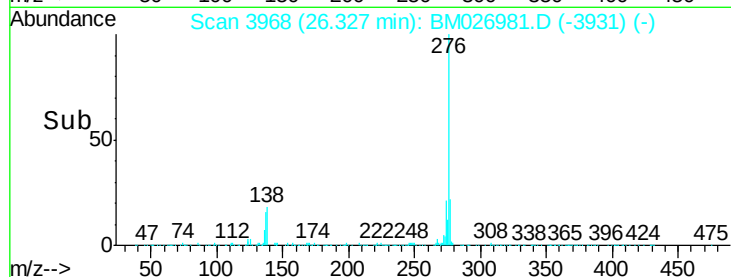
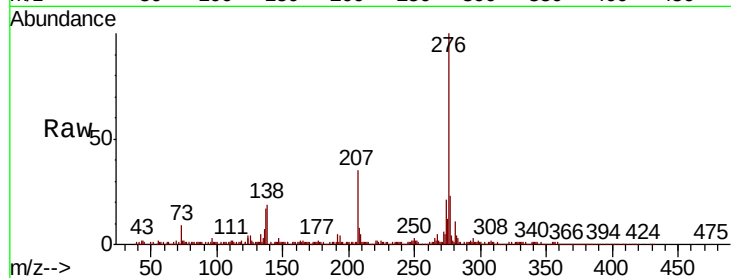
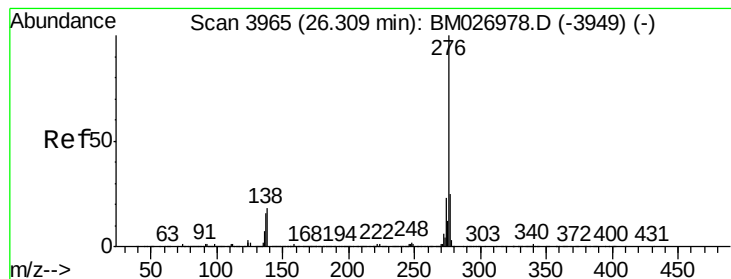
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#93  
Dibenzo(a,h)anthracene  
Concen: 11.118 ng/ul  
RT: 25.66 min Scan# 3855  
Delta R.T. 0.01 min  
Lab File: BM026981.D  
Acq: 03 Aug 2020 16:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 10.9  | 16.3# |
| 279     | 22.8  | 19.4  | 29.2  |





#94

Benzo(a,h,i)perylene

Concen: 11.729 ng/ul

RT: 26.33 min Scan# 3968

Delta R.T. 0.01 min

Lab File: BM026981.D

Acq: 03 Aug 2020 16:45

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 276     | 100   |            |       |
| 138     | 18.6  | 14.9       | 22.3  |
| 277     | 23.0  | 19.1       | 28.7  |

Instrument :

BNA\_M

ClientSampleId :

C0S89

Manual Integrations  
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