

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM103119\  
 Data File : BM023525.D  
 Acq On : 31 Oct 2019 18:27  
 Operator : JU  
 Sample : K5395-10  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 C0003

Manual Integrations  
 APPROVED

mohammad  
 11/1/2019 4:15:19 PM

Quant Time: Nov 01 07:32:59 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri Nov 01 07:12:43 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.61  | 152  | 407138   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.39 | 136  | 1643186  | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.26 | 164  | 991684   | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.01 | 188  | 2114805  | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.22 | 240  | 2219388  | 20.00 | ng/ul | 0.01     |
| 86) Perylene-d12          | 23.41 | 264  | 2669351  | 20.00 | ng/ul | 0.02     |

## System Monitoring Compounds

|                                |       |     |         |       |       |      |
|--------------------------------|-------|-----|---------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.15  | 96  | 34378   | 4.01  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.79  | 99  | 662351  | 19.37 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.95  | 67  | 432683  | 21.59 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.15  | 132 | 543353  | 20.33 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.32  | 113 | 481480  | 17.34 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.76  | 128 | 265194  | 21.44 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.48  | 143 | 278998  | 20.33 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.02 | 165 | 515325  | 19.10 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.53 | 131 | 330419  | 10.65 | ng/ul | 0.00 |
| 44) Dimethylphthalate-d6       | 13.68 | 166 | 1617491 | 21.48 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 13.95 | 160 | 1913497 | 22.18 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.47 | 143 | 151062  | 11.58 | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.26 | 176 | 1429330 | 22.41 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.39 | 200 | 143240  | 10.88 | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.11 | 188 | 2202663 | 22.04 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.42 | 212 | 2571971 | 21.07 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 23.28 | 264 | 3133378 | 23.04 | ng/ul | 0.02 |

## Target Compounds

|                            |       |     |           |         | Ovalue |     |
|----------------------------|-------|-----|-----------|---------|--------|-----|
| 6) Phenol                  | 6.82  | 94  | 74461     | 2.115   | ng/ul  | 95  |
| 45) Dimethylphthalate      | 13.73 | 163 | 704853    | 9.322   | ng/ul  | 100 |
| 48) Acenaphthylene         | 13.98 | 152 | 2039956   | 22.812  | ng/ul  | 99  |
| 50) Acenaphthene           | 14.32 | 153 | 227034    | 3.609   | ng/ul  | 99  |
| 54) Dibenzofuran           | 14.66 | 168 | 469957    | 5.217   | ng/ul  | 98  |
| 59) Fluorene               | 15.31 | 166 | 393257    | 5.354   | ng/ul# | 98  |
| 70) Phenanthrene           | 17.05 | 178 | 17629358m | 149.168 | ng/ul  |     |
| 72) Anthracene             | 17.14 | 178 | 5330020   | 44.512  | ng/ul  | 99  |
| 75) Carbazole              | 17.41 | 167 | 2023448   | 20.045  | ng/ul  | 99  |
| 77) Fluoranthene           | 19.07 | 202 | 24866113m | 201.712 | ng/ul  |     |
| 80) Pyrene                 | 19.44 | 202 | 24344163m | 155.335 | ng/ul  |     |
| 83) Benzo(a)anthracene     | 21.19 | 228 | 19625212m | 132.217 | ng/ul  |     |
| 85) Chrysene               | 21.25 | 228 | 18489793m | 135.004 | ng/ul  |     |
| 88) Benzo(b)fluoranthene   | 22.76 | 252 | 28272199m | 164.909 | ng/ul  |     |
| 89) Benzo(k)fluoranthene   | 22.80 | 252 | 12275305m | 76.251  | ng/ul  |     |
| 91) Benzo(a)pyrene         | 23.32 | 252 | 22290279m | 143.614 | ng/ul  |     |
| 92) Indeno(1,2,3-cd)pyrene | 25.64 | 276 | 22476987  | 133.747 | ng/ul  | 97  |
| 93) Dibenzo(a,h)anthracene | 25.63 | 278 | 5141141   | 36.281  | ng/ul# | 85  |
| 94) Benzo(g,h,i)perylene   | 26.31 | 276 | 20614629  | 150.769 | ng/ul  | 98  |

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

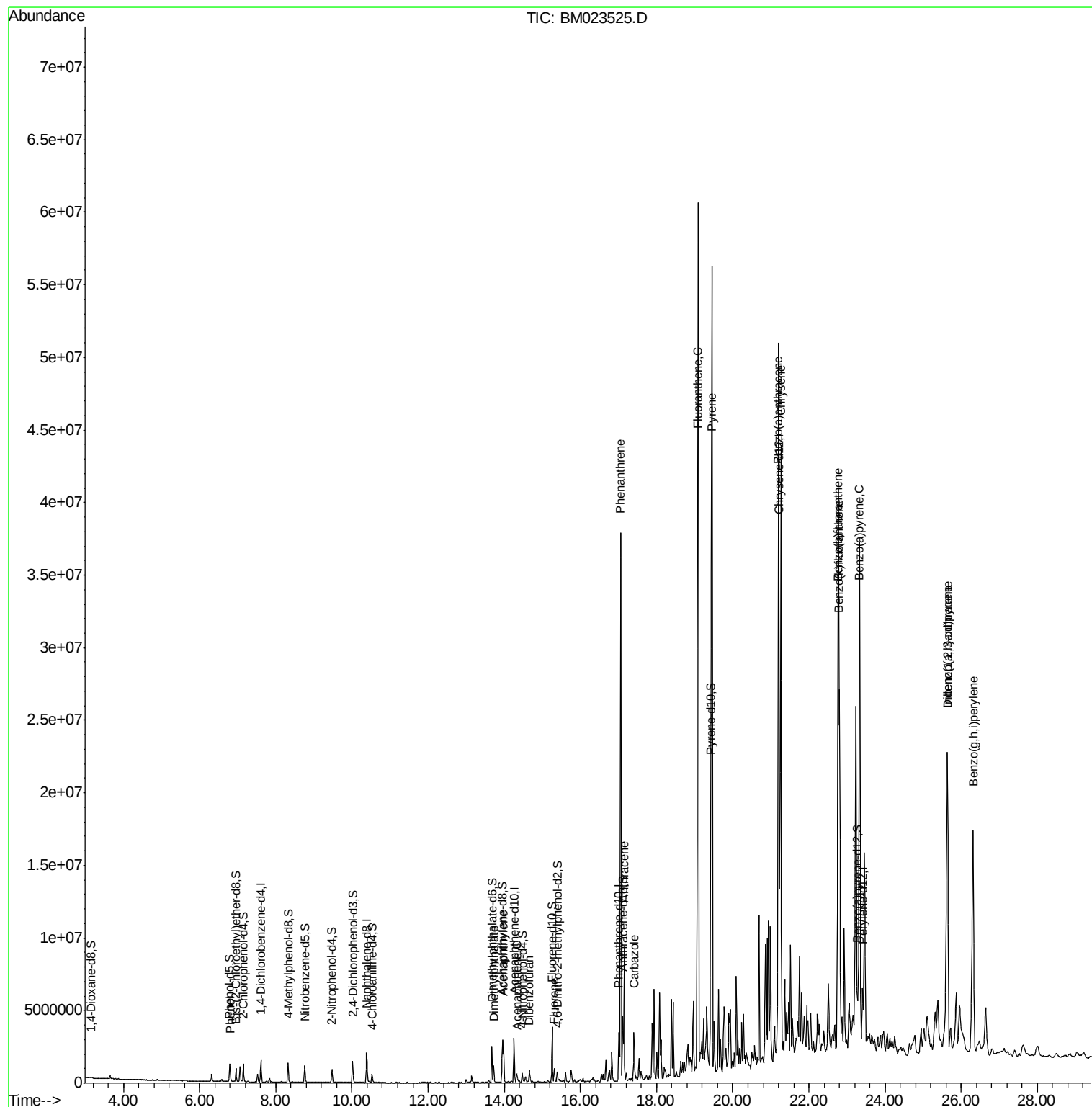
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM103119\  
Data File : BM023525.D  
Acq On : 31 Oct 2019 18:27  
Operator : JU  
Sample : K5395-10  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

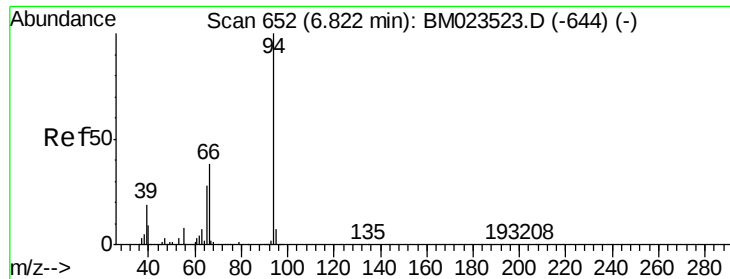
Instrument :  
BNA\_M  
ClientSampleId :  
C0003

Quant Time: Nov 01 07:32:59 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Nov 01 07:12:43 2019  
Response via : Initial Calibration

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#6

Phenol

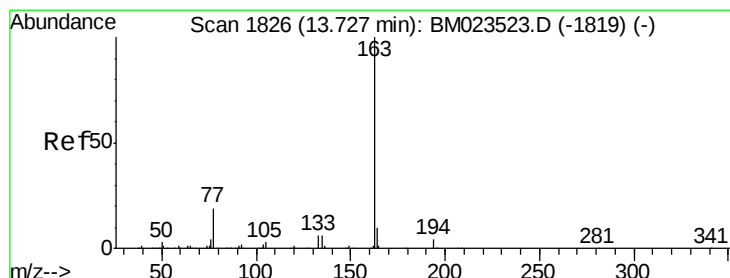
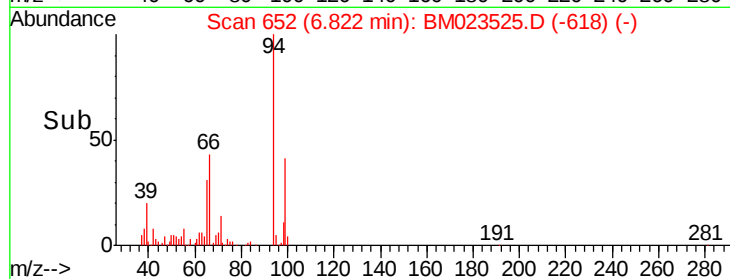
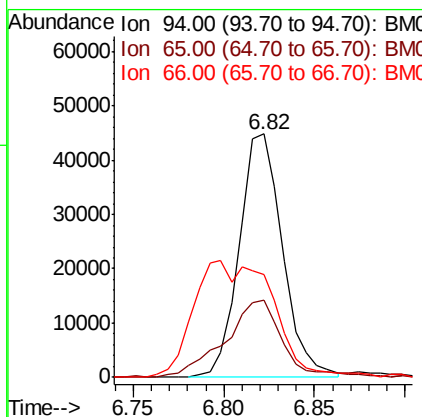
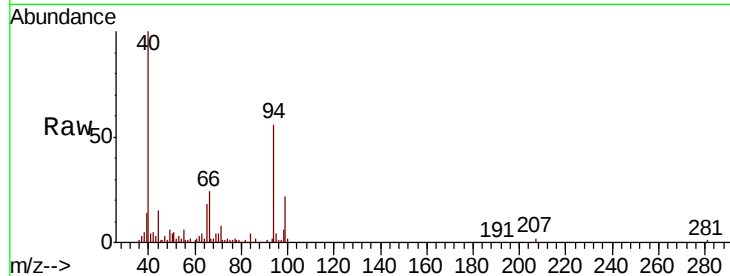
Concen: 2.115 ng/ul  
 RT: 6.82 min Scan# 652  
 Delta R.T. -0.00 min  
 Lab File: BM023525.D  
 Acq: 31 Oct 2019 18:27

Instrument :  
 BNA\_M  
 ClientSampled :  
 C0003

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 94      | 100   |       |       |
| 65      | 31.6  | 22.9  | 34.3  |
| 66      | 42.1  | 31.4  | 47.2  |

Manual Integrations  
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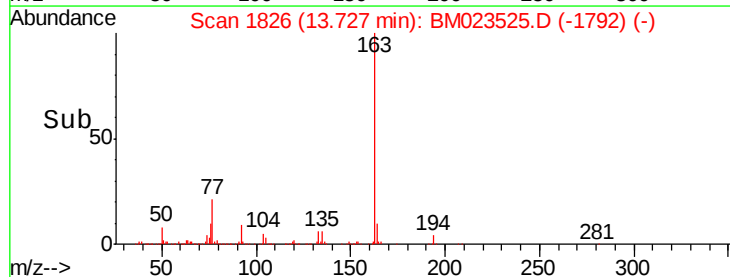
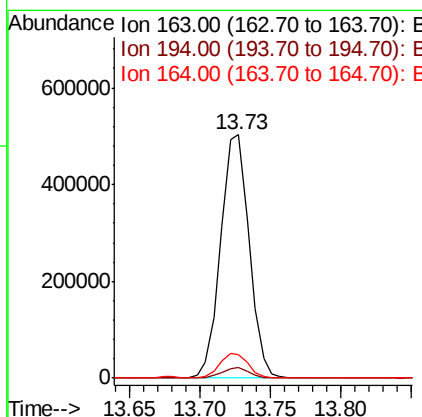
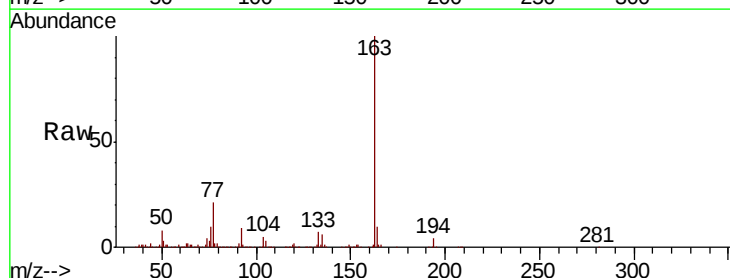


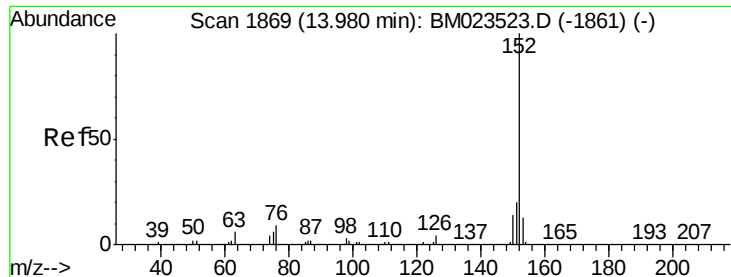
#45

Dimethylphthalate

Concen: 9.322 ng/ul  
 RT: 13.73 min Scan# 1826  
 Delta R.T. -0.00 min  
 Lab File: BM023525.D  
 Acq: 31 Oct 2019 18:27

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.2   | 3.3   | 4.9   |
| 164     | 9.7   | 7.9   | 11.9  |





#48

Acenaphthylene

Concen: 22.812 ng/ul

RT: 13.98 min Scan# 1869

Delta R.T. -0.00 min

Lab File: BM023525.D

Acq: 31 Oct 2019 18:27

Instrument :

BNA\_M

ClientSampleId :

C0003

Tot Ion:152 Resp: 2039956

Ion Ratio Lower Upper

152 100

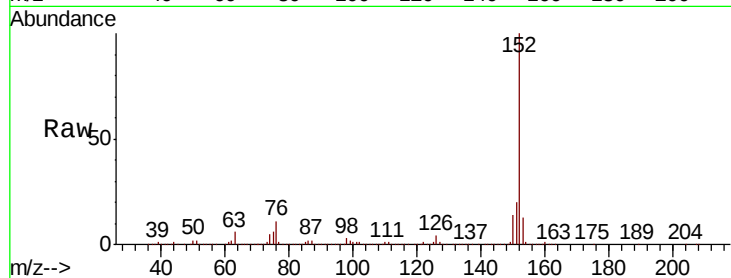
151 19.8 16.2 24.2

153 13.3 10.4 15.6

Manual Integrations  
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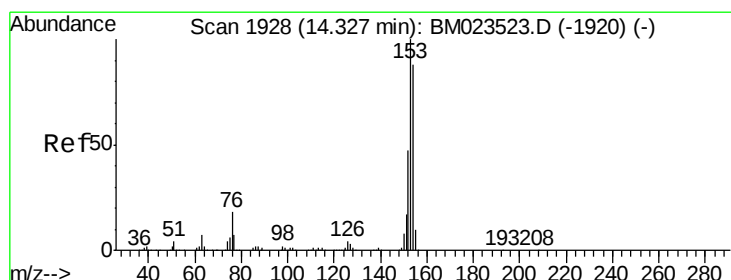
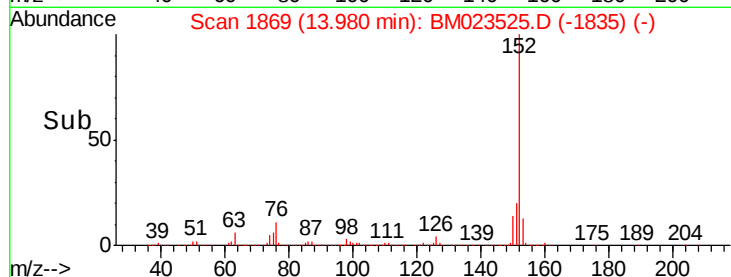
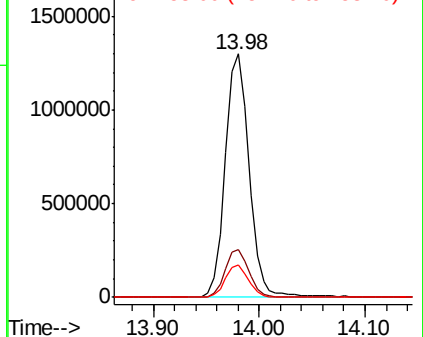


Abundance

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



#50

Acenaphthene

Concen: 3.609 ng/ul

RT: 14.32 min Scan# 1927

Delta R.T. -0.01 min

Lab File: BM023525.D

Acq: 31 Oct 2019 18:27

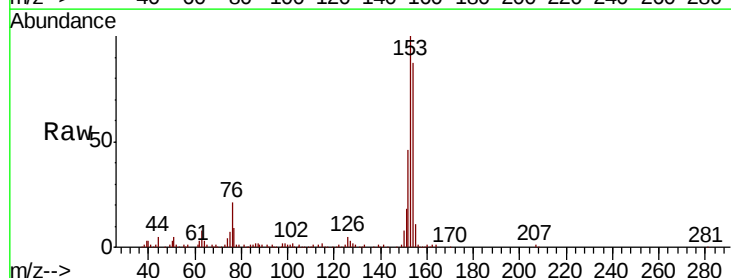
Tgt Ion:153 Resp: 227034

Ion Ratio Lower Upper

153 100

152 46.2 37.9 56.9

154 87.4 70.6 106.0

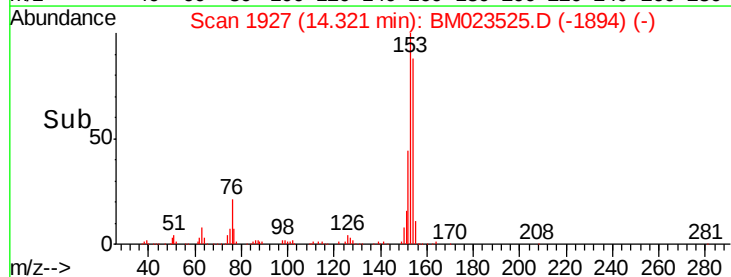
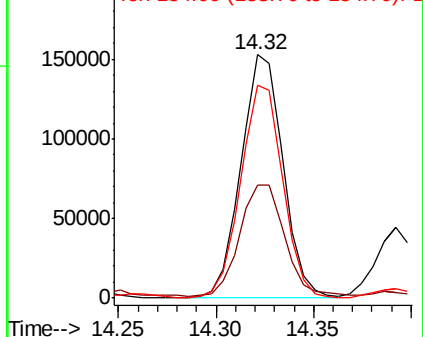


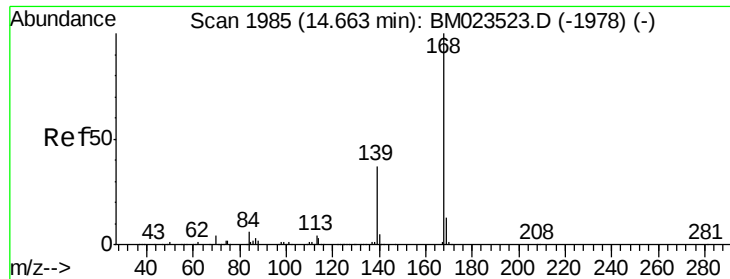
Abundance

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





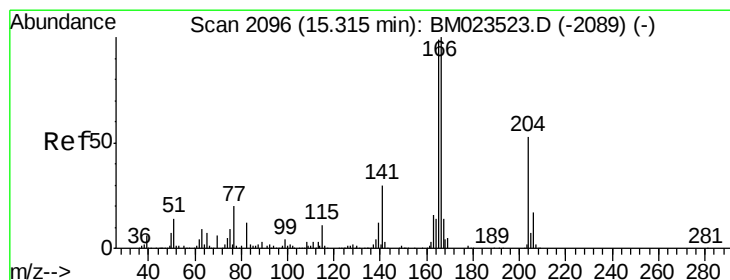
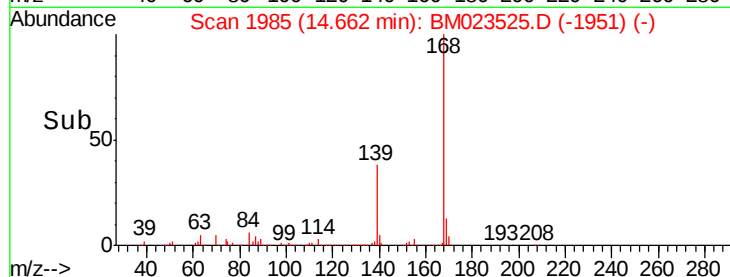
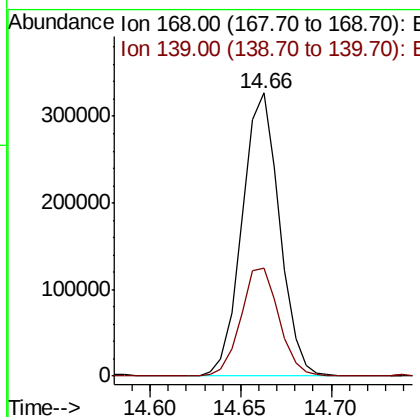
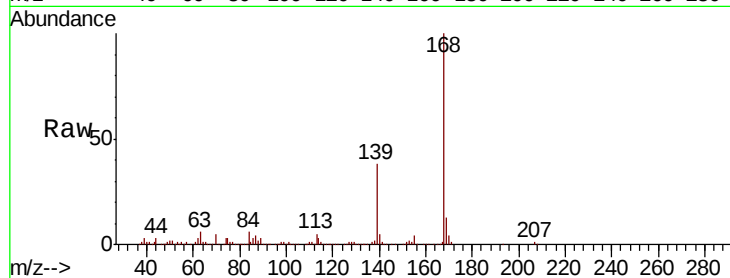
#54  
Dibenzenofuran  
Concen: 5.217 ng/ul  
RT: 14.66 min Scan# 1985  
Delta R.T. -0.00 min  
Lab File: BM023525.D  
Acq: 31 Oct 2019 18:27

Instrument :  
BNA\_M  
ClientSampleId :  
C0003

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 168     | 100   |       |       |
| 139     | 38.0  | 29.7  | 44.5  |

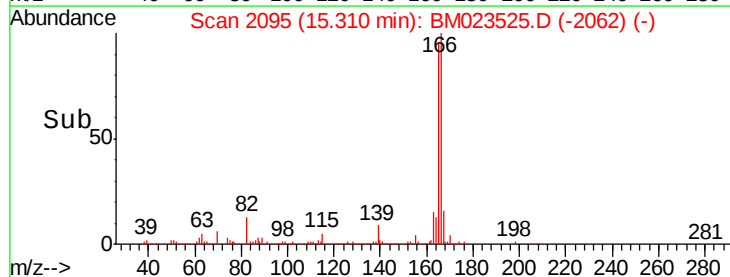
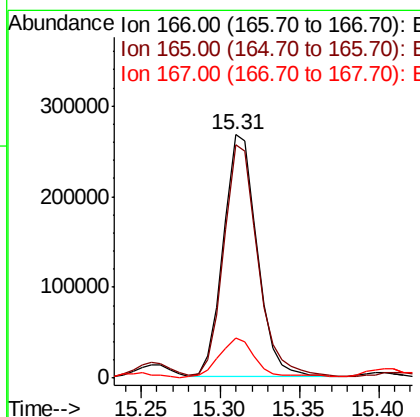
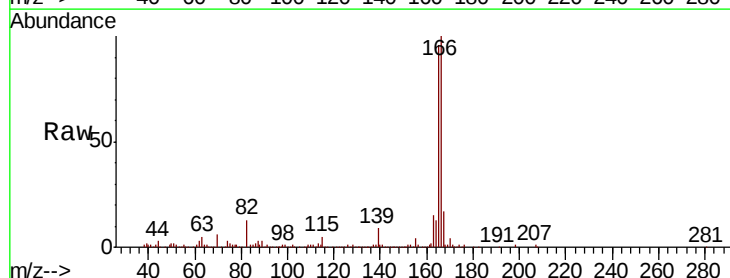
Manual Integrations  
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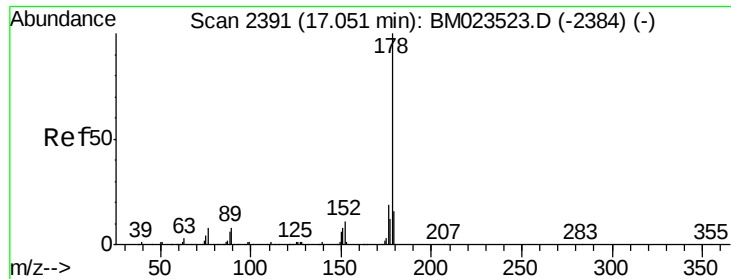
mohammad  
11/1/2019 4:15:19 PM



#59  
Fluorene  
Concen: 5.354 ng/ul  
RT: 15.31 min Scan# 2095  
Delta R.T. -0.01 min  
Lab File: BM023525.D  
Acq: 31 Oct 2019 18:27

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 96.0  | 77.8  | 116.6 |
| 167     | 16.6  | 10.8  | 16.2# |





#70

Phenanthrene

Concen: 149.168 ng/ul m

RT: 17.05 min Scan# 2391

Delta R.T. -0.00 min

Lab File: BM023525.D

Acq: 31 Oct 2019 18:27

Instrument :

BNA\_M

ClientSampleId :

C0003

Tot Ion:178 Resp:17629358

Ion Ratio Lower Upper

178 100

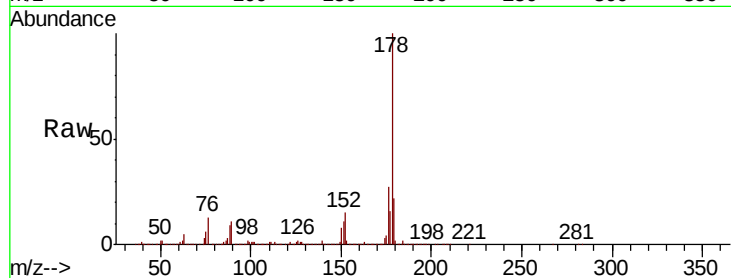
179 22.4 12.2 18.2#

176 27.2 14.9 22.3#

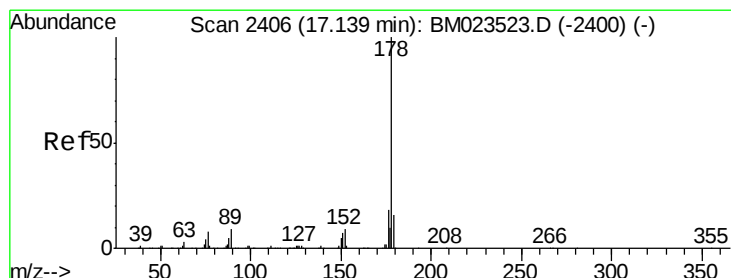
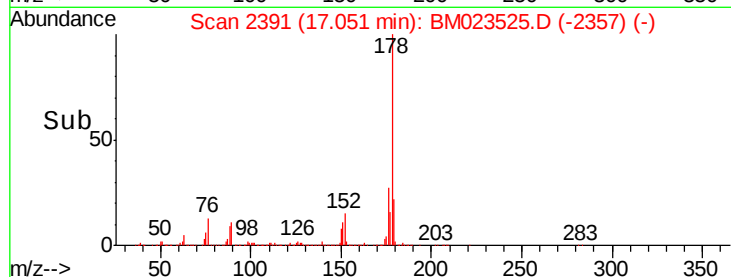
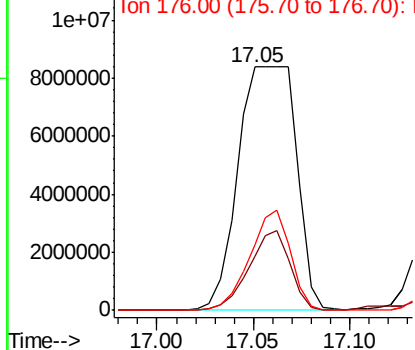
Manual Integrations  
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Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 179.00 (178.70 to 179.70): E  
Ion 176.00 (175.70 to 176.70): E



#72

Anthracene

Concen: 44.512 ng/ul

RT: 17.14 min Scan# 2407

Delta R.T. 0.01 min

Lab File: BM023525.D

Acq: 31 Oct 2019 18:27

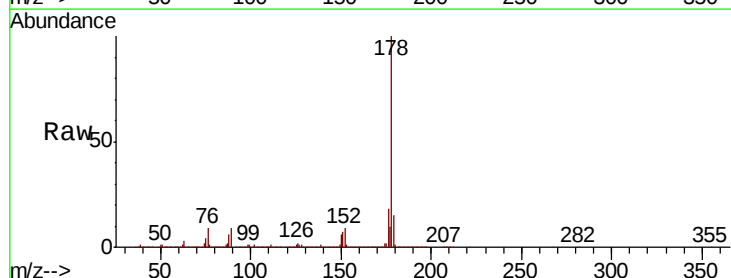
Tgt Ion:178 Resp: 5330020

Ion Ratio Lower Upper

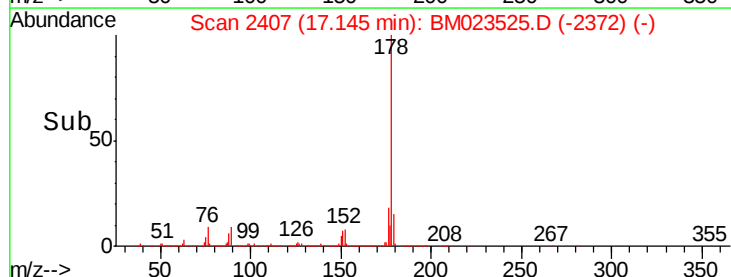
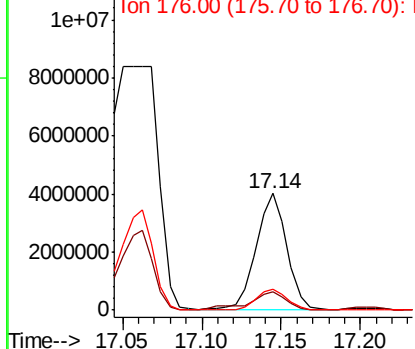
178 100

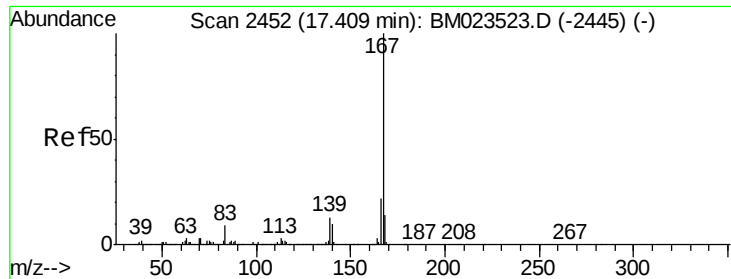
179 15.4 12.1 18.1

176 18.4 14.4 21.6



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





#75

Carbazole

Concen: 20.045 ng/ul

RT: 17.41 min Scan# 2452

Delta R.T. -0.00 min

Lab File: BM023525.D

Acq: 31 Oct 2019 18:27

Instrument :

BNA\_M

ClientSampleId :

C0003

Tot Ion:167 Resp: 2023448

Ion Ratio Lower Upper

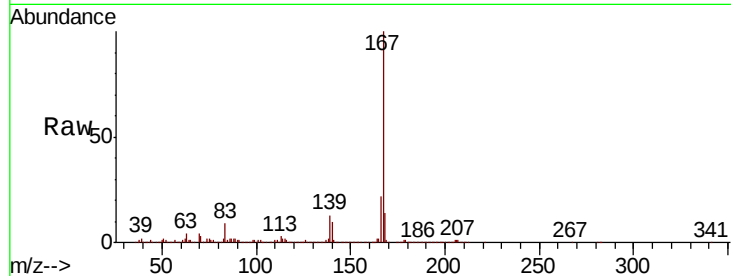
167 100

166 21.6 17.1 25.7

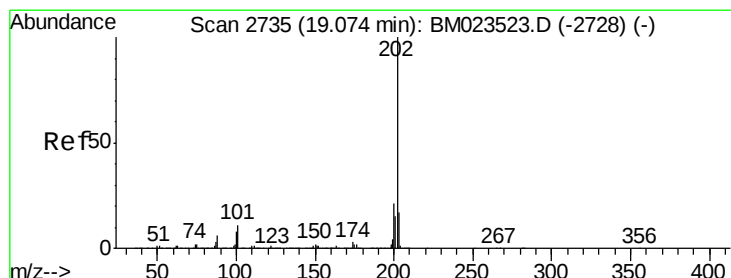
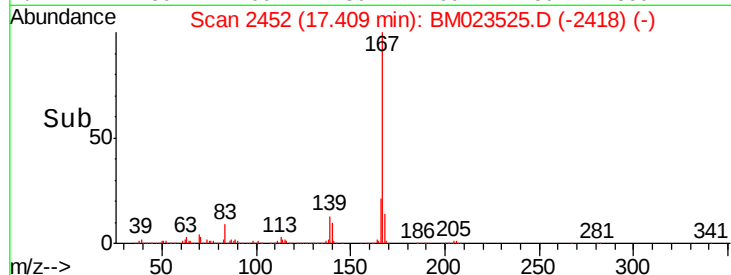
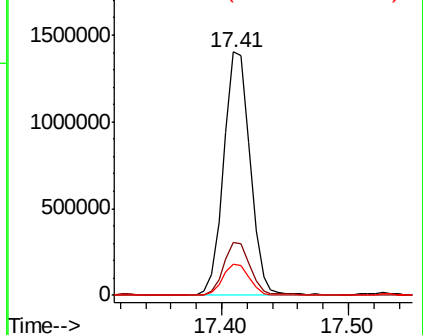
139 13.1 10.0 15.0

Manual Integrations  
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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



#77

Fluoranthene

Concen: 201.712 ng/ul m

RT: 19.07 min Scan# 2735

Delta R.T. -0.00 min

Lab File: BM023525.D

Acq: 31 Oct 2019 18:27

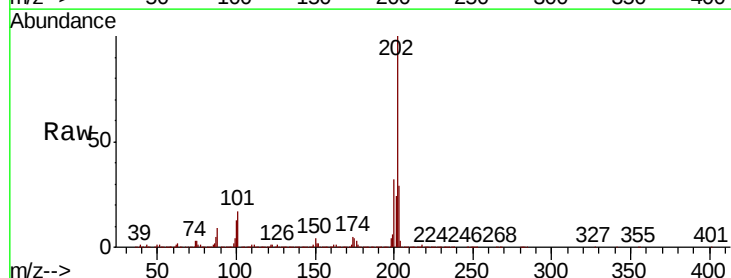
Tgt Ion:202 Resp:24866113

Ion Ratio Lower Upper

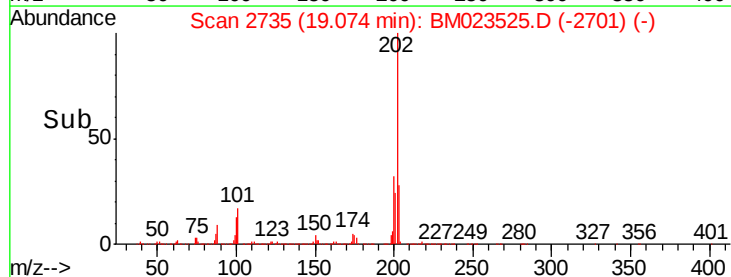
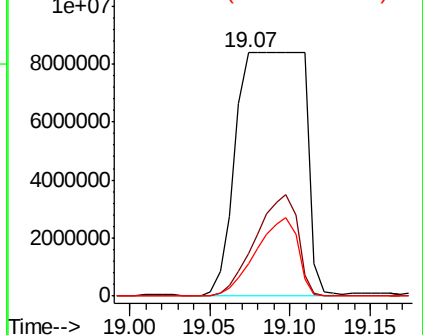
202 100

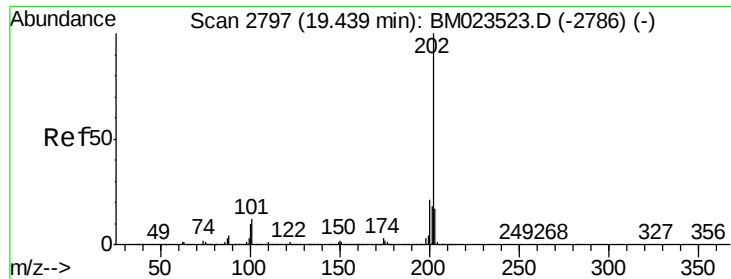
101 17.4 8.1 12.1#

100 13.4 6.2 9.2#



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): E





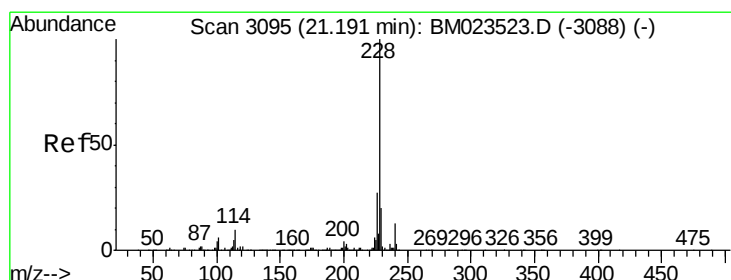
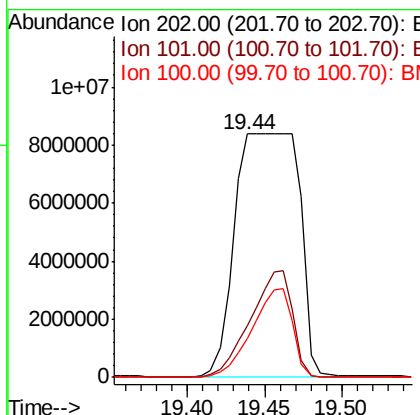
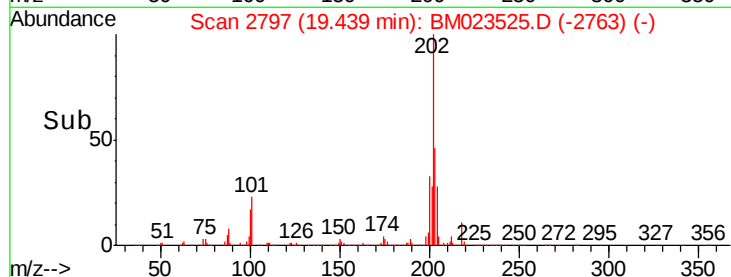
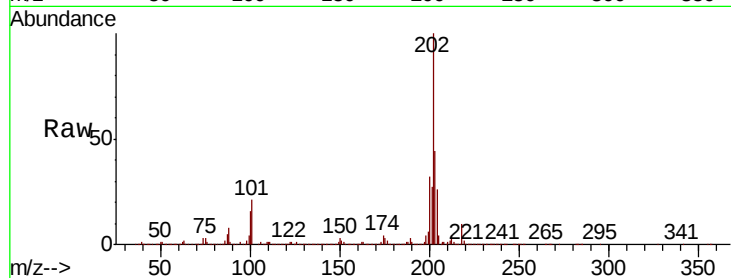
#80  
Pvrene  
Concen: 155.335 ng/ul m  
RT: 19.44 min Scan# 2797  
Delta R.T. -0.00 min  
Lab File: BM023525.D  
Acq: 31 Oct 2019 18:27

Instrument :  
BNA\_M  
ClientSampled :  
C0003

Tot Ion:202 Resp:24344163  
Ion Ratio Lower Upper  
202 100  
101 21.4 10.0 15.0#  
100 16.2 8.3 12.5#

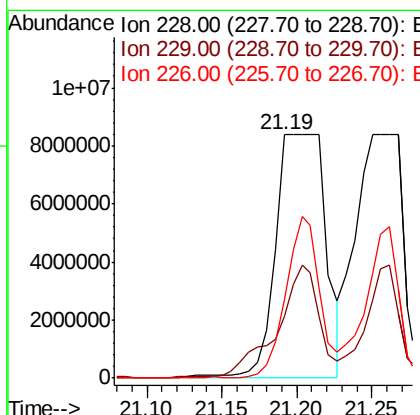
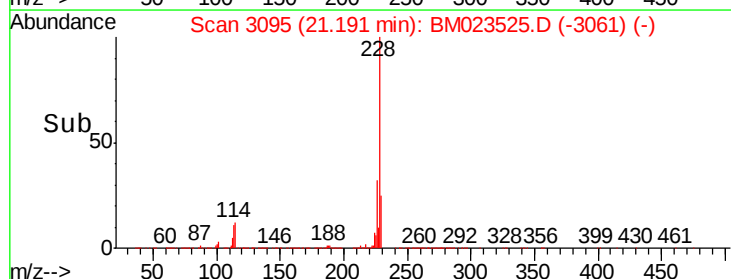
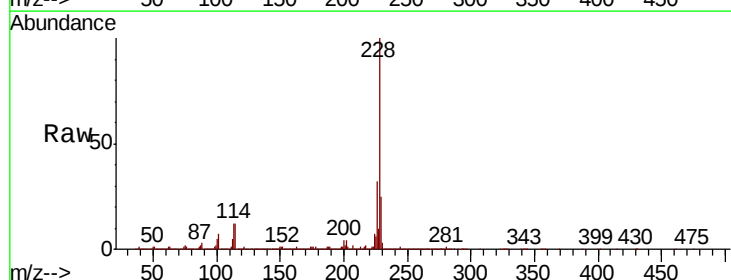
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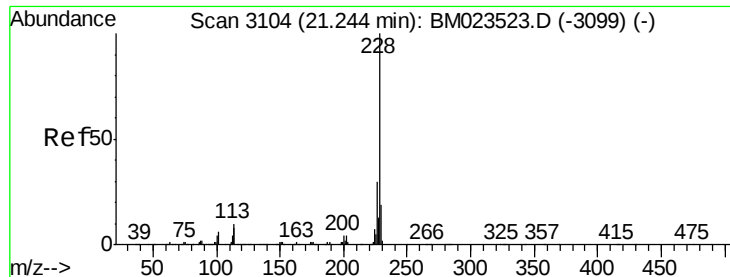
mohammad  
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#83  
Benzo(a)anthracene  
Concen: 132.217 ng/ul m  
RT: 21.19 min Scan# 3095  
Delta R.T. -0.00 min  
Lab File: BM023525.D  
Acq: 31 Oct 2019 18:27

Tgt Ion:228 Resp:19625212  
Ion Ratio Lower Upper  
228 100  
229 25.4 15.8 23.8#  
226 32.2 21.6 32.4





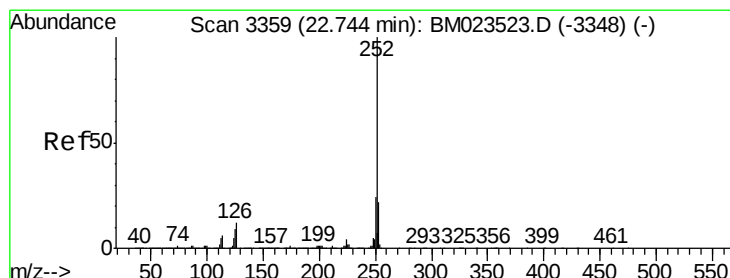
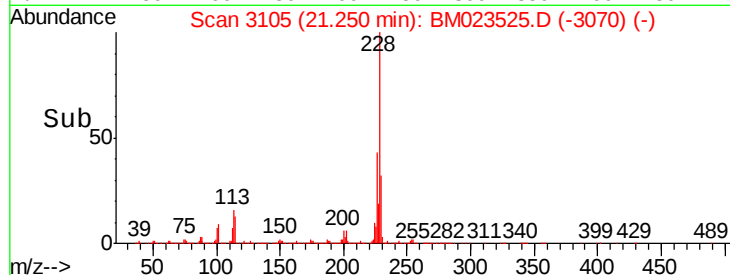
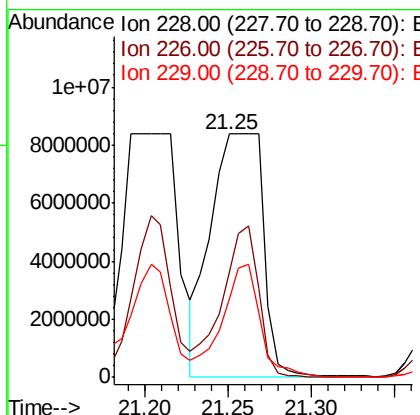
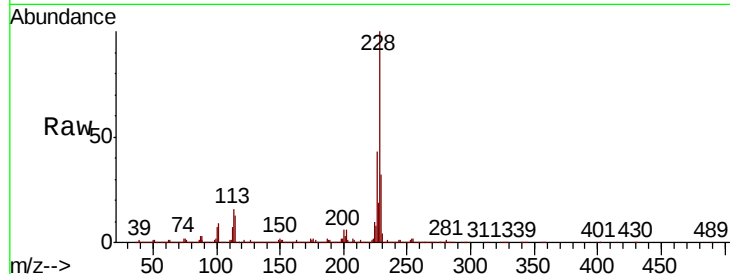
#85  
Chrysene  
Concen: 135.004 ng/ul m  
RT: 21.25 min Scan# 3105  
Delta R.T. 0.01 min  
Lab File: BM023525.D  
Acq: 31 Oct 2019 18:27

Instrument :  
BNA\_M  
ClientSampleId :  
C0003

Tot Ion:228 Resp:18489793  
Ion Ratio Lower Upper  
228 100  
226 43.1 24.0 36.0#  
229 32.4 16.0 24.0#

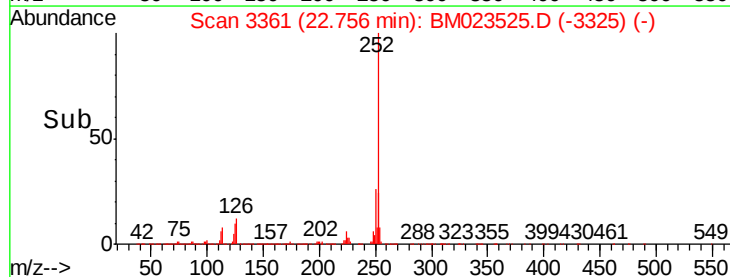
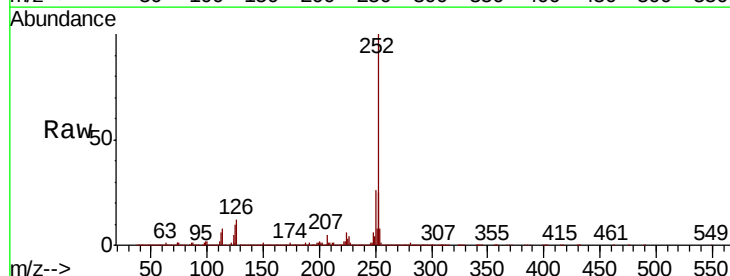
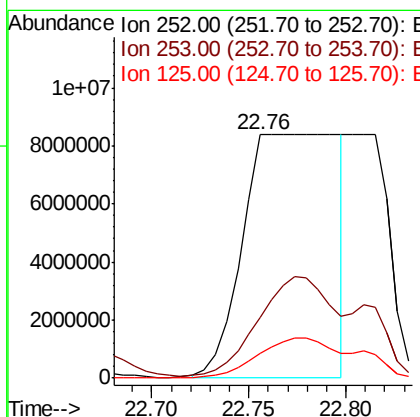
Manual Integrations  
APPROVED

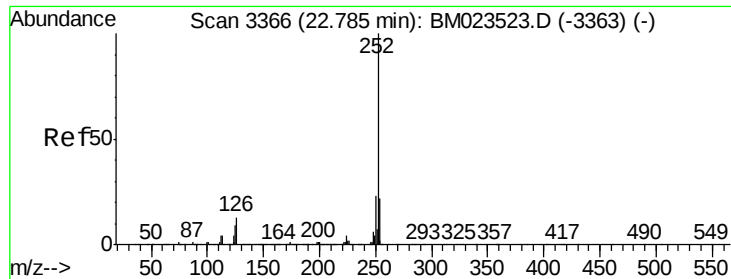
mohammad  
11/1/2019 4:15:19 PM



#88  
Benzo(b)fluoranthene  
Concen: 164.909 ng/ul m  
RT: 22.76 min Scan# 3361  
Delta R.T. 0.01 min  
Lab File: BM023525.D  
Acq: 31 Oct 2019 18:27

Tgt Ion:252 Resp:28272199  
Ion Ratio Lower Upper  
252 100  
253 25.0 17.5 26.3  
125 10.0 7.1 10.7





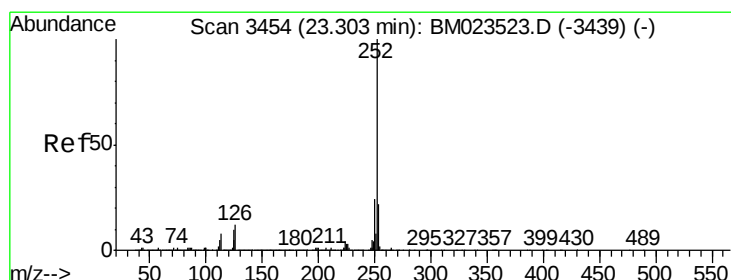
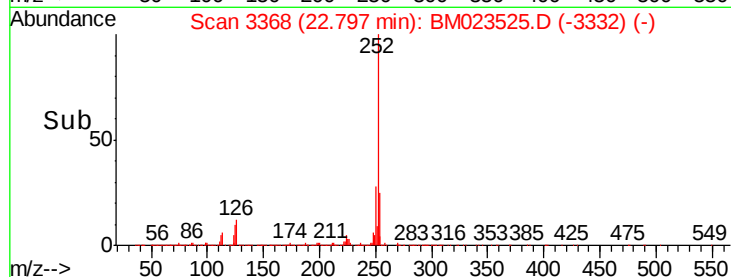
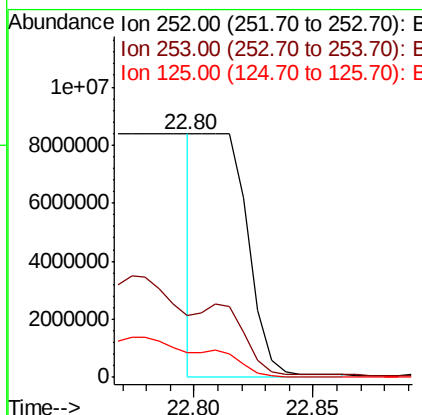
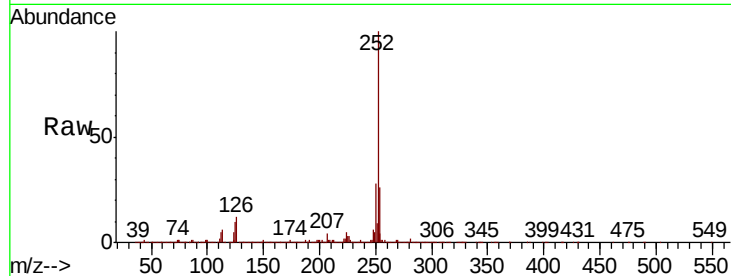
#89  
Benzo(k)fluoranthene  
Concen: 76.251 ng/ul m  
RT: 22.80 min Scan# 3368  
Delta R.T. 0.01 min  
Lab File: BM023525.D  
Acq: 31 Oct 2019 18:27

Instrument :  
BNA\_M  
ClientSampleId :  
C0003

Tot Ion:252 Resp:12275305  
Ion Ratio Lower Upper  
252 100  
253 25.5 17.8 26.6  
125 10.2 6.8 10.2#

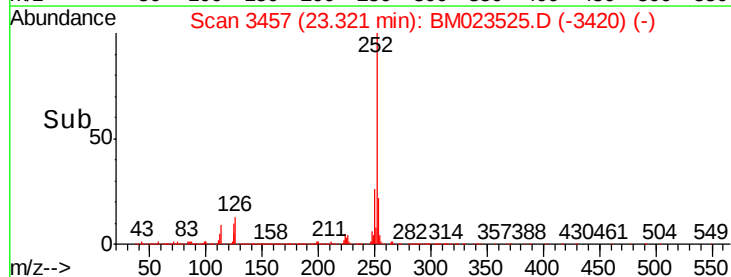
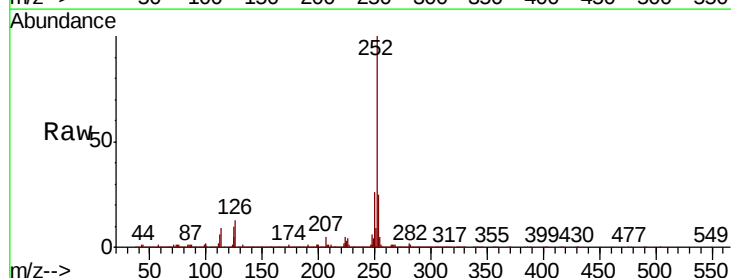
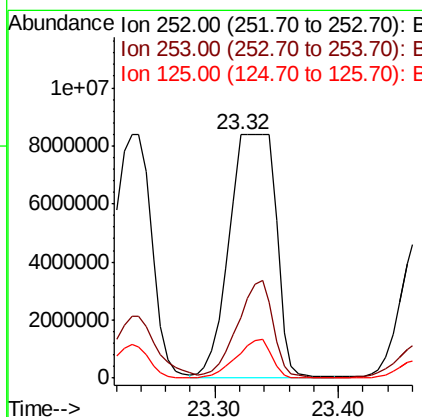
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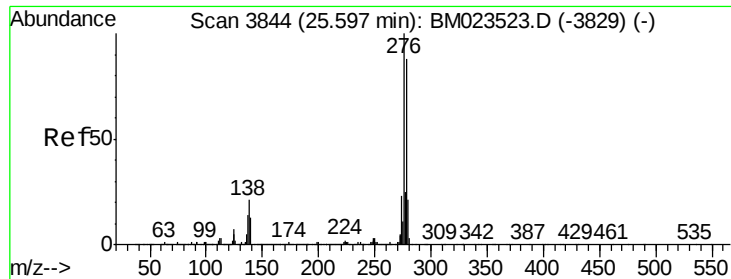
mohammad  
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#91  
Benzo(a)pyrene  
Concen: 143.614 ng/ul m  
RT: 23.32 min Scan# 3457  
Delta R.T. 0.02 min  
Lab File: BM023525.D  
Acq: 31 Oct 2019 18:27

Tgt Ion:252 Resp:22290279  
Ion Ratio Lower Upper  
252 100  
253 24.9 17.7 26.5  
125 10.3 7.5 11.3





#92  
 Indeno(1,2,3-cd)pyrene  
 Concen: 133.747 ng/ul  
 RT: 25.64 min Scan# 3851  
 Delta R.T. 0.04 min  
 Lab File: BM023525.D  
 Acq: 31 Oct 2019 18:27

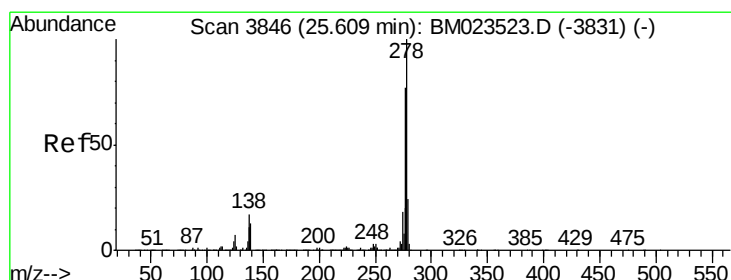
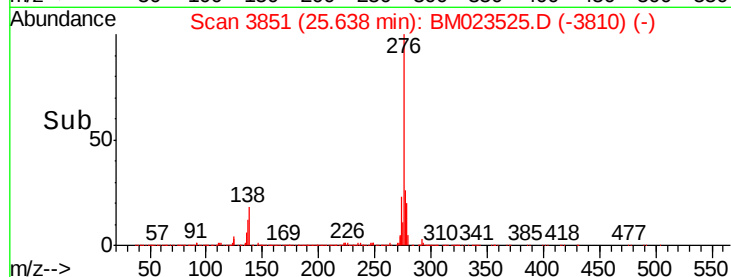
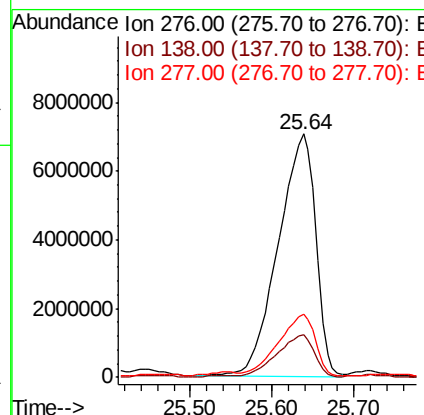
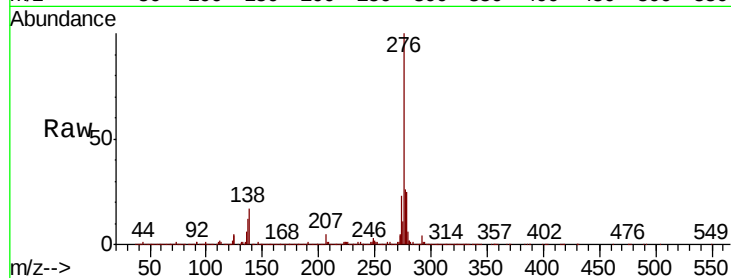
Instrument :  
 BNA\_M  
 ClientSampleId :  
 C0003

Tot Ion:276 Resp:22476987  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 276 | 100   |       |       |
| 138 | 17.3  | 15.7  | 23.5  |
| 277 | 25.8  | 20.2  | 30.2  |

Manual Integrations  
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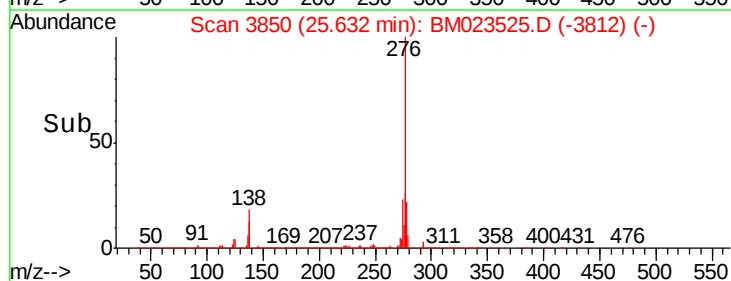
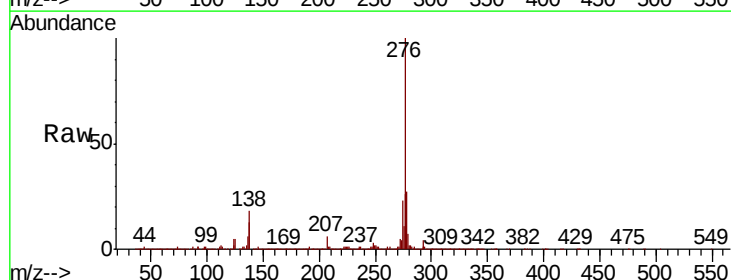
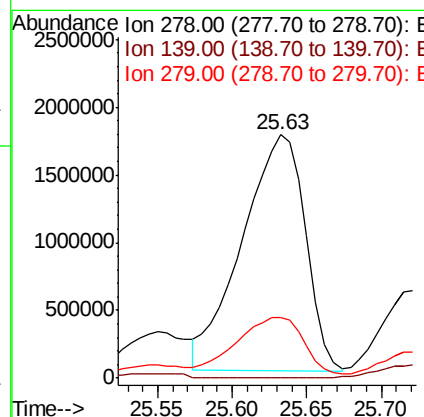
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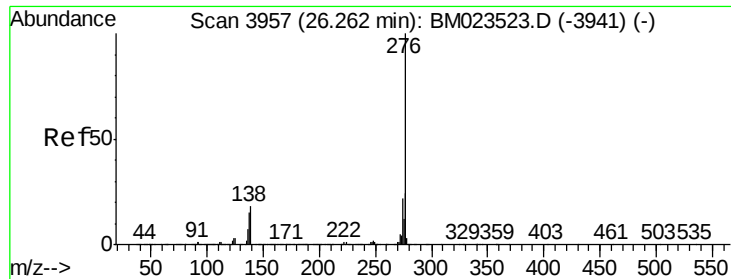


#93  
 Dibenzo(a,h)anthracene  
 Concen: 36.281 ng/ul  
 RT: 25.63 min Scan# 3850  
 Delta R.T. 0.02 min  
 Lab File: BM023525.D  
 Acq: 31 Oct 2019 18:27

Tgt Ion:278 Resp: 5141141  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 278 | 100   |       |       |
| 139 | 0.0   | 10.9  | 16.3# |
| 279 | 25.1  | 18.7  | 28.1  |





#94

Benzo(a,h,i)perylene

Concen: 150.769 ng/ul

RT: 26.31 min Scan# 3966

Delta R.T. 0.05 min

Lab File: BM023525.D

Acq: 31 Oct 2019 18:27

Instrument :

BNA\_M

ClientSampleId :

C0003

Tot Ion:276 Resp:20614629

Ion Ratio Lower Upper

276 100

138 17.4 14.4 21.6

277 24.9 19.0 28.6

Manual Integrations

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