

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102419\  
 Data File : BM023386.D  
 Acq On : 24 Oct 2019 19:17  
 Operator : JU  
 Sample : K5346-02MS  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 ETOL4MS

Manual Integrations  
 APPROVED

mohammad  
 10/26/2019 10:04:04 AM

Quant Time: Oct 24 23:10:42 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Oct 23 18:47:16 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.64  | 152  | 686857   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.42 | 136  | 2679744  | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.29 | 164  | 1416437  | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.03 | 188  | 2268490  | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.23 | 240  | 2001590  | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 23.43 | 264  | 2545387  | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |         |       |       |      |
|--------------------------------|-------|-----|---------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.16  | 96  | 69528   | 4.81  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.82  | 99  | 1430583 | 24.80 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.98  | 67  | 974540  | 28.82 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.17  | 132 | 1283322 | 28.46 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.35  | 113 | 1151281 | 24.57 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.79  | 128 | 660927  | 32.76 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.50  | 143 | 723011  | 32.30 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.05 | 165 | 1209088 | 27.49 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.56 | 131 | 516697  | 10.22 | ng/ul | 0.00 |
| 44) Dimethylphthalate-d6       | 13.70 | 166 | 3616278 | 33.62 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 13.97 | 160 | 4135961 | 33.57 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.50 | 143 | 288736  | 15.50 | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.29 | 176 | 2780730 | 30.53 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.42 | 200 | 161320  | 11.42 | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.13 | 188 | 3551171 | 33.12 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.43 | 212 | 3376395 | 30.67 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 23.29 | 264 | 4172308 | 32.18 | ng/ul | 0.00 |

## Target Compounds

|                                |       |     |         |        | Ovalue |     |
|--------------------------------|-------|-----|---------|--------|--------|-----|
| 6) Phenol                      | 6.85  | 94  | 2150557 | 36.203 | ng/ul  | 95  |
| 10) 2-Chlorophenol             | 7.21  | 128 | 1574673 | 33.329 | ng/ul  | 99  |
| 15) N-Nitroso-di-n-propylamine | 8.45  | 70  | 1193890 | 28.870 | ng/ul  | 97  |
| 33) 4-Chloro-3-methylphenol    | 11.72 | 107 | 1475726 | 30.848 | ng/ul  | 99  |
| 45) Dimethylphthalate          | 13.75 | 163 | 2328373 | 21.560 | ng/ul  | 100 |
| 50) Acenaphthene               | 14.35 | 153 | 3238546 | 36.044 | ng/ul  | 99  |
| 53) 4-Nitrophenol              | 14.51 | 109 | 387849  | 26.143 | ng/ul  | 97  |
| 55) 2,4-Dinitrotoluene         | 14.66 | 165 | 952698  | 30.718 | ng/ul  | 98  |
| 69) Pentachlorophenol          | 16.69 | 266 | 427541  | 21.716 | ng/ul  | 99  |
| 70) Phenanthrene               | 17.07 | 178 | 169803  | 1.339  | ng/ul  | 97  |
| 76) Di-n-butylphthalate        | 18.02 | 149 | 147087  | 1.082  | ng/ul# | 96  |
| 77) Fluoranthene               | 19.10 | 202 | 580521  | 4.390  | ng/ul  | 99  |
| 80) Pyrene                     | 19.46 | 202 | 5518483 | 39.044 | ng/ul  | 97  |
| 81) Butylbenzylphthalate       | 20.37 | 149 | 804614  | 13.904 | ng/ul  | 96  |
| 83) Benzo(a)anthracene         | 21.21 | 228 | 322472  | 2.409  | ng/ul# | 88  |
| 85) Chrysene                   | 21.26 | 228 | 459015  | 3.716  | ng/ul# | 90  |
| 88) Benzo(b)fluoranthene       | 22.77 | 252 | 760753  | 4.654  | ng/ul# | 79  |
| 89) Benzo(k)fluoranthene       | 22.81 | 252 | 216945m | 1.413  | ng/ul  |     |
| 91) Benzo(a)pyrene             | 23.34 | 252 | 399582  | 2.700  | ng/ul# | 74  |
| 92) Indeno(1,2,3-cd)pyrene     | 25.65 | 276 | 347809  | 2.170  | ng/ul# | 83  |
| 94) Benzo(a,h,i)perylene       | 26.33 | 276 | 401585  | 3.080  | ng/ul# | 81  |

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Operator : JU  
Sample : K5346-02MS  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOL4MS

Manual Integrations  
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Quant Time: Oct 24 23:10:42 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Wed Oct 23 18:47:16 2019  
Response via : Initial Calibration

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

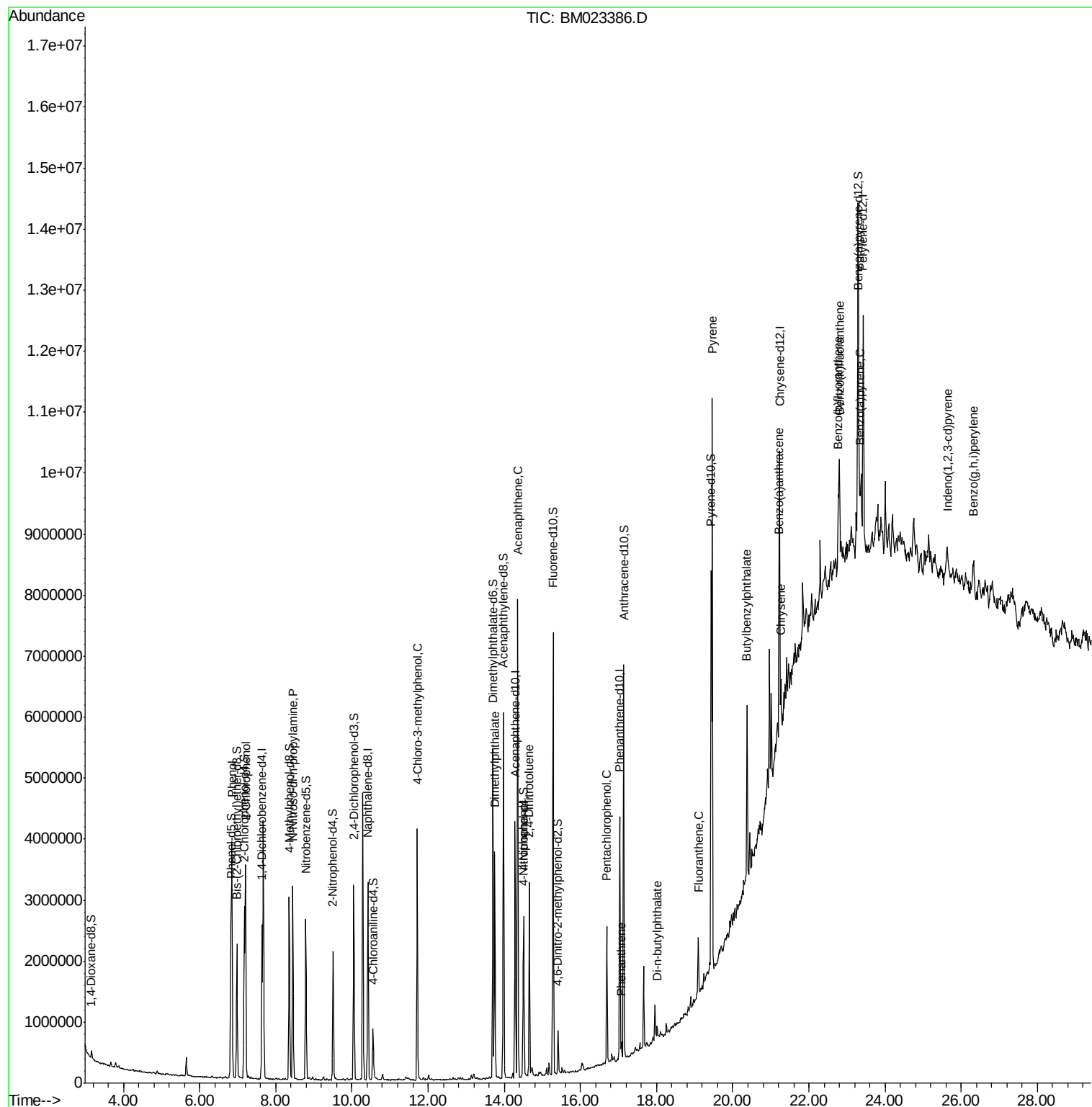
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102419\  
Data File : BM023386.D  
Acq On : 24 Oct 2019 19:17  
Operator : JU  
Sample : K5346-02MS  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

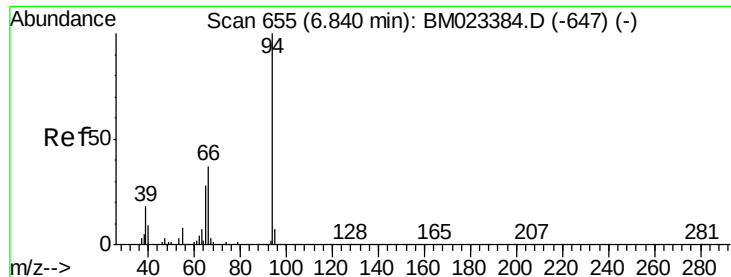
Instrument :  
BNA\_M  
ClientSampleId :  
ETOL4MS

Quant Time: Oct 24 23:10:42 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Wed Oct 23 18:47:16 2019  
Response via : Initial Calibration

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#6

Phenol

Concen: 36.203 ng/ul

RT: 6.85 min Scan# 657

Delta R.T. 0.01 min

Lab File: BM023386.D

Acq: 24 Oct 2019 19:17

Instrument :

BNA\_M

ClientSampleId :

ETOL4MS

Tot Ion: 94 Resp: 2150557

Ion Ratio Lower Upper

94 100

65 26.4 22.9 34.3

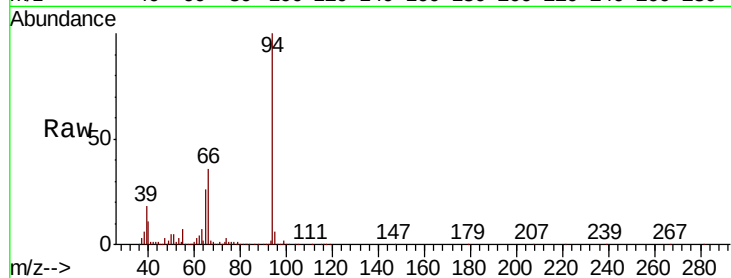
66 36.3 31.4 47.2

Manual Integrations

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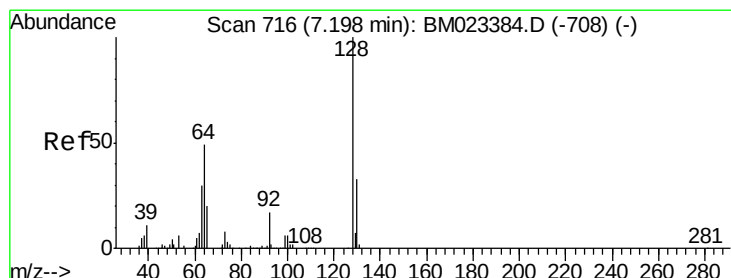
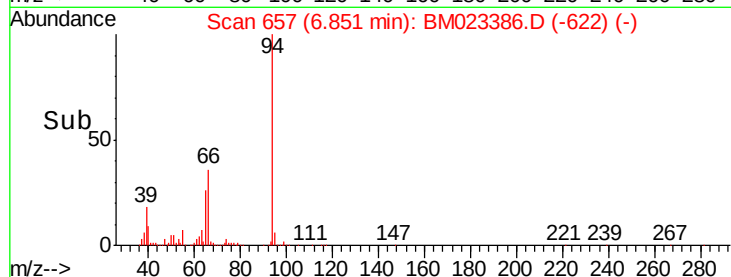
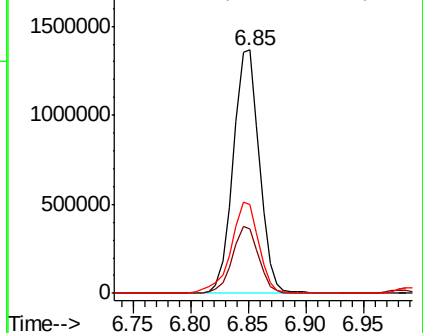
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Abundance Ion 94.00 (93.70 to 94.70): BM023384.D (-647) (-)

Ion 65.00 (64.70 to 65.70): BM023384.D (-647) (-)

Ion 66.00 (65.70 to 66.70): BM023384.D (-647) (-)



#10

2-Chlorophenol

Concen: 33.329 ng/ul

RT: 7.21 min Scan# 718

Delta R.T. -0.00 min

Lab File: BM023386.D

Acq: 24 Oct 2019 19:17

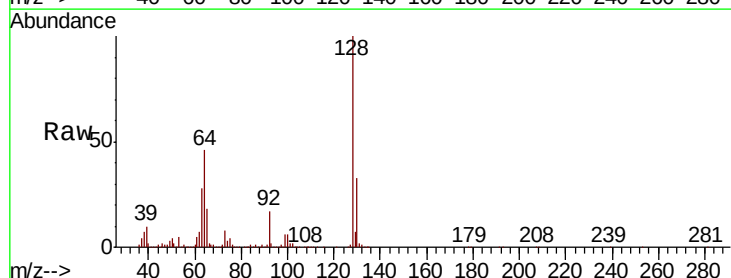
Tgt Ion:128 Resp: 1574673

Ion Ratio Lower Upper

128 100

64 45.9 37.3 55.9

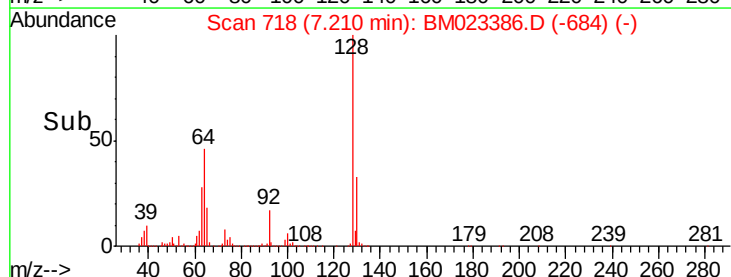
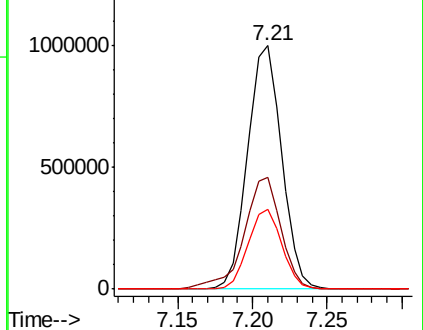
130 32.7 26.0 39.0

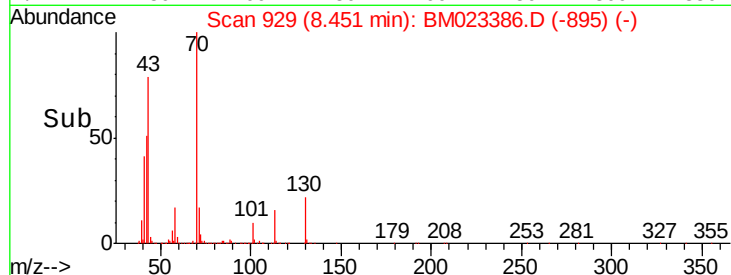
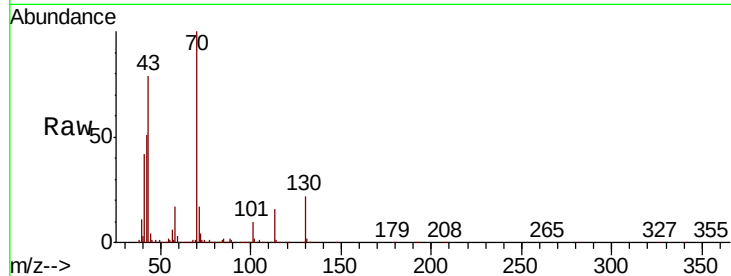
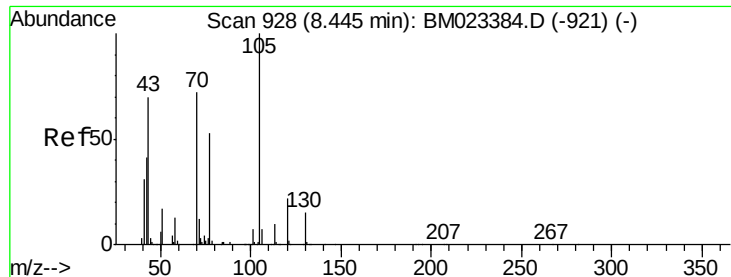


Abundance Ion 128.00 (127.70 to 128.70): BM023384.D (-708) (-)

Ion 64.00 (63.70 to 64.70): BM023384.D (-708) (-)

Ion 130.00 (129.70 to 130.70): BM023384.D (-708) (-)





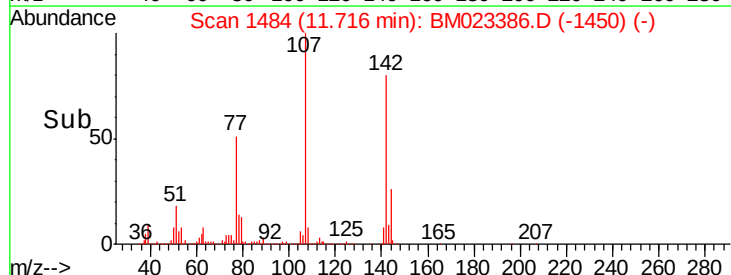
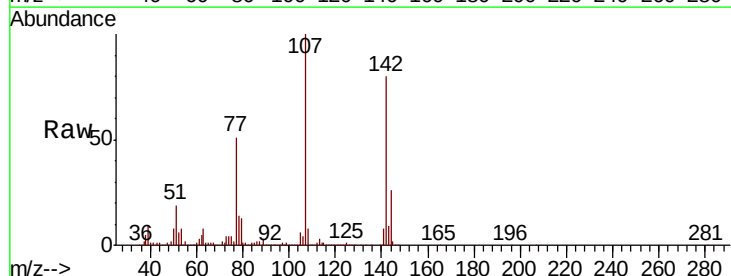
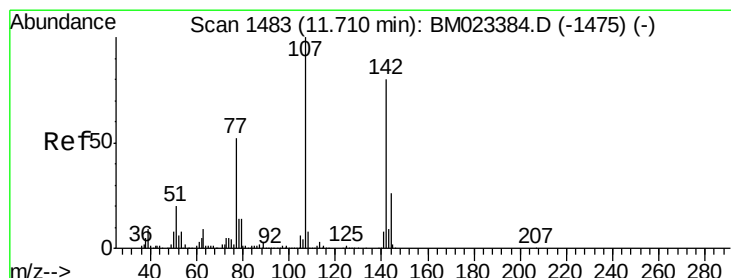
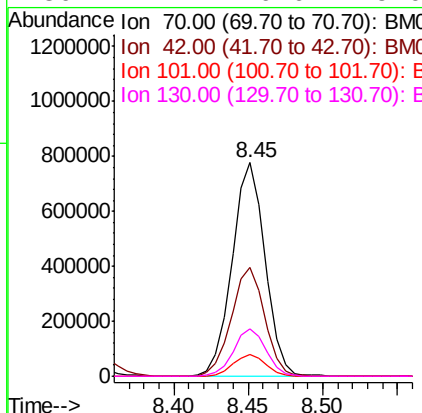
#15  
N-Nitroso-di-n-propylamine  
Concen: 28.870 ng/ul  
RT: 8.45 min Scan# 929  
Delta R.T. -0.00 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

Instrument :  
BNA\_M  
ClientSampled :  
ETOL4MS

| Tot Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 70      | 100  |       |       |       |
| 42      | 50.8 | 42.8  | 64.2  |       |
| 101     | 10.0 | 7.8   | 11.8  |       |
| 130     | 22.1 | 16.6  | 25.0  |       |

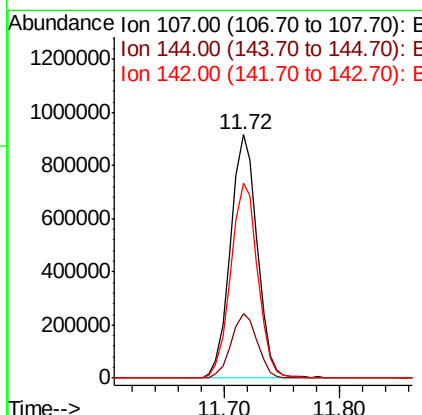
Manual Integrations  
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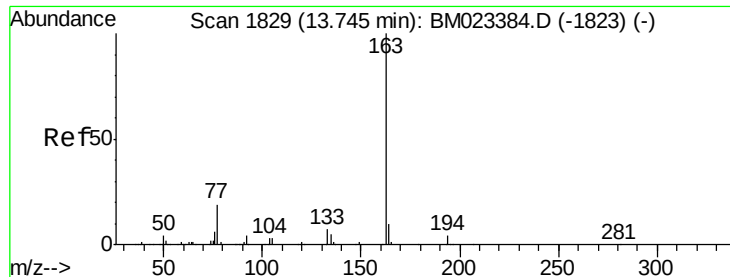
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#33  
4-Chloro-3-methylphenol  
Concen: 30.848 ng/ul  
RT: 11.72 min Scan# 1484  
Delta R.T. -0.00 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

| Tgt Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 107     | 100  |       |       |       |
| 144     | 26.3 | 20.7  | 31.1  |       |
| 142     | 80.2 | 63.1  | 94.7  |       |





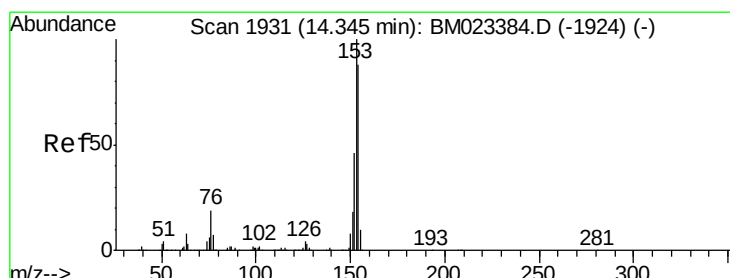
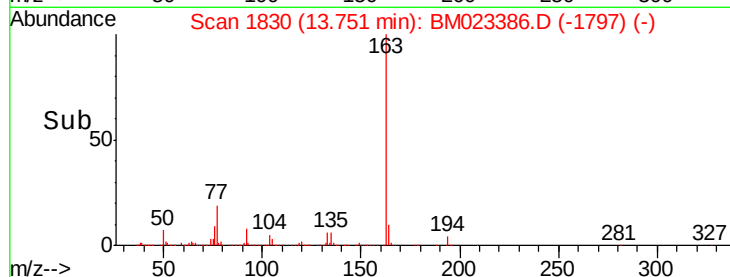
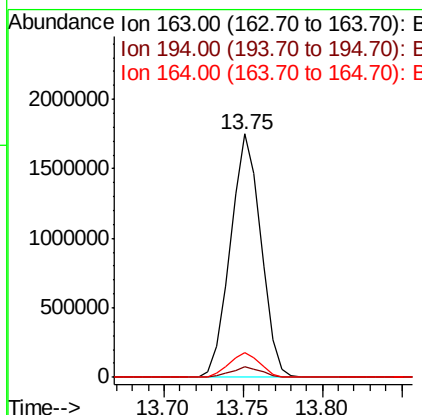
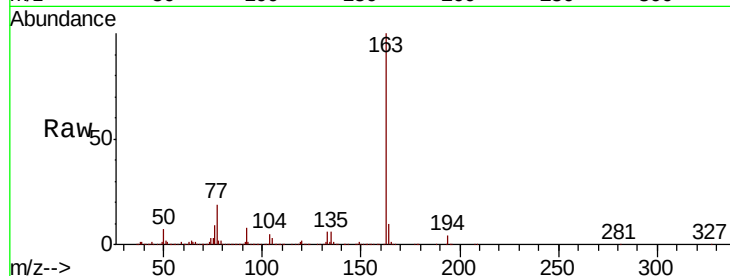
#45  
Dimethylphthalate  
Concen: 21.560 ng/ul  
RT: 13.75 min Scan# 1830  
Delta R.T. -0.01 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

Instrument :  
BNA\_M  
ClientSampleId :  
ETOL4MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.4   | 3.3   | 4.9   |
| 164     | 10.0  | 7.9   | 11.9  |

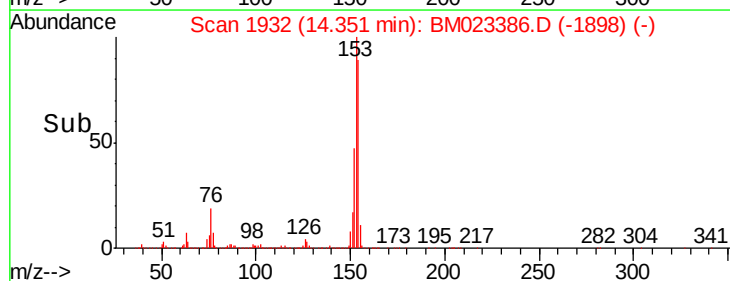
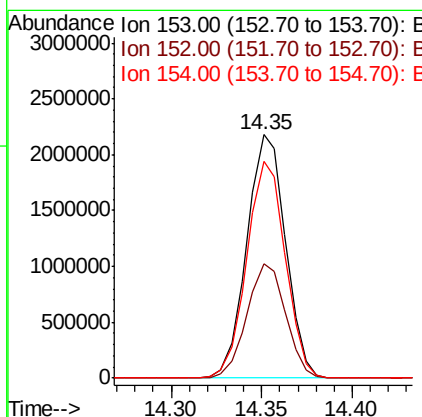
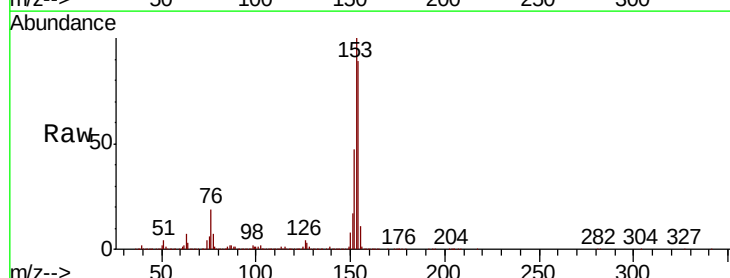
Manual Integrations  
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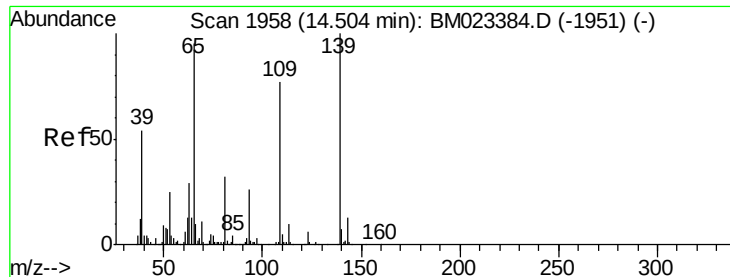
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#50  
Acenaphthene  
Concen: 36.044 ng/ul  
RT: 14.35 min Scan# 1932  
Delta R.T. -0.00 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 153     | 100   |       |       |
| 152     | 47.0  | 37.9  | 56.9  |
| 154     | 89.0  | 70.6  | 106.0 |





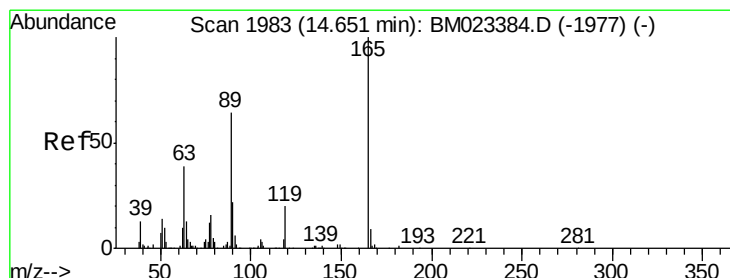
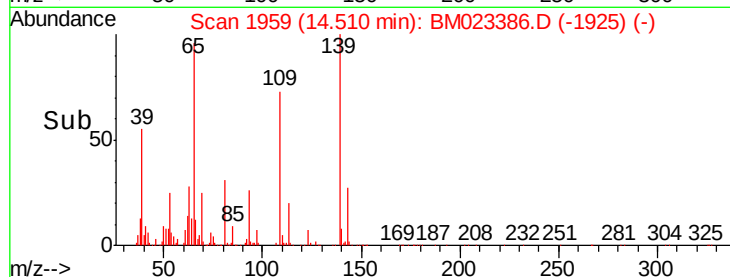
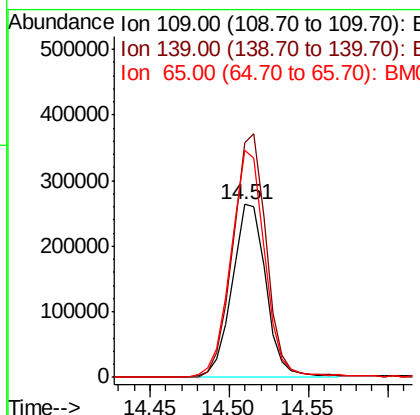
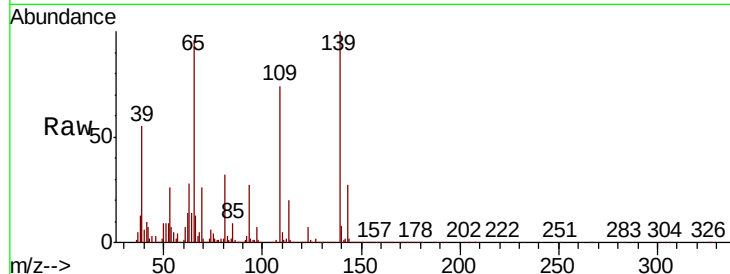
#53  
4-Nitrophenol  
Concen: 26.143 ng/ul  
RT: 14.51 min Scan# 1959  
Delta R.T. -0.00 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

Instrument :  
BNA\_M  
ClientSampleId :  
ETOL4MS

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 109     | 100   |       |       |       |
| 139     | 135.9 | 107.1 | 160.7 |       |
| 65      | 131.0 | 100.0 | 150.0 |       |

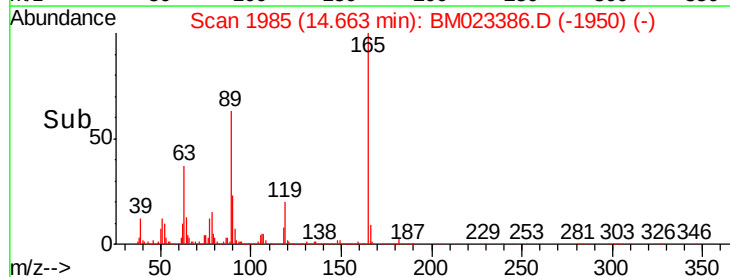
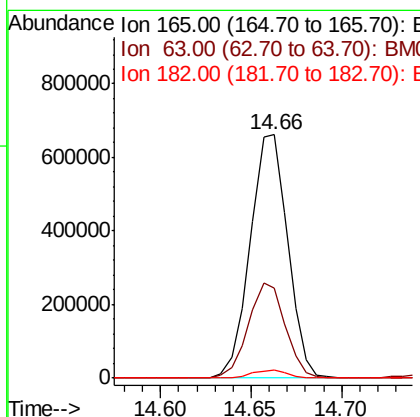
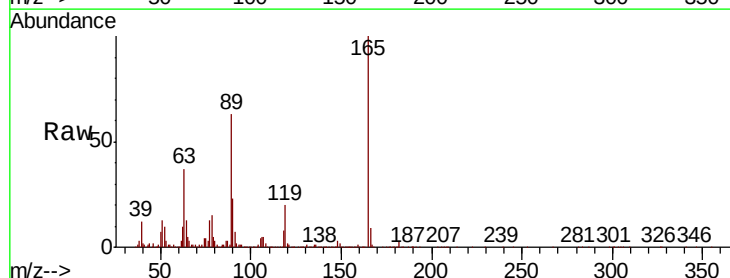
Manual Integrations  
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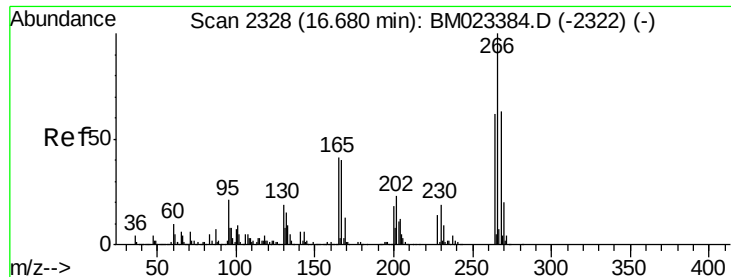
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#55  
2,4-Dinitrotoluene  
Concen: 30.718 ng/ul  
RT: 14.66 min Scan# 1985  
Delta R.T. 0.01 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 165     | 100   |      |       |       |
| 63      | 37.2  | 30.9 | 46.3  |       |
| 182     | 3.1   | 2.5  | 3.7   |       |





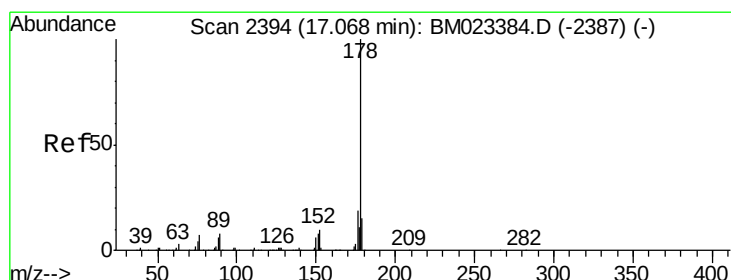
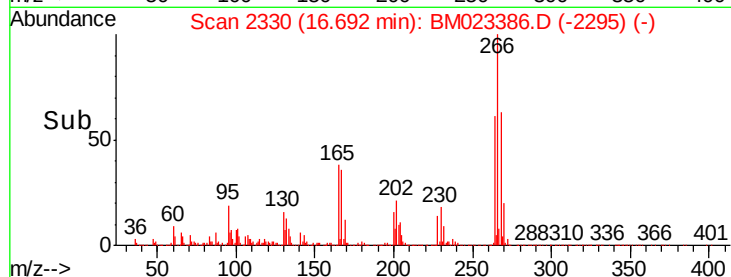
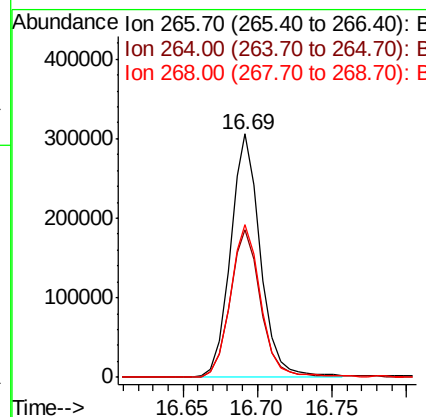
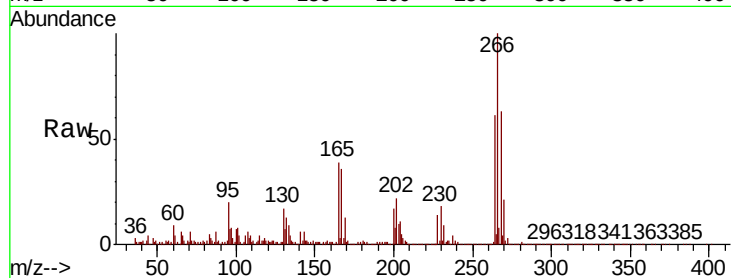
#69  
 Pentachlorophenol  
 Concen: 21.716 ng/ul  
 RT: 16.69 min Scan# 2330  
 Delta R.T. 0.01 min  
 Lab File: BM023386.D  
 Acq: 24 Oct 2019 19:17

Instrument :  
 BNA\_M  
 ClientSampleId :  
 ETOL4MS

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 266     | 100   | 427541 |       |       |
| 264     | 60.5  | 49.4   | 74.2  |       |
| 268     | 62.9  | 50.4   | 75.6  |       |

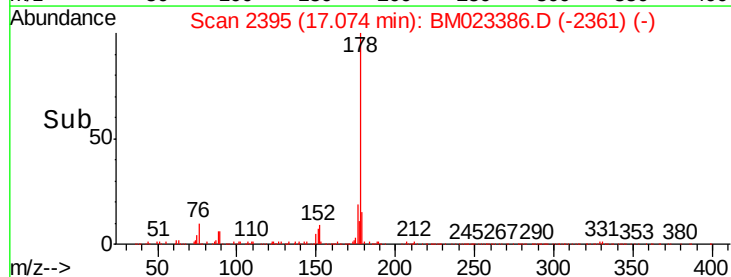
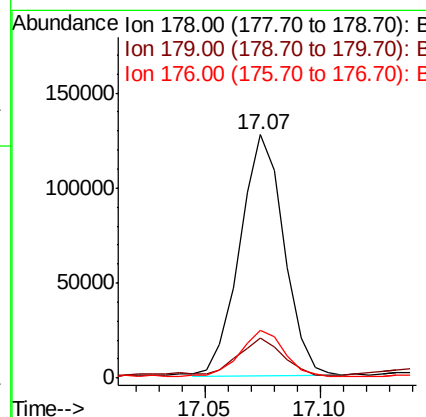
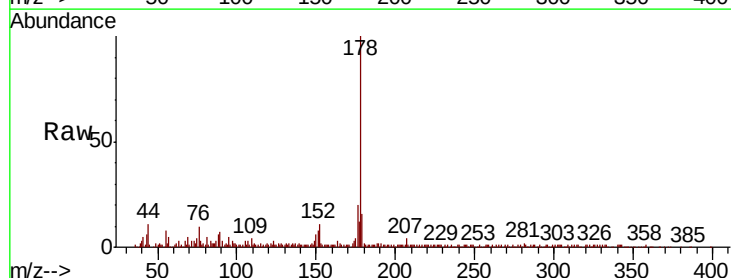
Manual Integrations  
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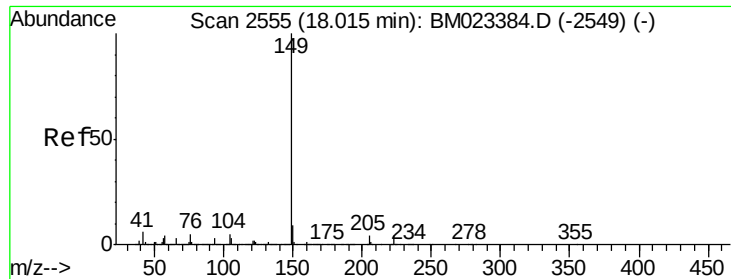


#70  
 Phenanthrene  
 Concen: 1.339 ng/ul  
 RT: 17.07 min Scan# 2395  
 Delta R.T. -0.00 min  
 Lab File: BM023386.D  
 Acq: 24 Oct 2019 19:17

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 178     | 100   | 169803 |       |       |
| 179     | 16.3  | 12.2   | 18.2  |       |
| 176     | 19.7  | 14.9   | 22.3  |       |







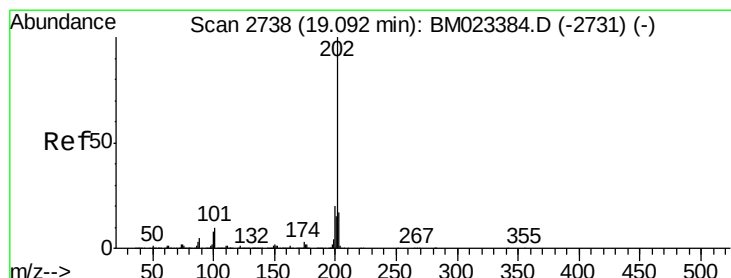
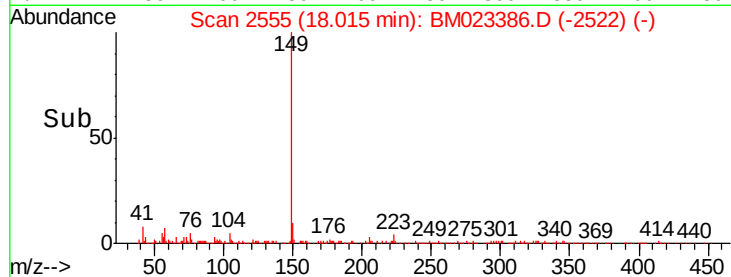
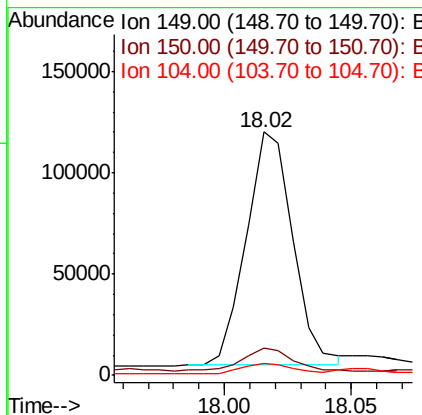
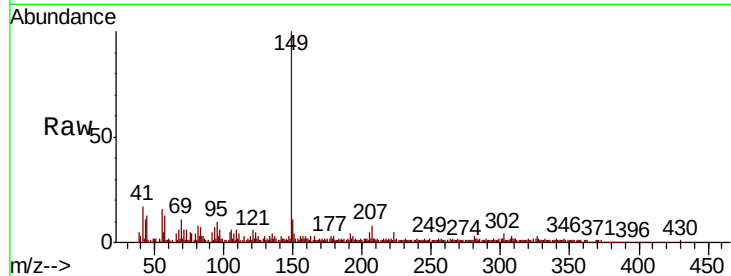
#76  
Di-n-butylphthalate  
Concen: 1.082 ng/ul  
RT: 18.02 min Scan# 2555  
Delta R.T. -0.01 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

Instrument :  
BNA\_M  
ClientSampleId :  
ETOL4MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 150     | 11.1  | 7.2   | 10.8# |
| 104     | 5.1   | 3.9   | 5.9   |

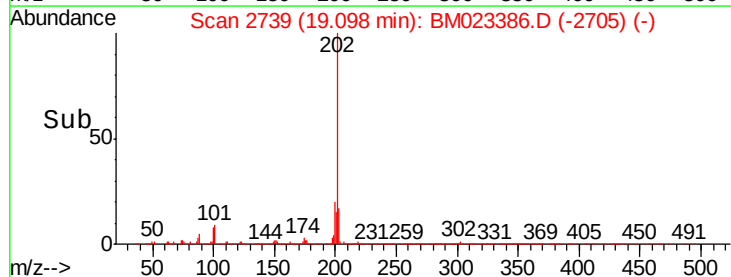
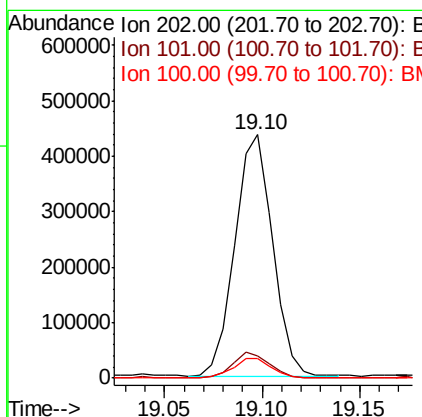
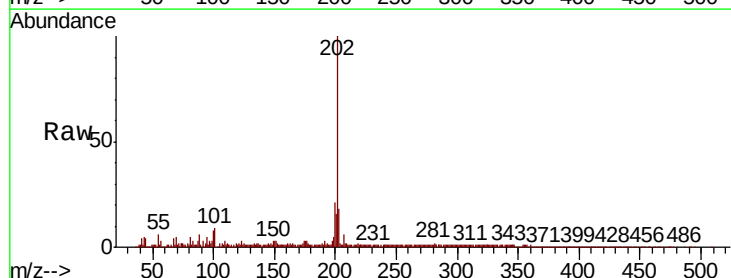
Manual Integrations  
APPROVED

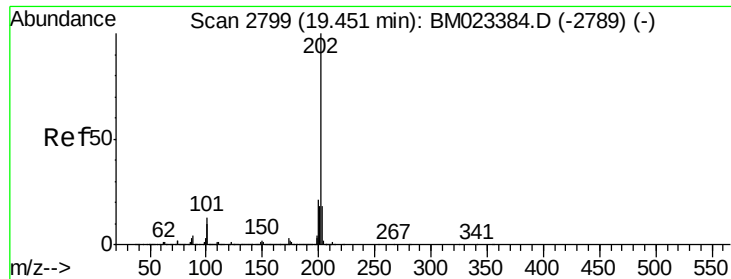
mohammad  
10/26/2019 10:04:04 AM



#77  
Fluoranthene  
Concen: 4.390 ng/ul  
RT: 19.10 min Scan# 2739  
Delta R.T. -0.00 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 9.3   | 8.1   | 12.1  |
| 100     | 7.8   | 6.2   | 9.2   |





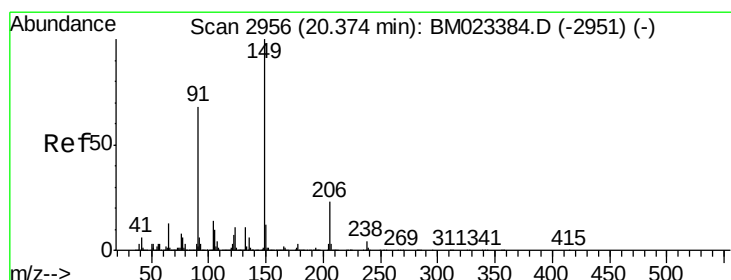
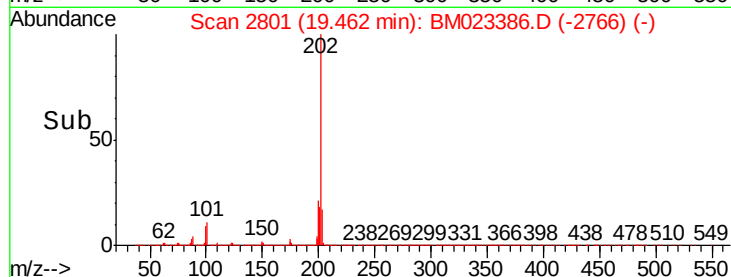
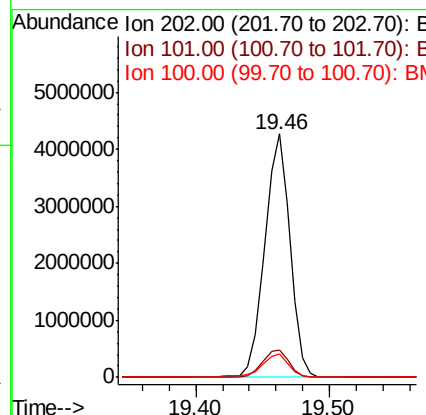
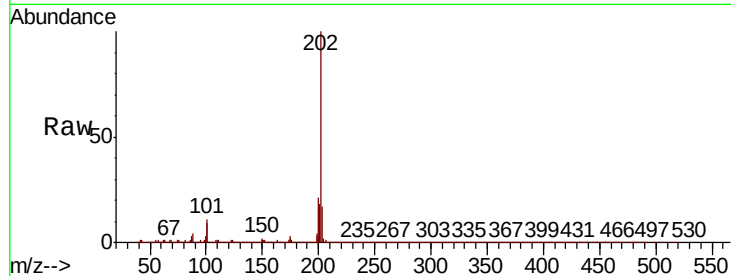
#80  
Pvrene  
Concen: 39.044 ng/ul  
RT: 19.46 min Scan# 2801  
Delta R.T. 0.01 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

Instrument :  
BNA\_M  
ClientSampleId :  
ETOL4MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 11.3  | 10.0  | 15.0  |
| 100     | 9.4   | 8.3   | 12.5  |

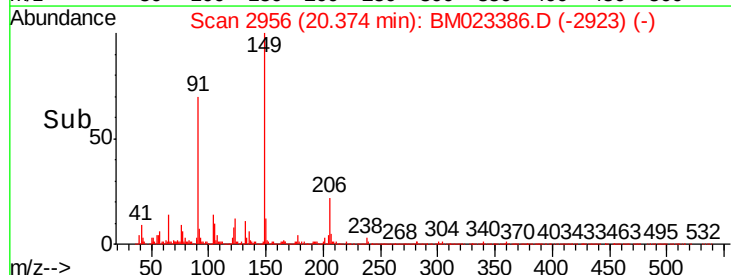
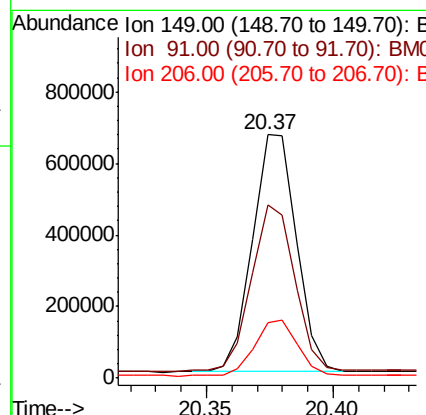
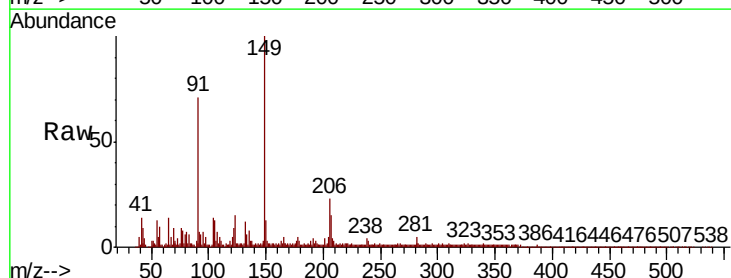
Manual Integrations  
APPROVED

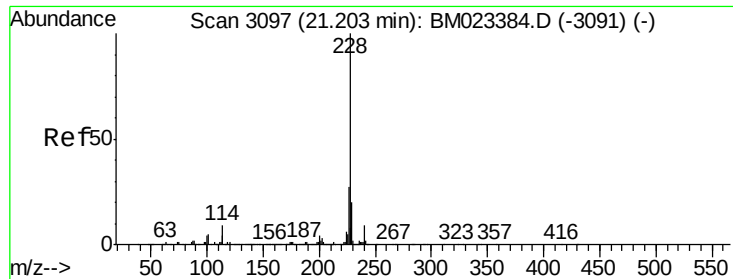
mohammad  
10/26/2019 10:04:04 AM



#81  
Butylbenzylphthalate  
Concen: 13.904 ng/ul  
RT: 20.37 min Scan# 2956  
Delta R.T. -0.01 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 91      | 71.1  | 54.2  | 81.2  |
| 206     | 22.7  | 17.7  | 26.5  |





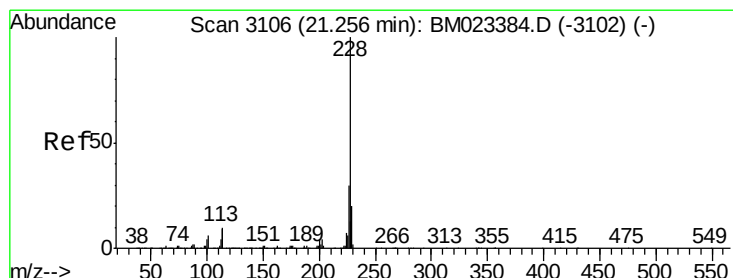
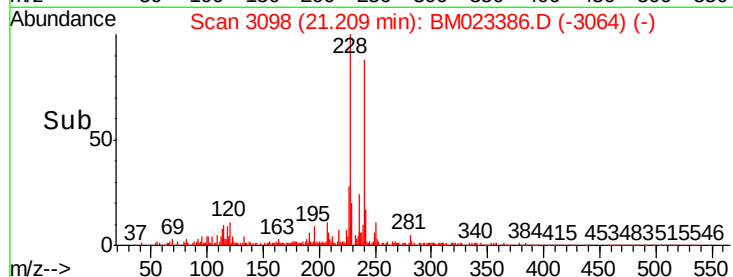
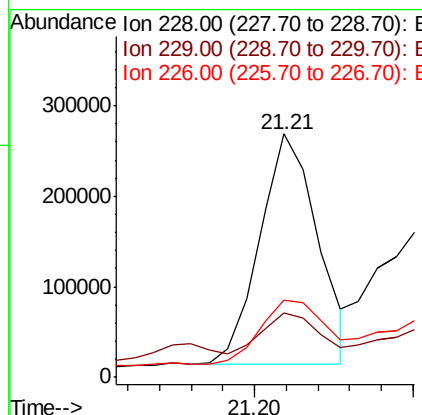
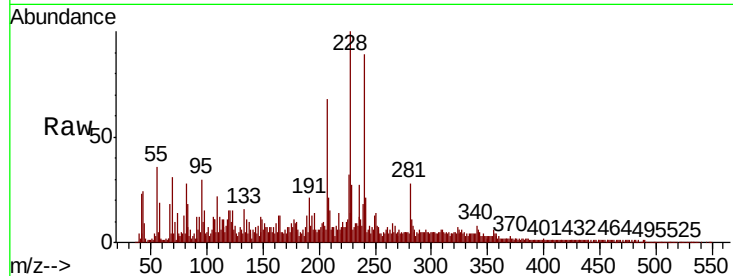
#83  
Benzo(a)anthracene  
Concen: 2.409 ng/ul  
RT: 21.21 min Scan# 3098  
Delta R.T. -0.00 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

Instrument :  
BNA\_M  
ClientSampleId :  
ETOL4MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 26.7  | 15.8  | 23.8# |
| 226     | 31.8  | 21.6  | 32.4  |

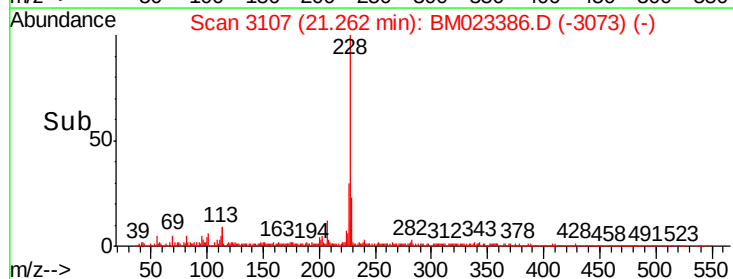
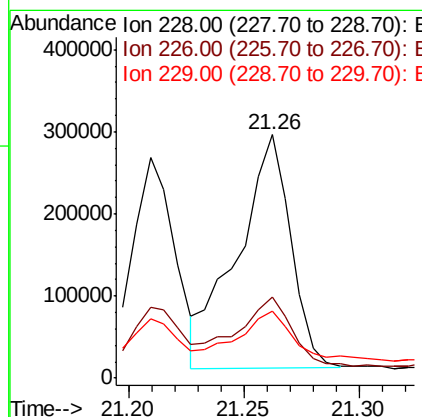
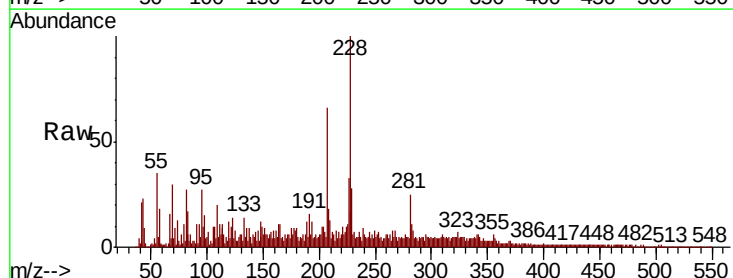
Manual Integrations  
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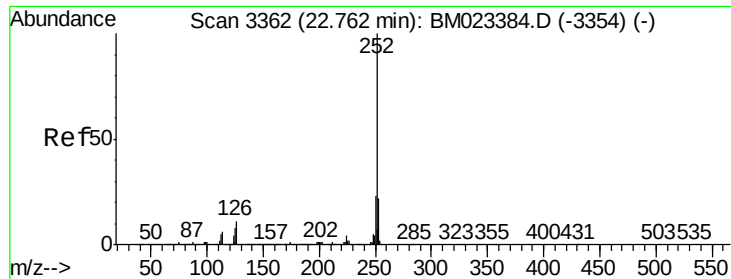
mohammad  
10/26/2019 10:04:04 AM



#85  
Chrysene  
Concen: 3.716 ng/ul  
RT: 21.26 min Scan# 3107  
Delta R.T. -0.00 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 33.3  | 24.0  | 36.0  |
| 229     | 27.7  | 16.0  | 24.0# |





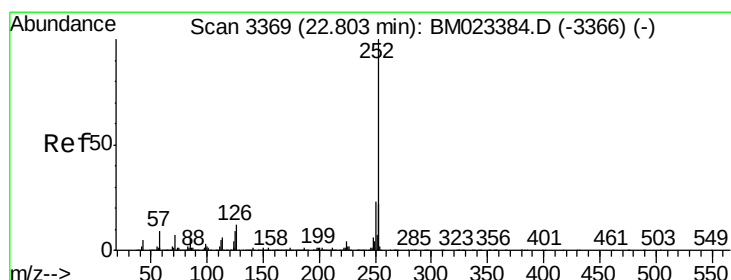
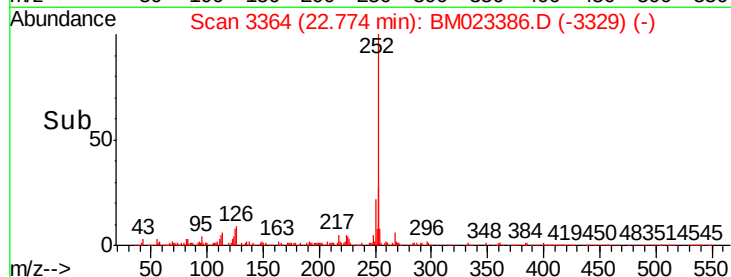
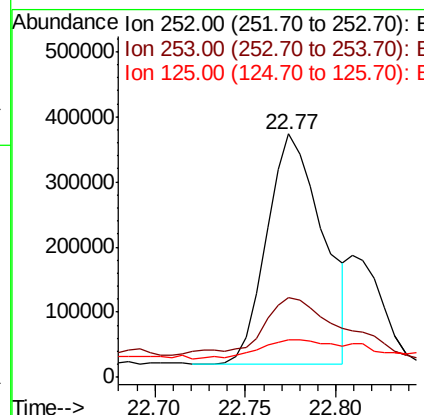
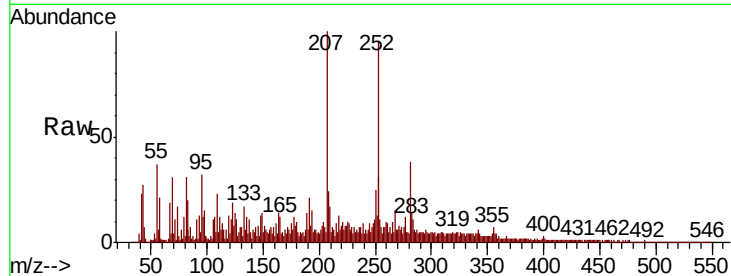
#88  
Benzo(b)fluoranthene  
Concen: 4.654 ng/ul  
RT: 22.77 min Scan# 3364  
Delta R.T. 0.01 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

Instrument :  
BNA\_M  
ClientSampleId :  
ETOL4MS

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 32.8  | 17.5       | 26.3# |
| 125     | 15.2  | 7.1        | 10.7# |

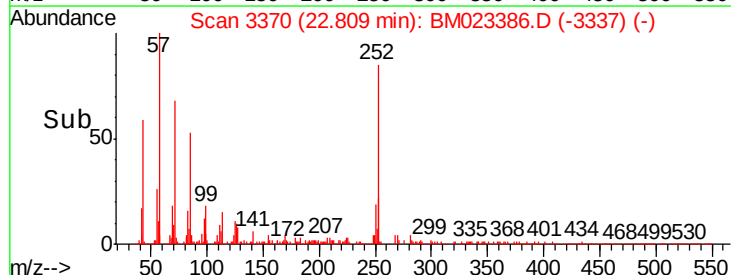
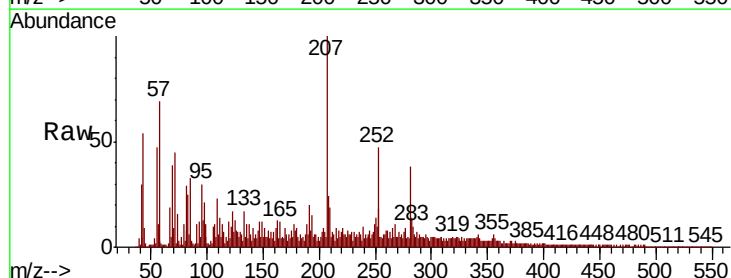
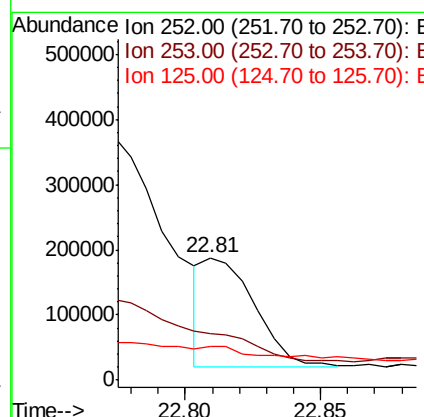
Manual Integrations  
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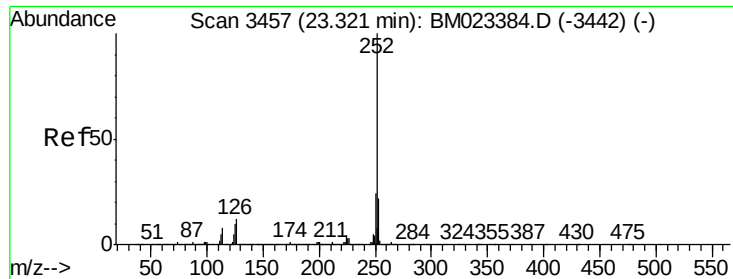
mohammad  
10/26/2019 10:04:04 AM



#89  
Benzo(k)fluoranthene  
Concen: 1.413 ng/ul m  
RT: 22.81 min Scan# 3370  
Delta R.T. -0.01 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 38.1  | 17.8       | 26.6# |
| 125     | 27.7  | 6.8        | 10.2# |





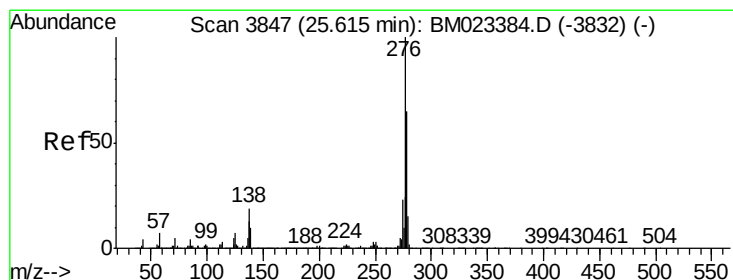
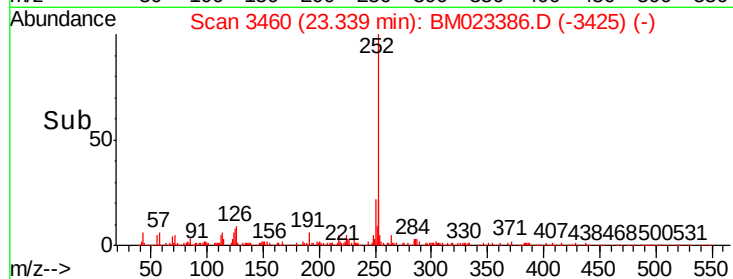
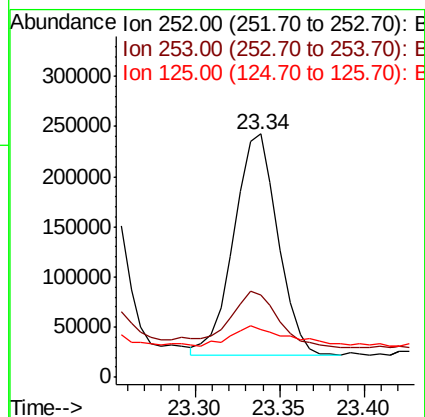
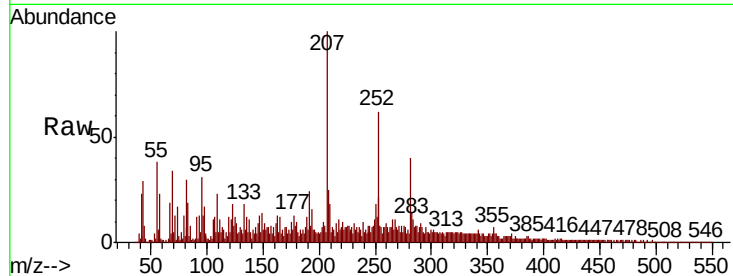
#91  
Benzo(a)pyrene  
Concen: 2.700 ng/ul  
RT: 23.34 min Scan# 3460  
Delta R.T. 0.01 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

Instrument :  
BNA\_M  
ClientSampleId :  
ETOL4MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 33.9  | 17.7  | 26.5# |
| 125     | 19.8  | 7.5   | 11.3# |

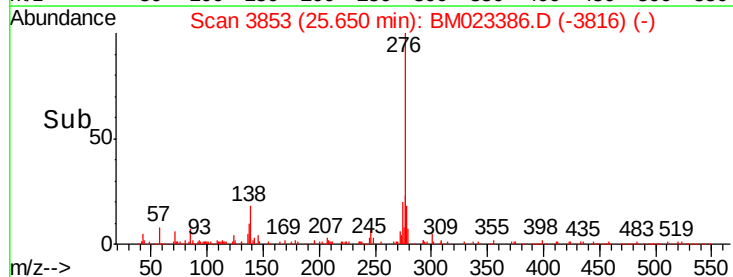
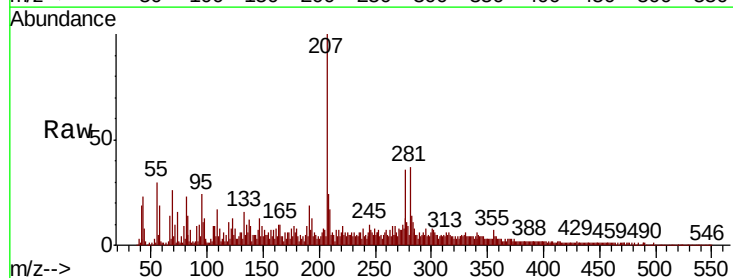
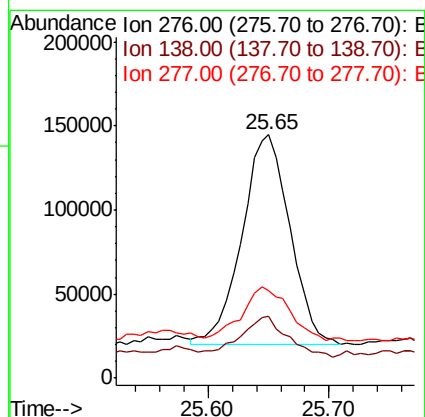
Manual Integrations  
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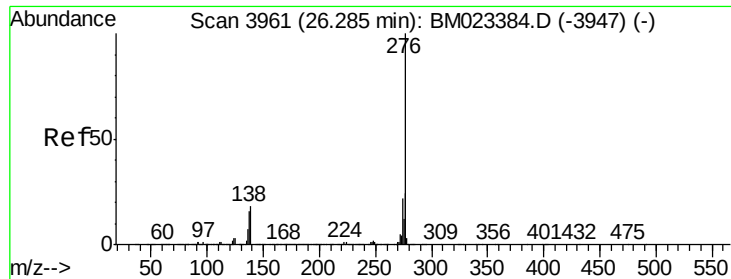
mohammad  
10/26/2019 10:04:04 AM



#92  
Indeno(1,2,3-cd)pyrene  
Concen: 2.170 ng/ul  
RT: 25.65 min Scan# 3853  
Delta R.T. 0.02 min  
Lab File: BM023386.D  
Acq: 24 Oct 2019 19:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 25.2  | 15.7  | 23.5# |
| 277     | 35.9  | 20.2  | 30.2# |





#94

Benzo(a,h,i)perylene

Concen: 3.080 ng/ul

RT: 26.33 min Scan# 3968

Delta R.T. 0.02 min

Lab File: BM023386.D

Acq: 24 Oct 2019 19:17

Instrument :

BNA\_M

ClientSampleId :

ETOL4MS

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 401585 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 22.8  | 14.4  | 21.6#  |
| 277       | 36.2  | 19.0  | 28.6#  |

Manual Integrations  
APPROVED

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