

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM081219\  
 Data File : BM022027.D  
 Acq On : 12 Aug 2019 12:13  
 Operator : HP/JU  
 Sample : K4028-17DL 5X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 BENR4DL

Manual Integrations  
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Sohil  
 8/13/2019 9:56:17 AM

Quant Time: Aug 12 14:24:33 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\SOM-EPA-SIM-BM080319.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Aug 12 14:07:26 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.61  | 152  | 850      | 0.40  | ng/ul  | -0.02    |
| 2) Naphthalene-d8           | 10.40 | 136  | 3341     | 0.40  | ng/ul  | -0.02    |
| 6) Acenaphthene-d10         | 14.27 | 164  | 1783     | 0.40  | ng/ul  | -0.01    |
| 10) Phenanthrene-d10        | 17.02 | 188  | 3990     | 0.40  | ng/ul  | -0.02    |
| 16) Chrysene-d12            | 21.22 | 240  | 4056     | 0.40  | ng/ul  | -0.02    |
| 20) Perylene-d12            | 23.44 | 264  | 4326     | 0.40  | ng/ul  | -0.02    |
| System Monitoring Compounds |       |      |          |       |        |          |
| 4) 2-Methylnaphthalene-d10  | 12.02 | 152  | 168      | 0.03  | ng/ul  | 0.00     |
| 14) Fluoranthene-d10        | 19.06 | 212  | 498      | 0.04  | ng/ul  | -0.02    |
| Target Compounds            |       |      |          |       | Ovalue |          |
| 3) Naphthalene              | 10.45 | 128  | 599      | 0.063 | ng/ul# | 75       |
| 5) 2-Methylnaphthalene      | 12.09 | 142  | 375      | 0.060 | ng/ul  | 97       |
| 7) Acenaphthylene           | 13.99 | 152  | 1071     | 0.129 | ng/ul# | 79       |
| 8) Acenaphthene             | 14.33 | 153  | 1457     | 0.214 | ng/ul  | 98       |
| 9) Fluorene                 | 15.33 | 166  | 1422     | 0.188 | ng/ul# | 98       |
| 12) Phenanthrene            | 17.06 | 178  | 33201    | 2.860 | ng/ul  | 96       |
| 13) Anthracene              | 17.16 | 178  | 7268     | 0.734 | ng/ul  | 98       |
| 15) Fluoranthene            | 19.09 | 202  | 53561    | 3.444 | ng/ul  | 96       |
| 17) Pyrene                  | 19.45 | 202  | 64517    | 3.871 | ng/ul  | 99       |
| 18) Benzo(a)anthracene      | 21.21 | 228  | 34494    | 2.378 | ng/ul  | 99       |
| 19) Chrysene                | 21.26 | 228  | 36701    | 1.967 | ng/ul  | 99       |
| 21) Benzo(b)fluoranthene    | 22.77 | 252  | 35103m   | 2.406 | ng/ul  |          |
| 22) Benzo(k)fluoranthene    | 22.81 | 252  | 12129m   | 0.735 | ng/ul  |          |
| 23) Benzo(a)pyrene          | 23.34 | 252  | 29047    | 1.958 | ng/ul# | 78       |
| 24) Indeno(1,2,3-cd)pyrene  | 25.64 | 276  | 15977    | 0.902 | ng/ul# | 94       |
| 25) Dibenzo(a,h)anthracene  | 25.64 | 278  | 4703     | 0.328 | ng/ul  | 93       |
| 26) Benzo(a,h,i)perylene    | 26.32 | 276  | 16985    | 1.065 | ng/ul  | 98       |

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

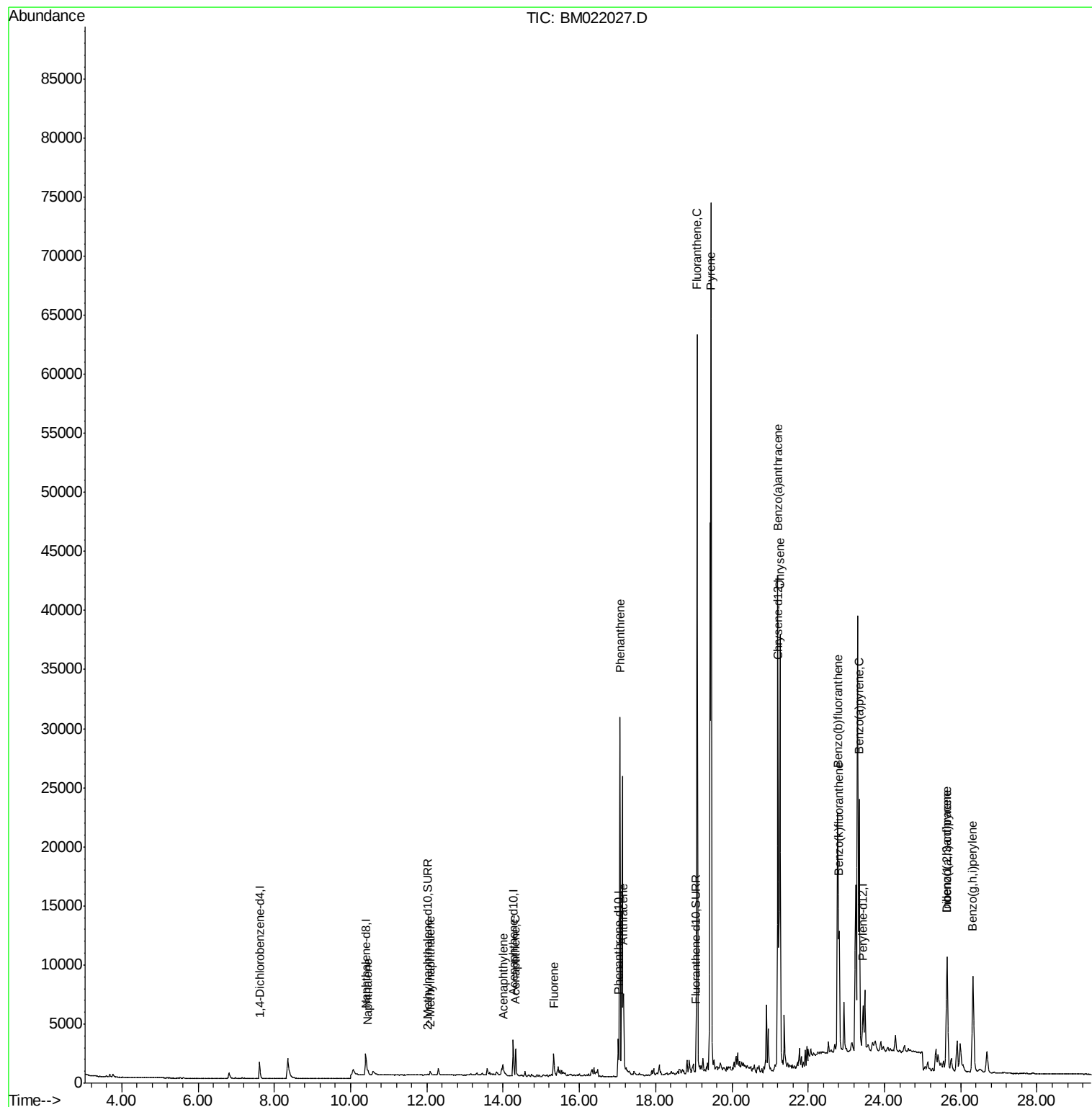
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM081219\  
Data File : BM022027.D  
Acq On : 12 Aug 2019 12:13  
Operator : HP/JU  
Sample : K4028-17DL 5X  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

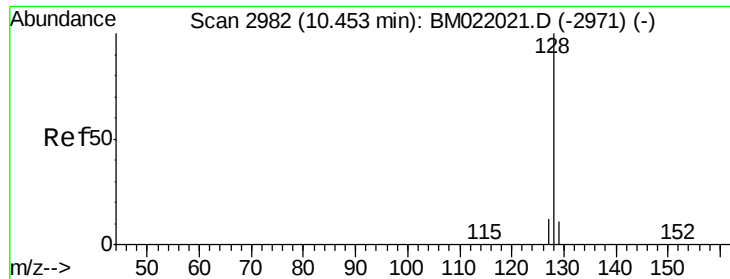
Instrument :  
BNA\_M  
ClientSampleId :  
BENR4DL

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Quant Time: Aug 12 14:24:33 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\SOM-EPA-SIM-BM080319.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 12 14:07:26 2019  
Response via : Initial Calibration





#3

Naphthalene

Concen: 0.063 ng/ul

RT: 10.45 min Scan# 2981

Delta R.T. -0.02 min

Lab File: BM022027.D

Acq: 12 Aug 2019 12:13

Instrument :

BNA\_M

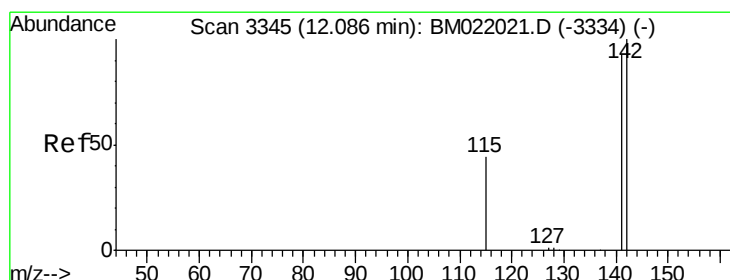
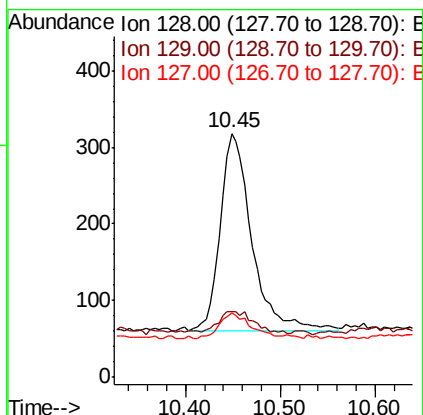
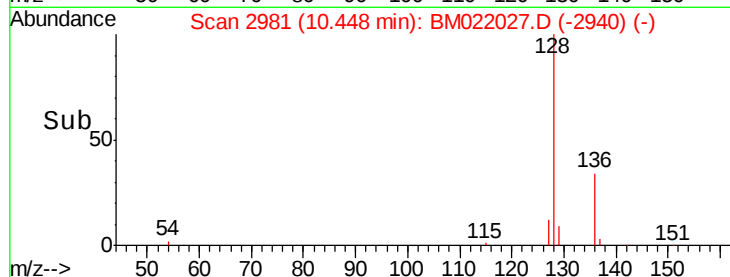
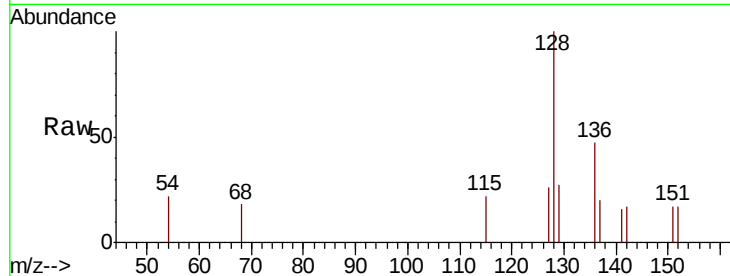
ClientSampleId :

BENR4DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 128   | Resp: | 599   |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 26.7  | 12.3  | 18.5# |
| 127       | 26.1  | 13.0  | 19.6# |

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#5

2-Methylnaphthalene

Concen: 0.060 ng/ul

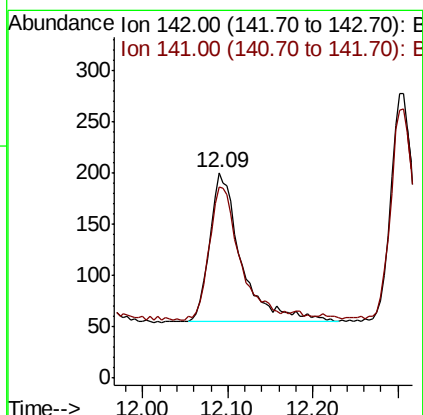
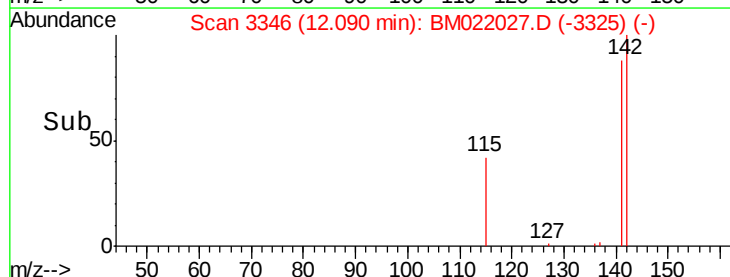
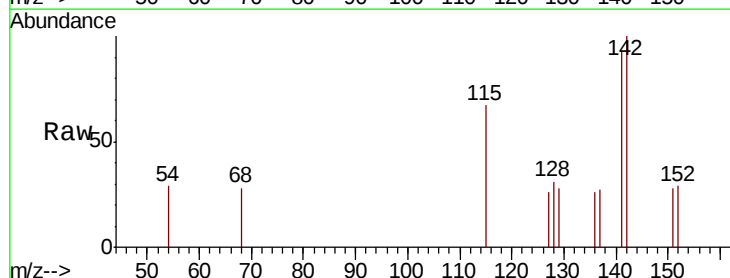
RT: 12.09 min Scan# 3346

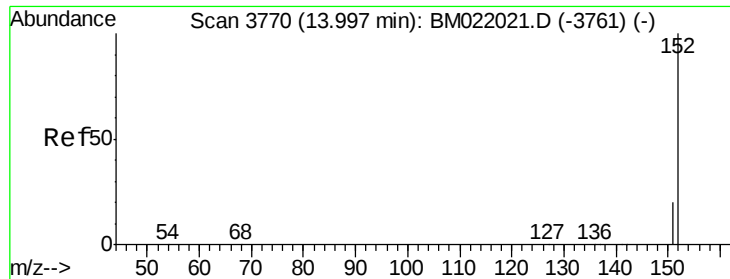
Delta R.T. -0.01 min

Lab File: BM022027.D

Acq: 12 Aug 2019 12:13

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 142   | Resp: | 375   |
| Ion Ratio | Lower | Upper |       |
| 142       | 100   |       |       |
| 141       | 90.1  | 74.3  | 111.5 |





#7

Acenaphthylene

Concen: 0.129 ng/ul

RT: 13.99 min Scan# 3769

Delta R.T. -0.02 min

Lab File: BM022027.D

Acq: 12 Aug 2019 12:13

Instrument :

BNA\_M

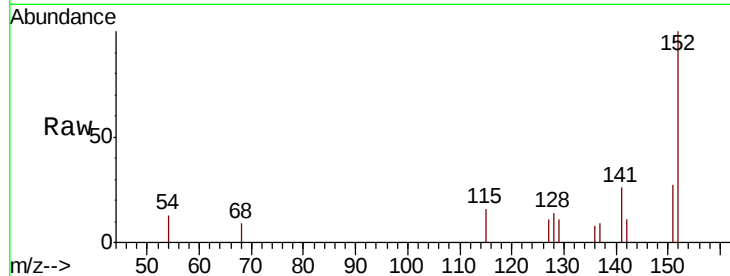
ClientSampleId :

BENR4DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 152   | Resp: | 1071  |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 27.2  | 18.3  | 27.5  |
| 153       | 0.0   | 12.8  | 19.2# |

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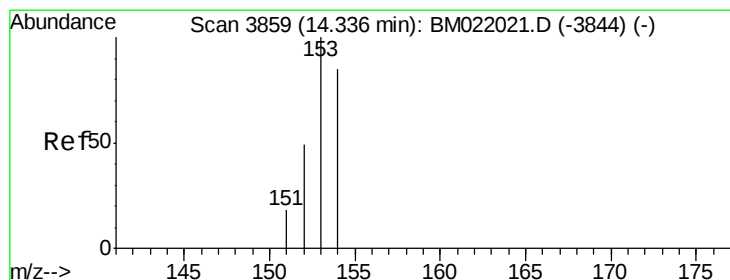
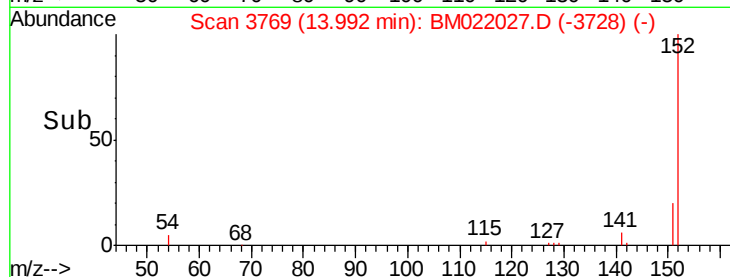
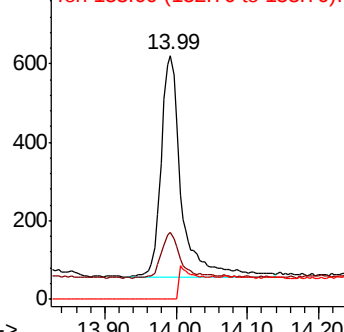


Abundance

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



#8

Acenaphthene

Concen: 0.214 ng/ul

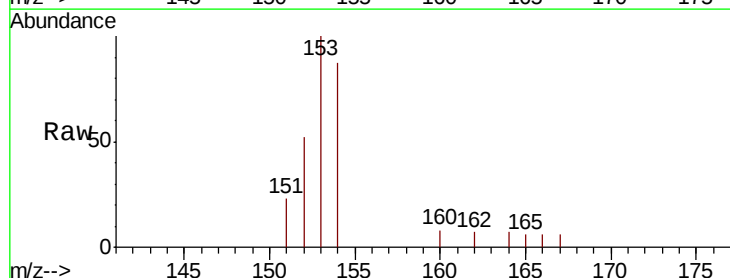
RT: 14.33 min Scan# 3857

Delta R.T. -0.02 min

Lab File: BM022027.D

Acq: 12 Aug 2019 12:13

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 1457  |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 52.1  | 41.3  | 61.9  |
| 154       | 87.5  | 72.3  | 108.5 |

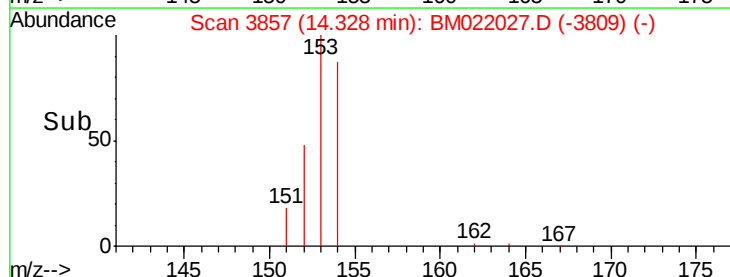
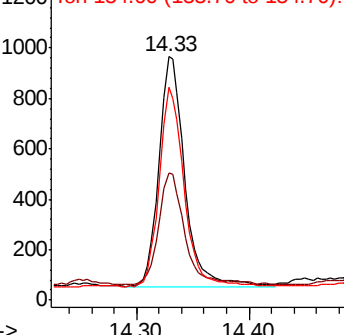


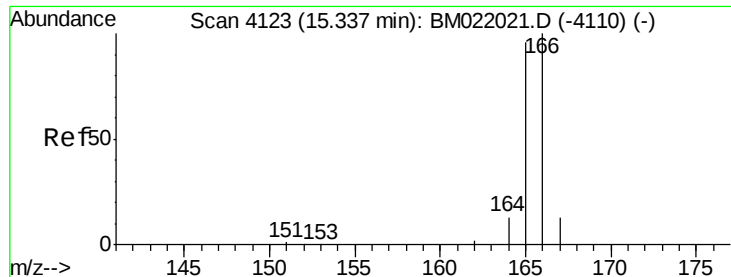
Abundance

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





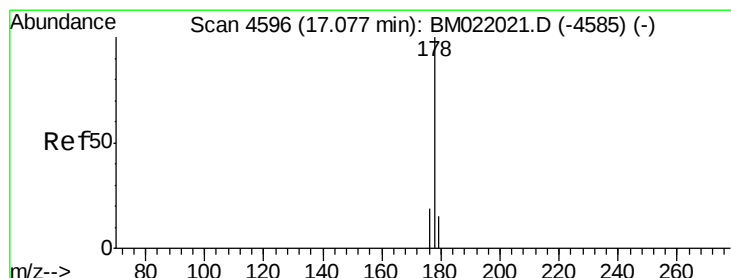
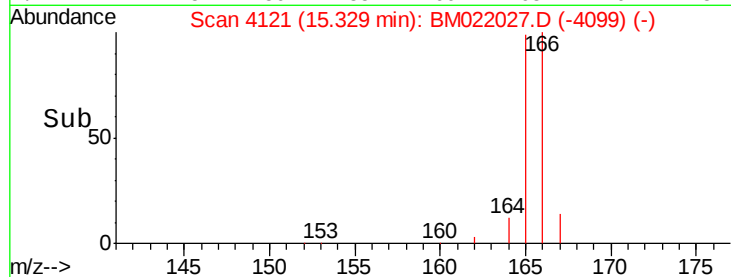
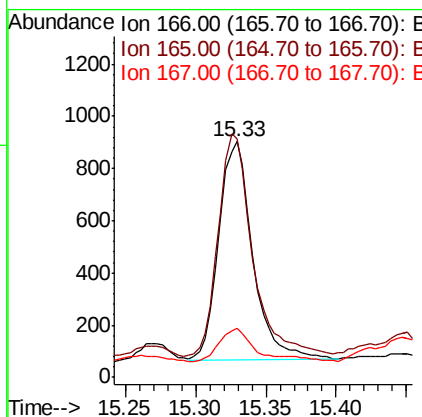
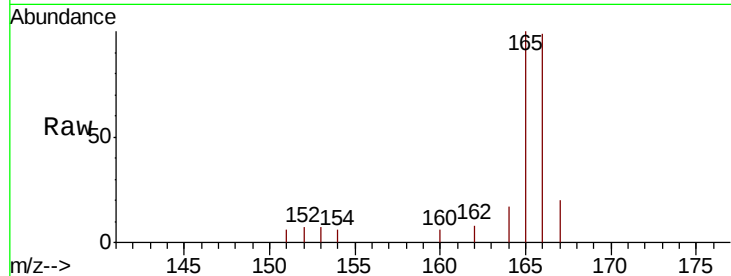
#9  
**Fluorene**  
 Concen: 0.188 ng/ul  
 RT: 15.33 min Scan# 4121  
 Delta R.T. -0.02 min  
 Lab File: BM022027.D  
 Acq: 12 Aug 2019 12:13

Instrument :  
 BNA\_M  
 ClientSampleId :  
 BENR4DL

| Tot Ion | Ion   | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|-------|
| 166     | 100   |       | 1422  |       |       |
| 165     | 101.1 | 81.4  | 122.0 |       |       |
| 167     | 20.6  | 13.7  | 20.5# |       |       |

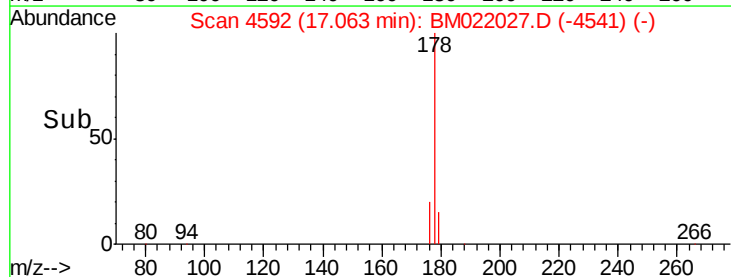
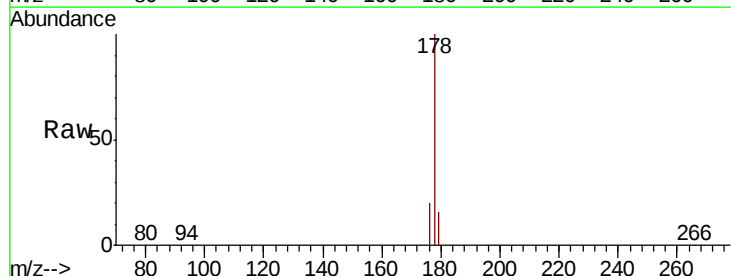
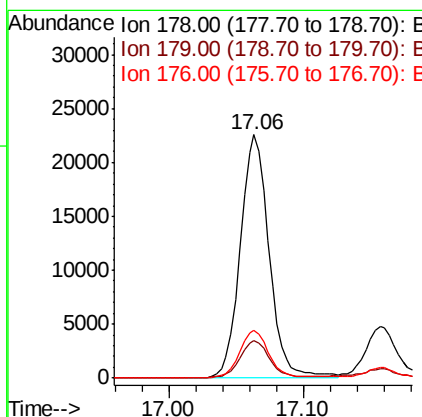
Manual Integrations  
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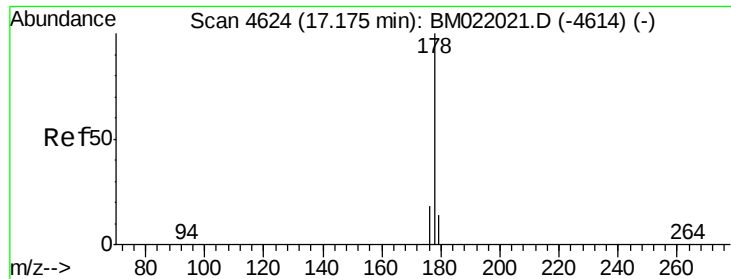
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#12  
**Phenanthrene**  
 Concen: 2.860 ng/ul  
 RT: 17.06 min Scan# 4592  
 Delta R.T. -0.02 min  
 Lab File: BM022027.D  
 Acq: 12 Aug 2019 12:13

| Tgt Ion | Ion  | Ratio | Resp  | Lower | Upper |
|---------|------|-------|-------|-------|-------|
| 178     | 100  |       | 33201 |       |       |
| 179     | 15.5 | 14.2  | 21.2  |       |       |
| 176     | 19.8 | 16.8  | 25.2  |       |       |





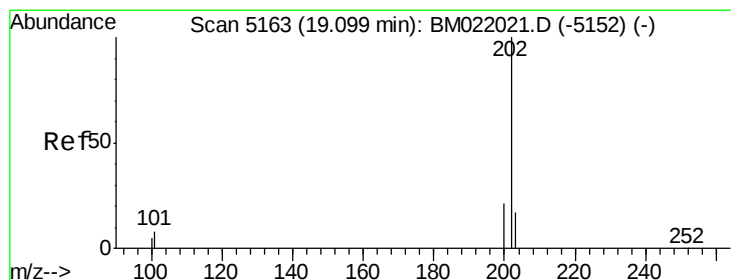
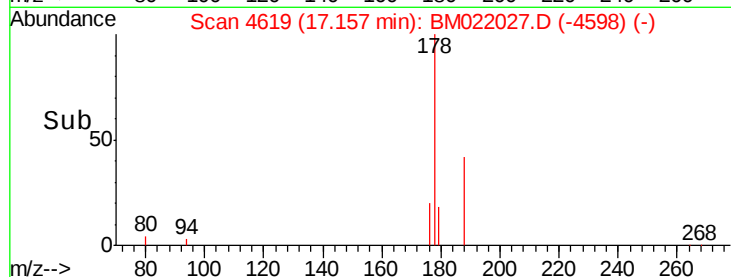
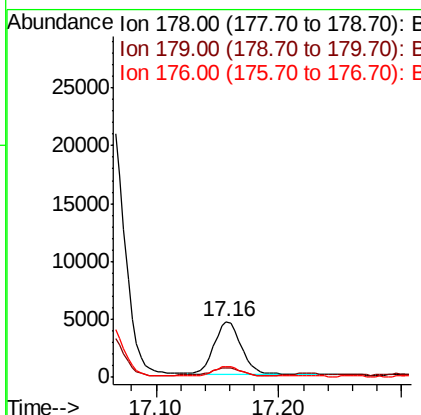
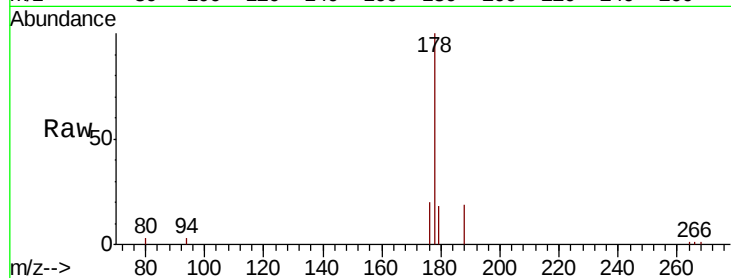
#13  
 Anthracene  
 Concen: 0.734 ng/ul  
 RT: 17.16 min Scan# 4619  
 Delta R.T. -0.03 min  
 Lab File: BM022027.D  
 Acq: 12 Aug 2019 12:13

Instrument :  
 BNA\_M  
 ClientSampled :  
 BENR4DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 18.0  | 15.5  | 23.3  |
| 176     | 20.1  | 16.6  | 25.0  |

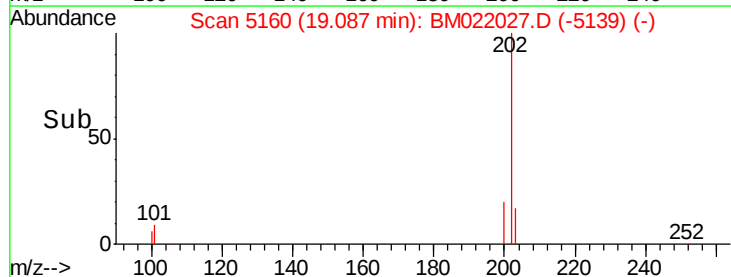
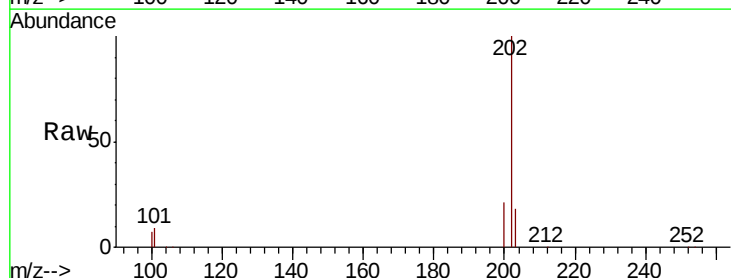
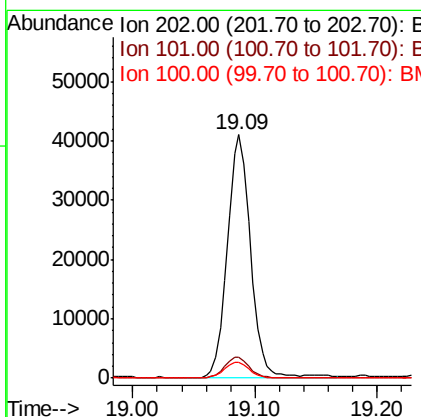
Manual Integrations  
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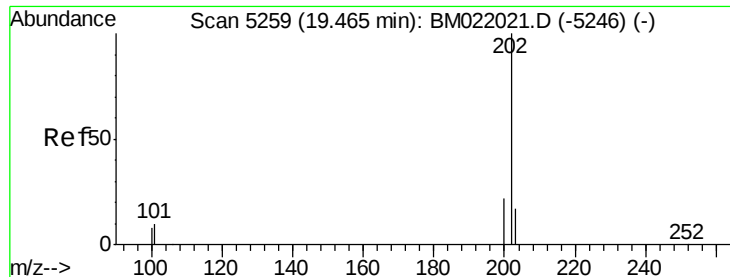
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#15  
 Fluoranthene  
 Concen: 3.444 ng/ul  
 RT: 19.09 min Scan# 5160  
 Delta R.T. -0.02 min  
 Lab File: BM022027.D  
 Acq: 12 Aug 2019 12:13

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 8.7   | 0.0   | 30.2  |
| 100     | 6.6   | 0.0   | 28.1  |





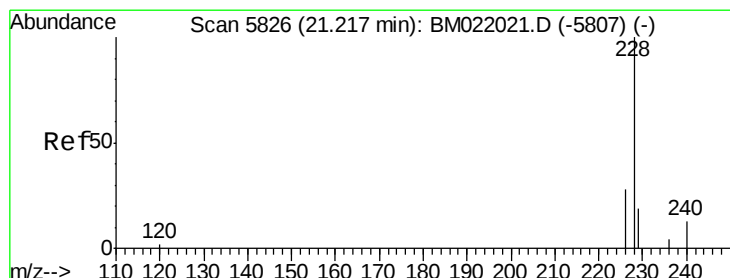
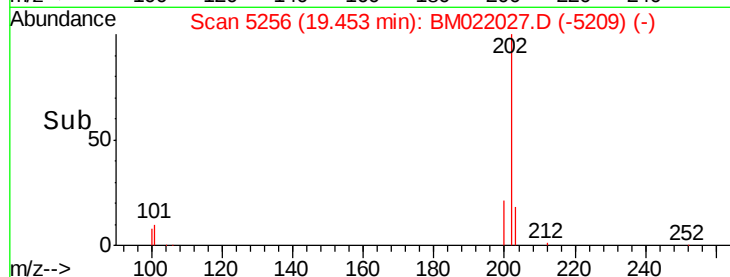
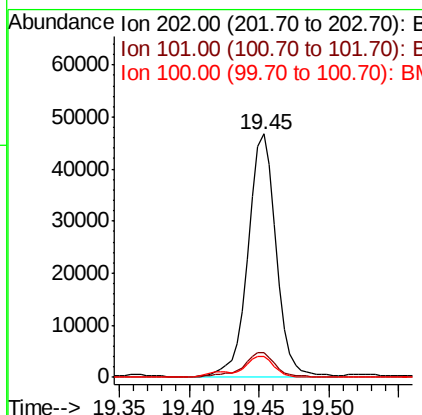
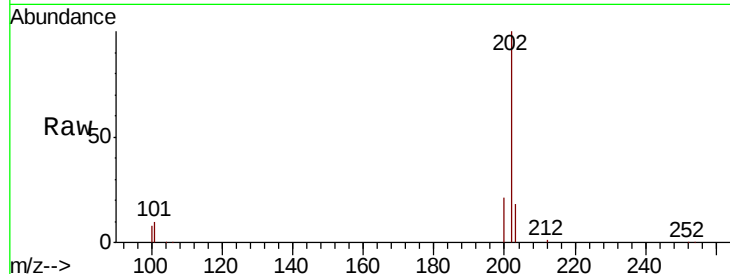
#17  
Pvrene  
Concen: 3.871 ng/ul  
RT: 19.45 min Scan# 5256  
Delta R.T. -0.02 min  
Lab File: BM022027.D  
Acq: 12 Aug 2019 12:13

Instrument :  
BNA\_M  
ClientSampleId :  
BENR4DL

| Tot Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 202     | 100   |            |            |
| 101     | 10.0  | 8.3        | 12.5       |
| 100     | 8.4   | 7.2        | 10.8       |

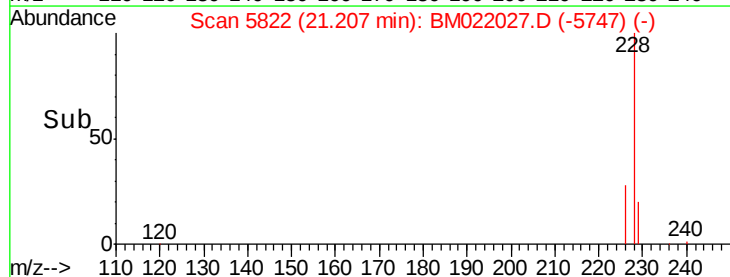
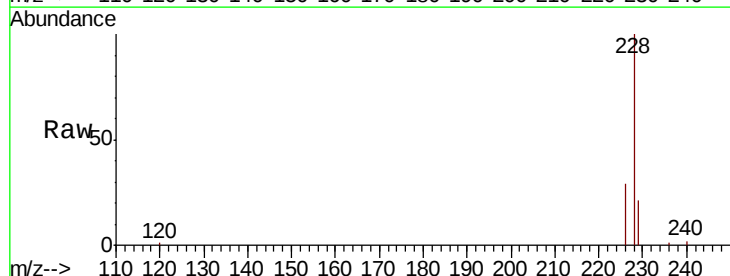
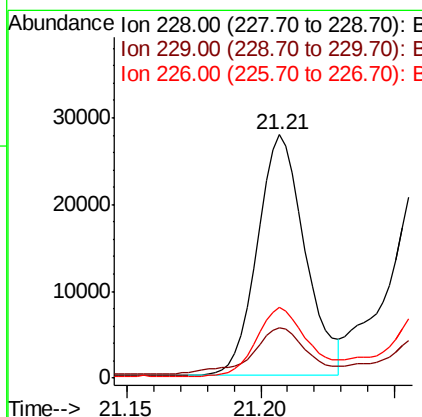
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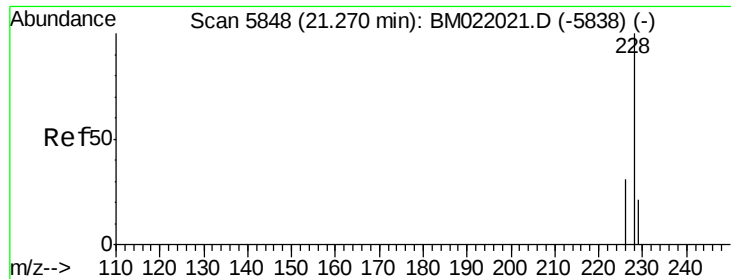
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#18  
Benzo(a)anthracene  
Concen: 2.378 ng/ul  
RT: 21.21 min Scan# 5822  
Delta R.T. -0.02 min  
Lab File: BM022027.D  
Acq: 12 Aug 2019 12:13

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 228     | 100   |            |            |
| 229     | 20.6  | 17.2       | 25.8       |
| 226     | 28.9  | 22.6       | 34.0       |





#19

Chrysene

Concen: 1.967 ng/ul

RT: 21.26 min Scan# 5844

Delta R.T. -0.02 min

Lab File: BM022027.D

Acq: 12 Aug 2019 12:13

Instrument :

BNA\_M

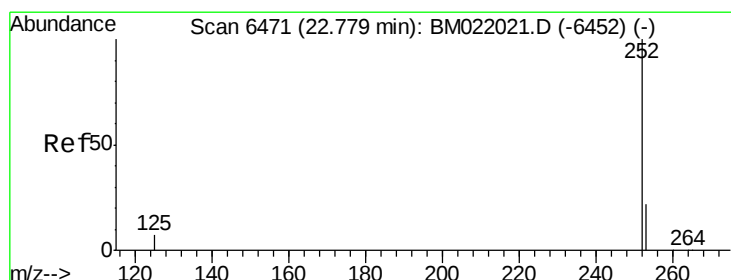
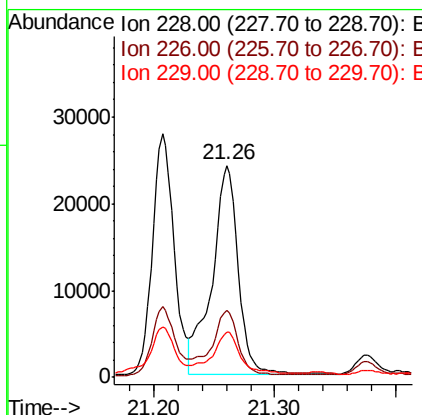
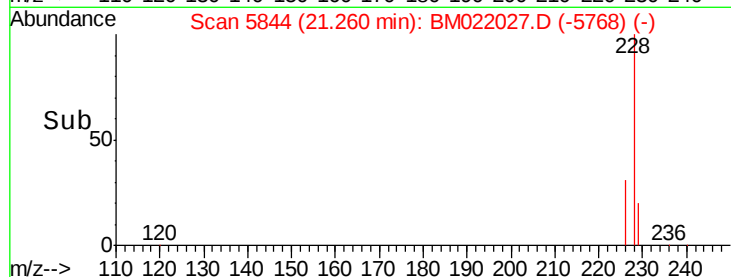
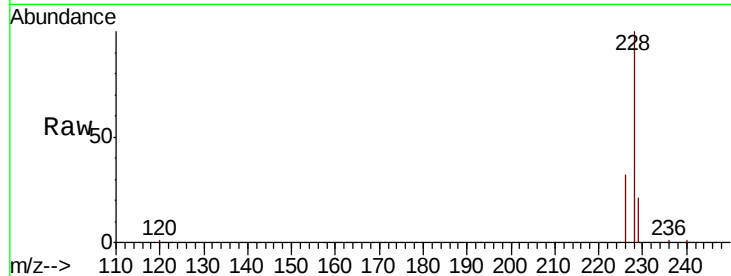
ClientSampleId :

BENR4DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 228   | Resp: | 36701 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 31.6  | 24.9  | 37.3  |
| 229       | 21.5  | 16.6  | 25.0  |

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#21

Benzo(b)fluoranthene

Concen: 2.406 ng/ul m

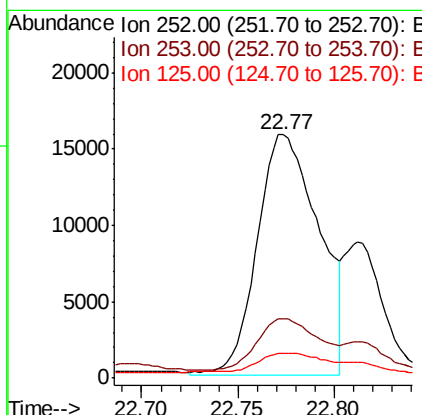
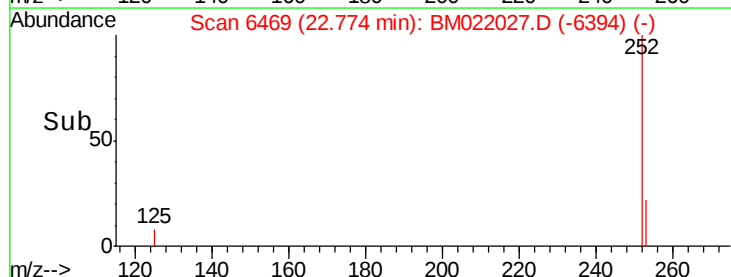
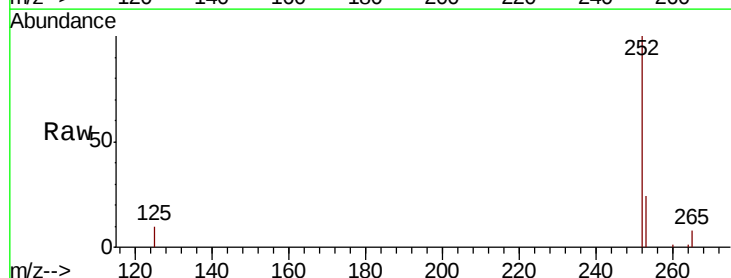
RT: 22.77 min Scan# 6469

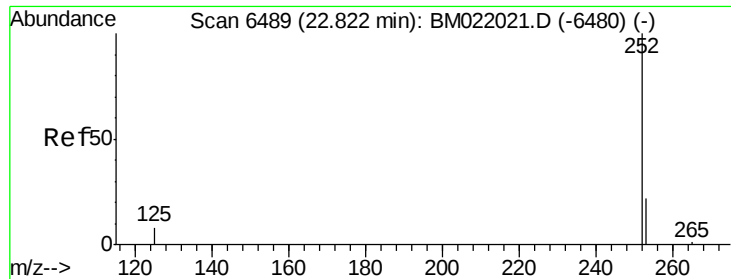
Delta R.T. -0.02 min

Lab File: BM022027.D

Acq: 12 Aug 2019 12:13

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 35103 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 24.5  | 0.0   | 67.4  |
| 125       | 10.2  | 0.0   | 31.0  |





#22

Benzo(k)fluoranthene

Concen: 0.735 ng/ul m

RT: 22.81 min Scan# 6485

Delta R.T. -0.02 min

Lab File: BM022027.D

Acq: 12 Aug 2019 12:13

Instrument :

BNA\_M

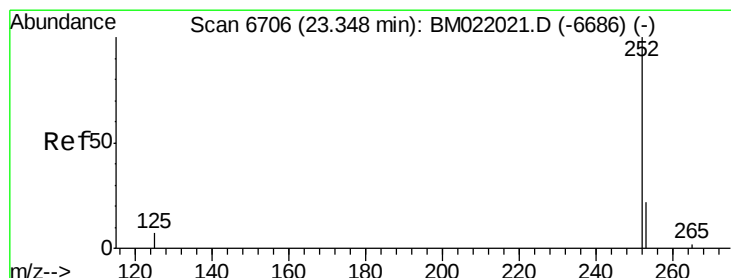
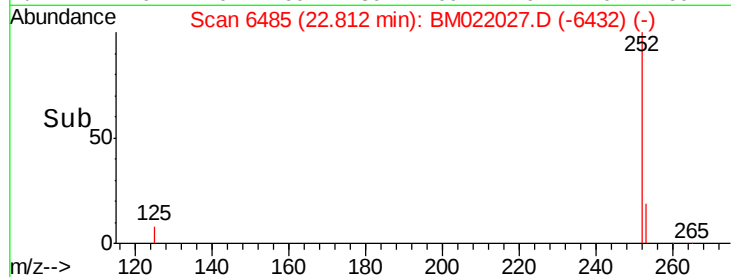
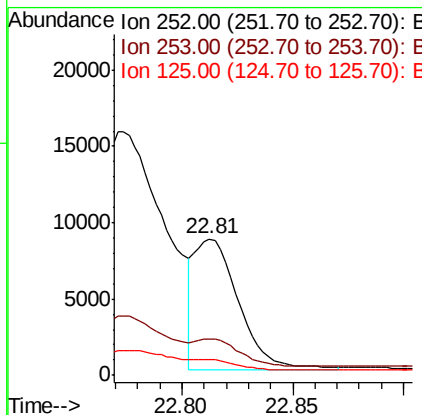
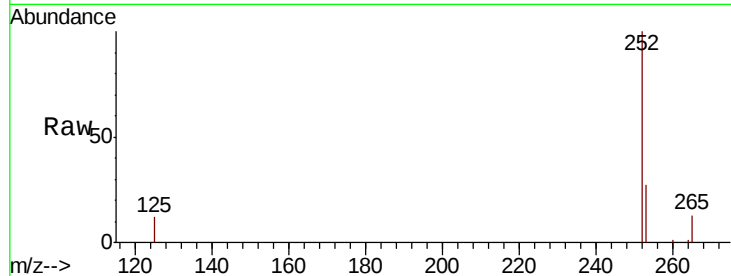
ClientSampleId :

BENR4DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 12129 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 27.0  | 27.0  | 40.4  |
| 125       | 11.6  | 12.2  | 18.2# |

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#23

Benzo(a)pyrene

Concen: 1.958 ng/ul

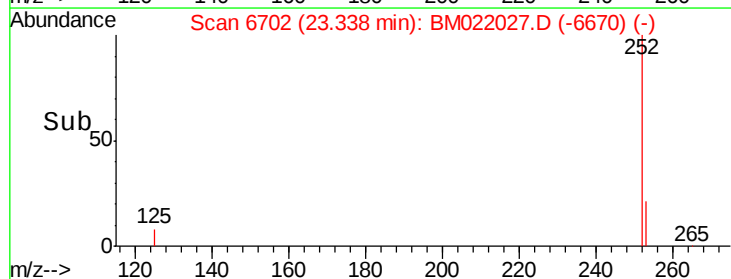
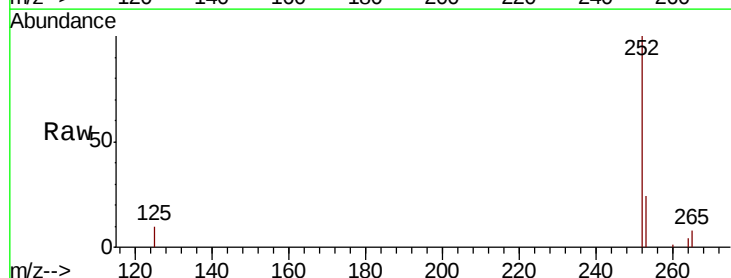
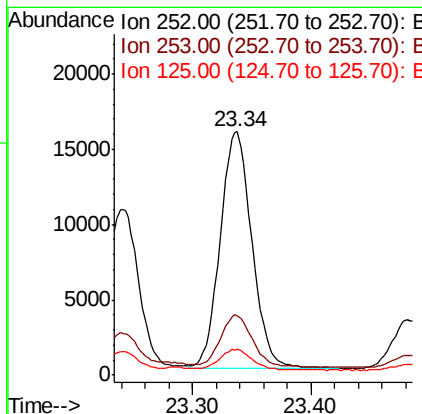
RT: 23.34 min Scan# 6702

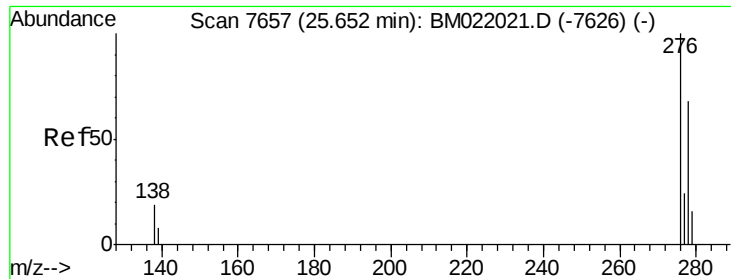
Delta R.T. -0.02 min

Lab File: BM022027.D

Acq: 12 Aug 2019 12:13

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 29047 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 24.3  | 31.7  | 47.5# |
| 125       | 10.5  | 14.6  | 21.8# |





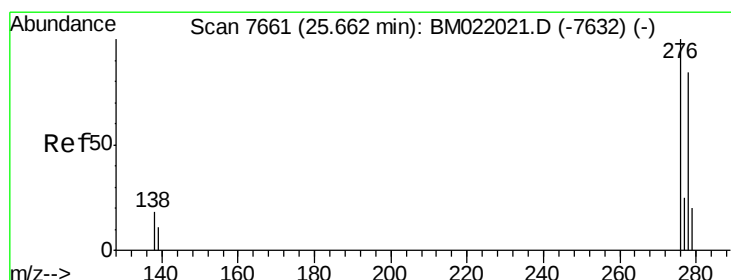
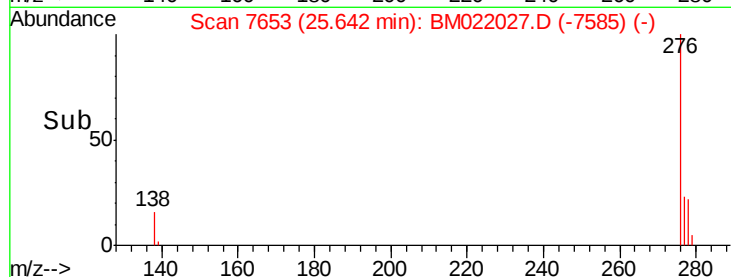
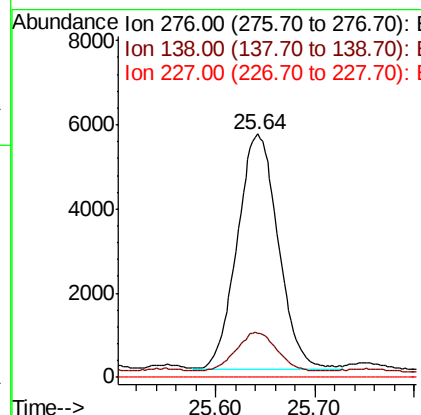
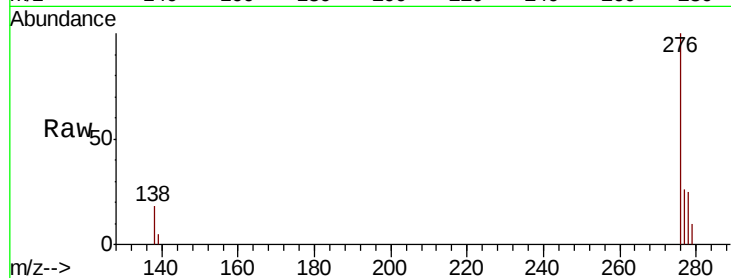
#24  
Indeno(1,2,3-cd)pyrene  
Concen: 0.902 ng/ul  
RT: 25.64 min Scan# 7653  
Delta R.T. -0.03 min  
Lab File: BM022027.D  
Acq: 12 Aug 2019 12:13

Instrument :  
BNA\_M  
ClientSampleId :  
BENR4DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 16.2  | 15.1  | 22.7  |
| 227     | 0.0   | 0.0   | 0.0   |

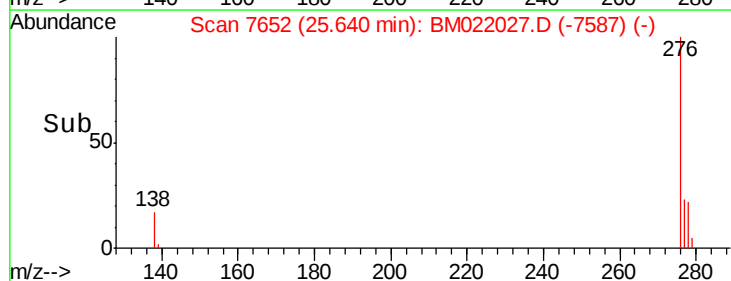
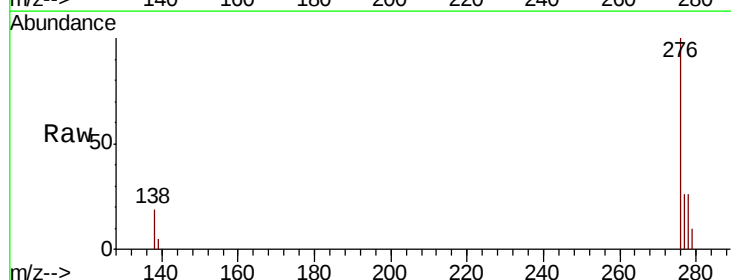
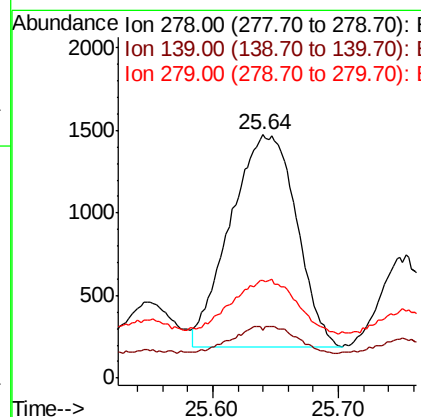
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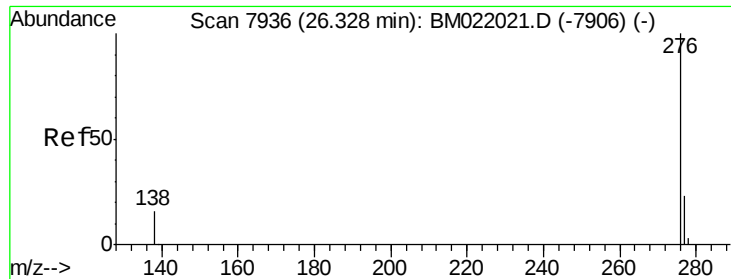
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#25  
Dibenzo(a,h)anthracene  
Concen: 0.328 ng/ul  
RT: 25.64 min Scan# 7652  
Delta R.T. -0.04 min  
Lab File: BM022027.D  
Acq: 12 Aug 2019 12:13

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 19.9  | 14.2  | 21.2  |
| 279     | 40.4  | 28.3  | 42.5  |





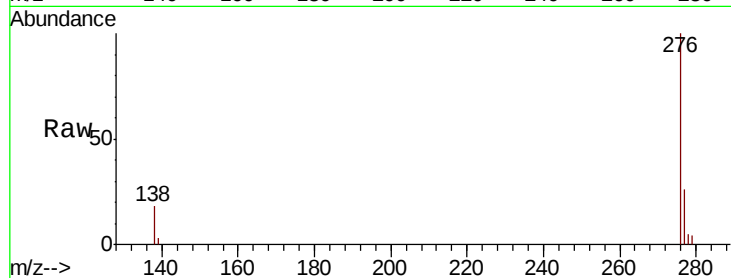
#26  
 Benzo(a,h,i)perylene  
 Concen: 1.065 ng/ul  
 RT: 26.32 min Scan# 7933  
 Delta R.T. -0.04 min  
 Lab File: BM022027.D  
 Acq: 12 Aug 2019 12:13

Instrument :  
 BNA\_M  
 ClientSampleId :  
 BENR4DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 276   | Resp: | 16985 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 18.5  | 15.5  | 23.3  |
| 277       | 25.8  | 21.4  | 32.2  |

Manual Integrations  
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Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

