

Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\  
 Data File : BF087751.D  
 Acq On : 6 Jun 2016 14:43  
 Operator : UM/SJ  
 Sample : H3267-10 5X  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 STA-TA-1257(0-4)

Manual Integrations  
 APPROVED

umangi  
 6/6/2016 7:31:38 PM

Quant Time: Jun 06 16:54:30 2016  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF060416.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jun 04 11:07:28 2016  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.84  | 152  | 129855   | 20.00 | ng    | -0.02    |
| 21) Naphthalene-d8          | 8.14  | 136  | 551459   | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10        | 9.88  | 164  | 217912   | 20.00 | ng    | -0.02    |
| 63) Phenanthrene-d10        | 11.37 | 188  | 378542   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12            | 14.00 | 240  | 282852   | 20.00 | ng    | -0.02    |
| 86) Perylene-d12            | 15.43 | 264  | 255181   | 20.00 | ng    | -0.01    |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.44  | 112  | 166219   | 20.69 | ng    | -0.01    |
| 7) Phenol-d6                | 6.47  | 99   | 215682   | 21.41 | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.40  | 82   | 110713   | 11.62 | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol    | 10.67 | 330  | 39164    | 17.90 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.21  | 172  | 282319   | 15.94 | ng    | -0.02    |
| 78) Terphenyl-d14           | 12.95 | 244  | 176617   | 15.24 | ng    | -0.02    |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 70) Phenanthrene            | 11.39 | 178  | 161933   | 7.89  | ng    | 98       |
| 71) Anthracene              | 11.44 | 178  | 44793    | 2.18  | ng    | 98       |
| 74) Fluoranthene            | 12.58 | 202  | 322124   | 15.95 | ng    | 92       |
| 77) Pyrene                  | 12.80 | 202  | 280130   | 13.91 | ng    | 98       |
| 80) Benzo(a)anthracene      | 13.99 | 228  | 165868   | 10.16 | ng    | 96       |
| 82) Chrysene                | 14.02 | 228  | 111488   | 6.86  | ng    | 97       |
| 85) Indeno(1,2,3-cd)pyrene  | 16.80 | 276  | 67588    | 5.03  | ng    | # 100    |
| 87) Benzo(b)fluoranthene    | 15.02 | 252  | 178071m  | 10.73 | ng    |          |
| 88) Benzo(k)fluoranthene    | 15.03 | 252  | 68034m   | 4.93  | ng    |          |
| 89) Benzo(a)pyrene          | 15.36 | 252  | 118699   | 8.51  | ng    | 99       |
| 91) Benzo(g,h,i)perylene    | 17.22 | 276  | 63984    | 5.34  | ng    | 97       |

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

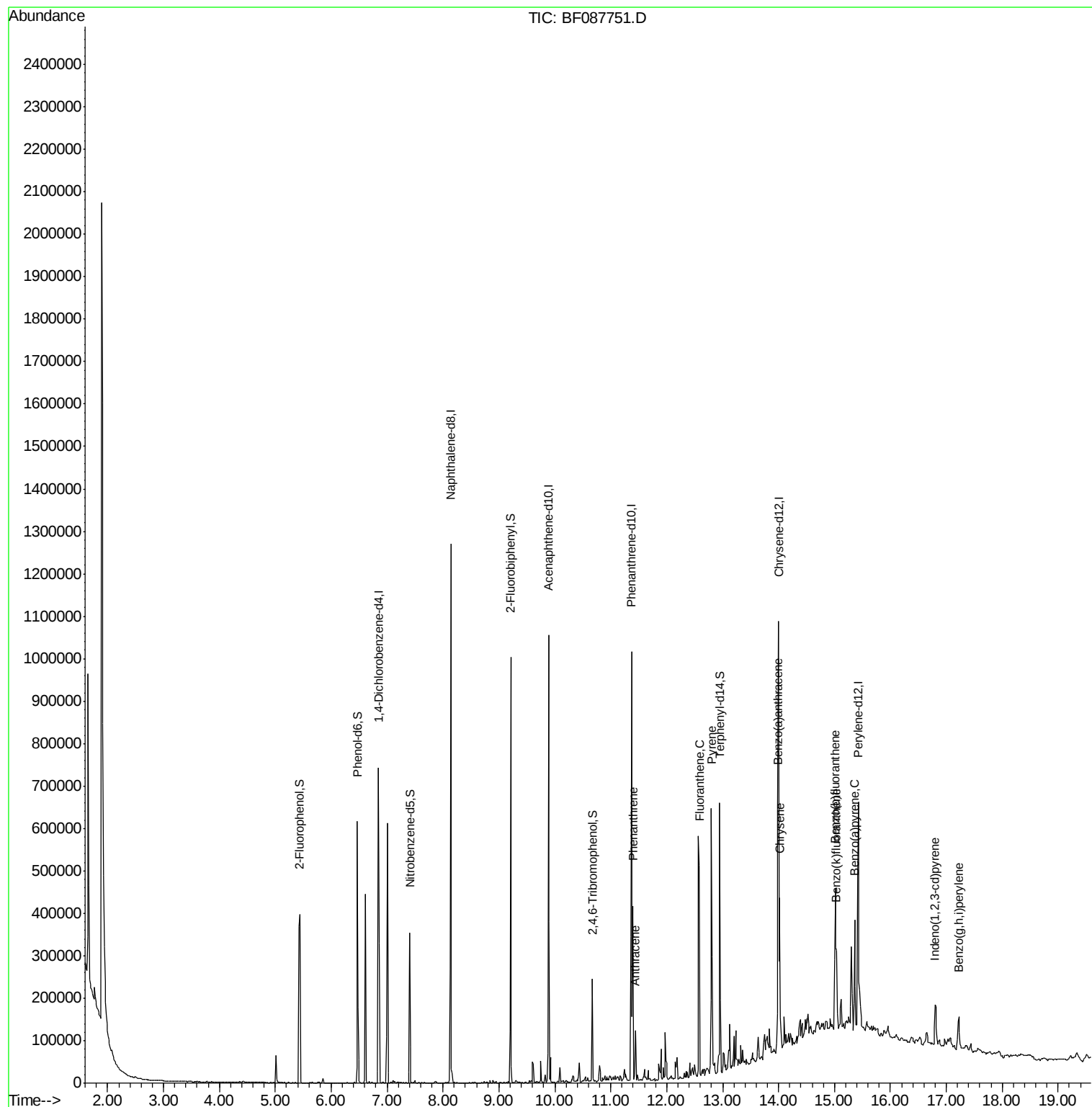
Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\  
Data File : BF087751.D  
Acq On : 6 Jun 2016 14:43  
Operator : UM/SJ  
Sample : H3267-10 5X  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

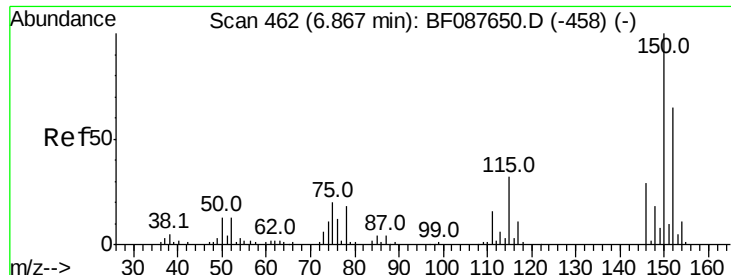
Instrument :  
BNA\_F  
ClientSampleId :  
STA-TA-1257(0-4)

Manual Integrations  
APPROVED

umangi  
6/6/2016 7:31:38 PM

Quant Time: Jun 06 16:54:30 2016  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF060416.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jun 04 11:07:28 2016  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.84 min Scan# 460

Delta R.T. -0.02 min

Lab File: BF087751.D

Acq: 6 Jun 2016 14:43

Instrument :

BNA\_F

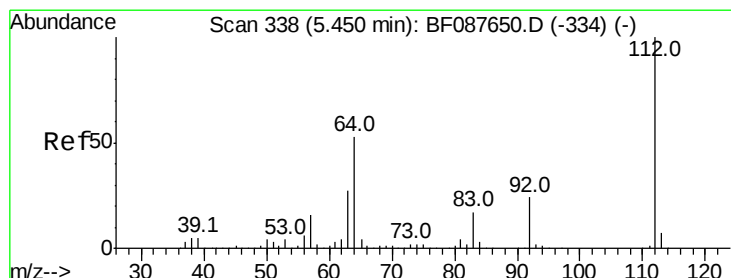
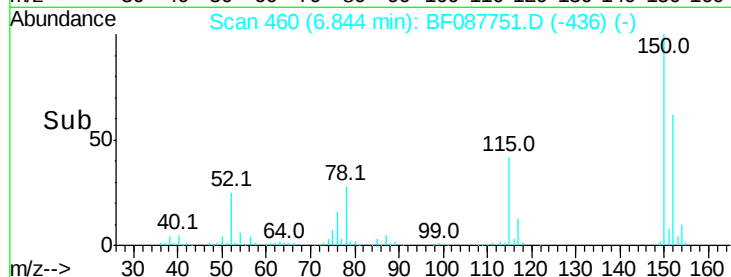
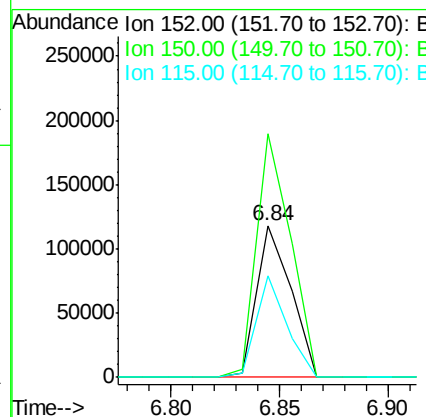
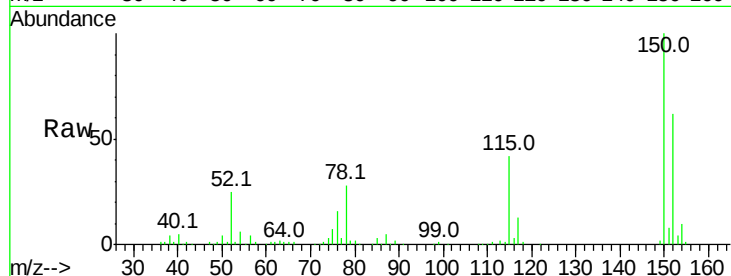
ClientSampleId :

STA-TA-1257(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 160.4 | 123.8 | 185.6 |
| 115     | 67.0  | 39.6  | 59.4  |

Manual Integrations  
APPROVED

umangi  
6/6/2016 7:31:38 PM



#5

2-Fluorophenol

Concen: 20.69 ng

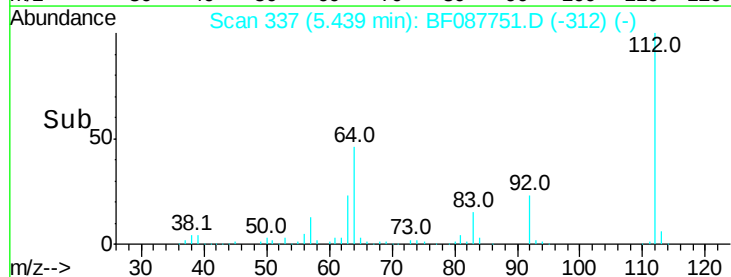
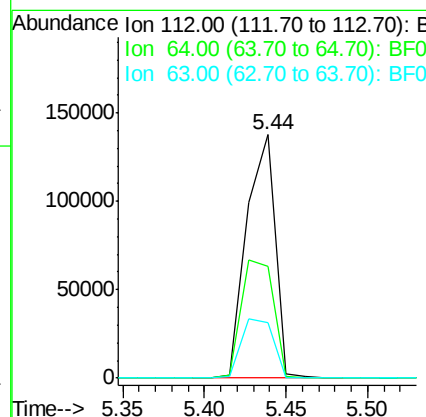
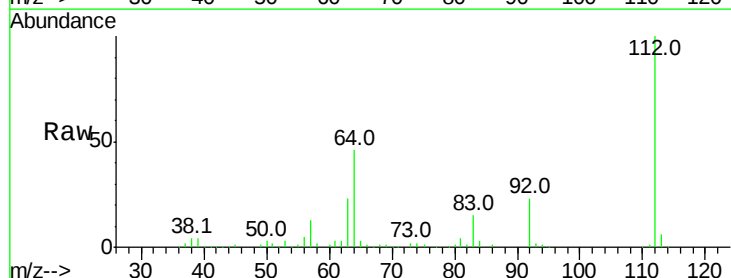
RT: 5.44 min Scan# 337

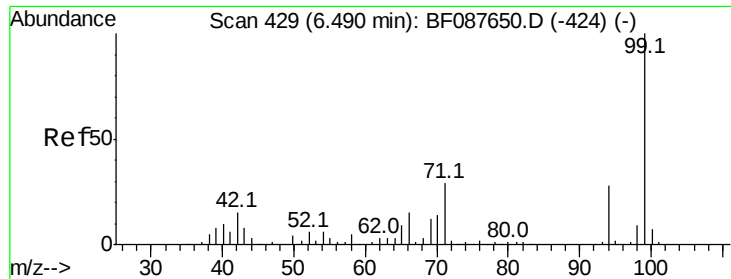
Delta R.T. -0.01 min

Lab File: BF087751.D

Acq: 6 Jun 2016 14:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 45.9  | 42.2  | 63.2  |
| 63      | 22.7  | 21.8  | 32.8  |





#7

Phenol-d6

Concen: 21.41 ng

RT: 6.47 min Scan# 427

Delta R.T. -0.02 min

Lab File: BF087751.D

Acq: 6 Jun 2016 14:43

Instrument :

BNA\_F

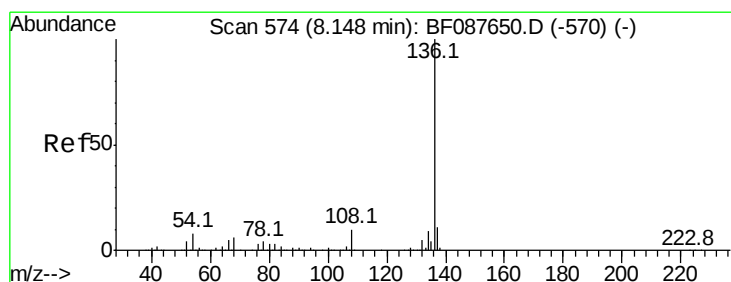
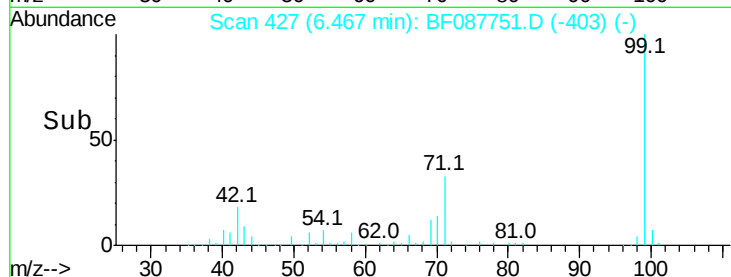
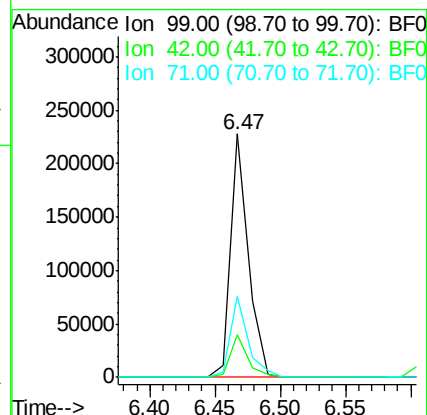
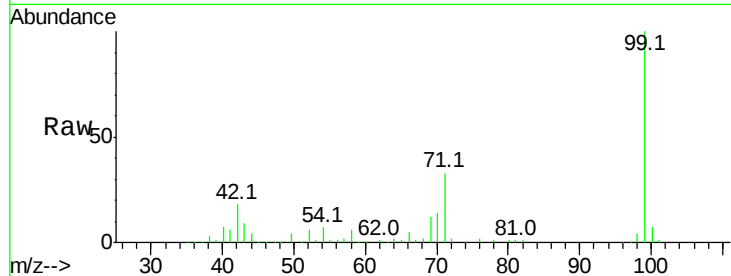
ClientSampleId :

STA-TA-1257(0-4)

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 99      | 100  |       | 215682 |       |       |
| 42      | 17.8 | 12.2  | 18.2   |       |       |
| 71      | 33.2 | 23.4  | 35.0   |       |       |

Manual Integrations  
APPROVED

umangi  
6/6/2016 7:31:38 PM



#21

Naphthalene-d8

Concen: 20.00 ng

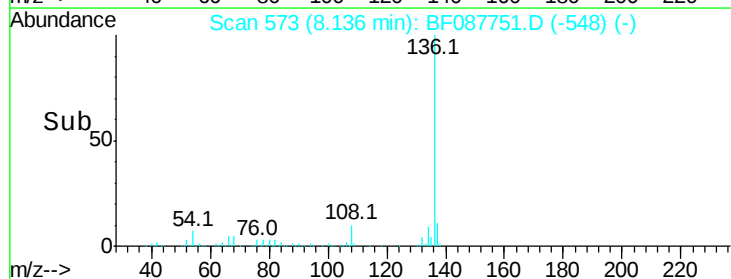
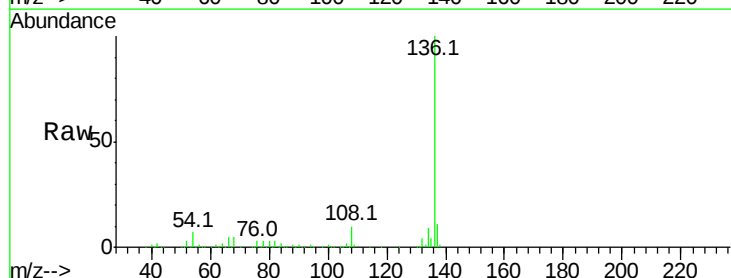
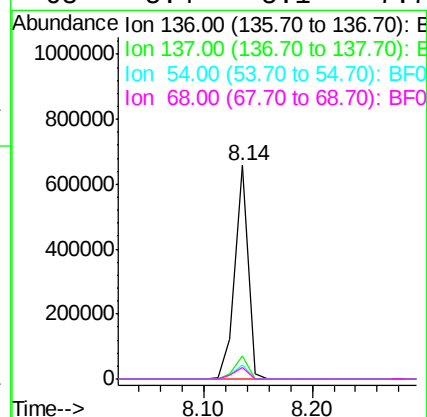
RT: 8.14 min Scan# 573

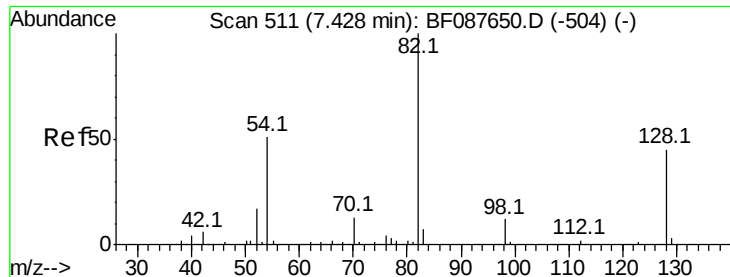
Delta R.T. -0.01 min

Lab File: BF087751.D

Acq: 6 Jun 2016 14:43

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 136     | 100  |       | 551459 |       |       |
| 137     | 11.0 | 9.1   | 13.7   |       |       |
| 54      | 6.7  | 6.6   | 10.0   |       |       |
| 68      | 5.4  | 5.1   | 7.7    |       |       |





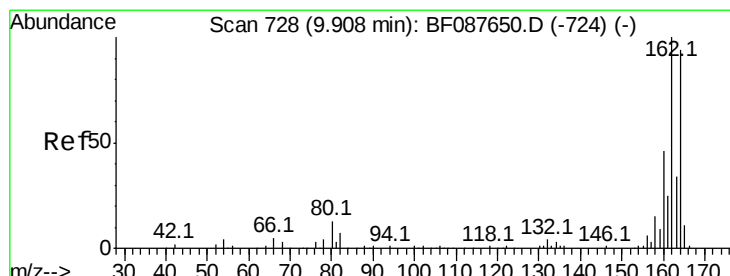
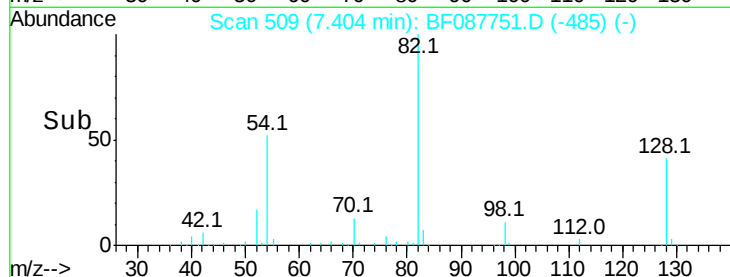
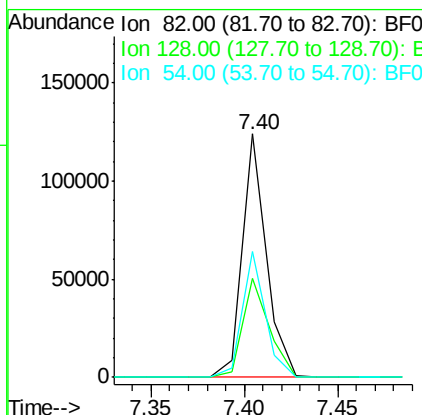
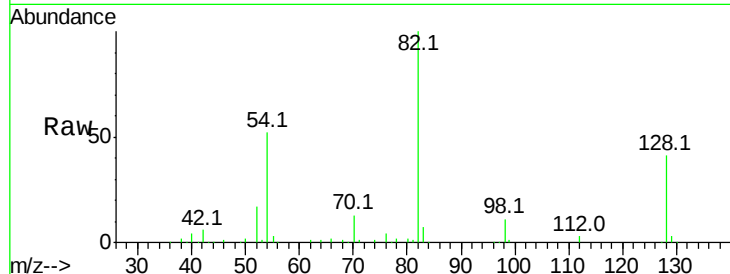
#23  
 Nitrobenzene-d5  
 Concen: 11.62 ng  
 RT: 7.40 min Scan# 509  
 Delta R.T. -0.02 min  
 Lab File: BF087751.D  
 Acq: 6 Jun 2016 14:43

Instrument :  
 BNA\_F  
 ClientSampleId :  
 STA-TA-1257(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 40.6  | 35.9  | 53.9  |
| 54      | 51.7  | 40.9  | 61.3  |

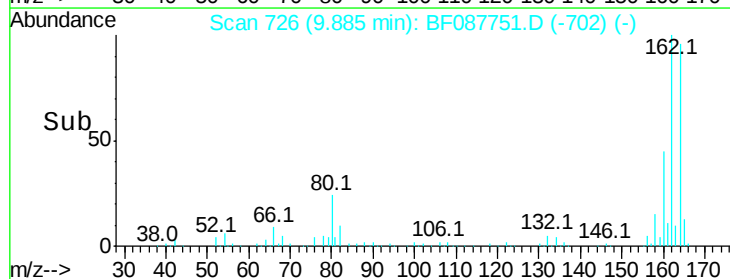
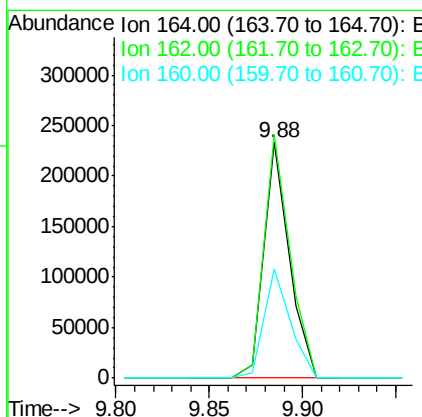
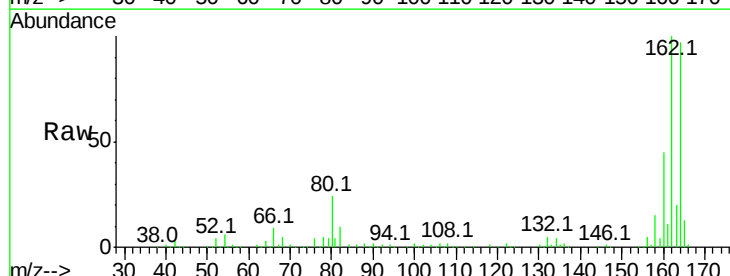
Manual Integrations  
 APPROVED

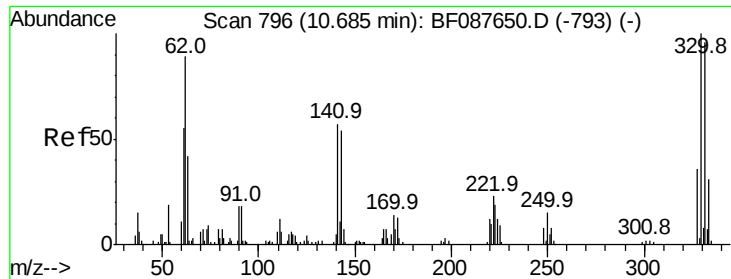
umangi  
 6/6/2016 7:31:38 PM



#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.88 min Scan# 726  
 Delta R.T. -0.02 min  
 Lab File: BF087751.D  
 Acq: 6 Jun 2016 14:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 103.4 | 85.4  | 128.2 |
| 160     | 46.4  | 39.5  | 59.3  |





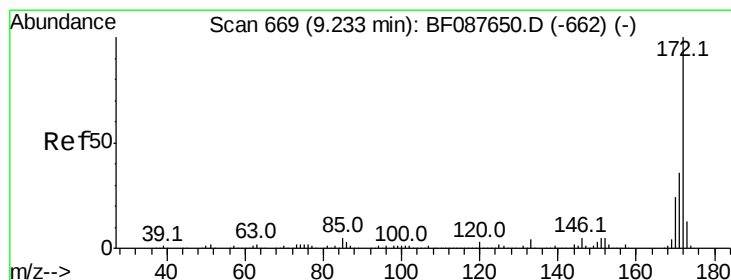
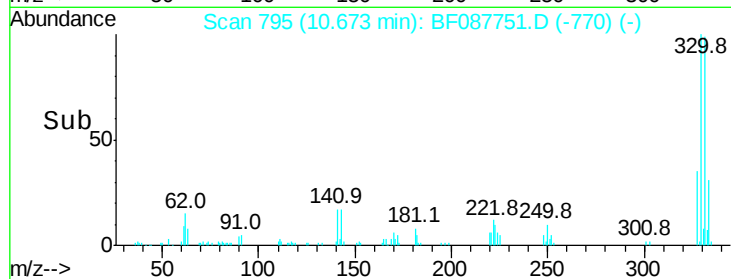
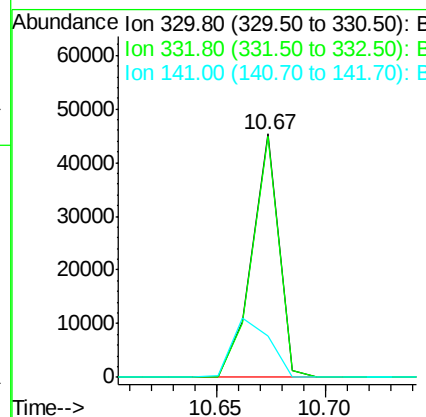
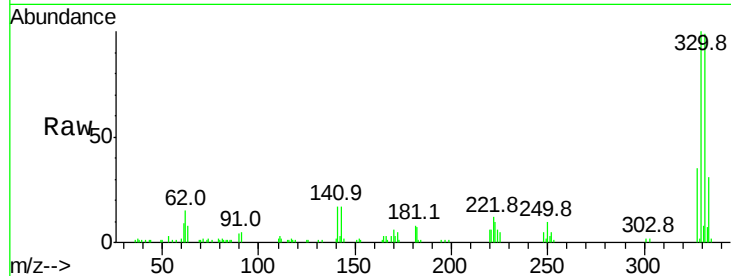
#41  
 2,4,6-Tribromophenol  
 Concen: 17.90 ng  
 RT: 10.67 min Scan# 795  
 Delta R.T. -0.01 min  
 Lab File: BF087751.D  
 Acq: 6 Jun 2016 14:43

Instrument :  
 BNA\_F  
 ClientSampleId :  
 STA-TA-1257(0-4)

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 330     | 100   |      |       |       |
| 332     | 98.4  | 0.0  | 0.0   | 0.0   |
| 141     | 33.6  | 0.0  | 0.0   | 0.0   |

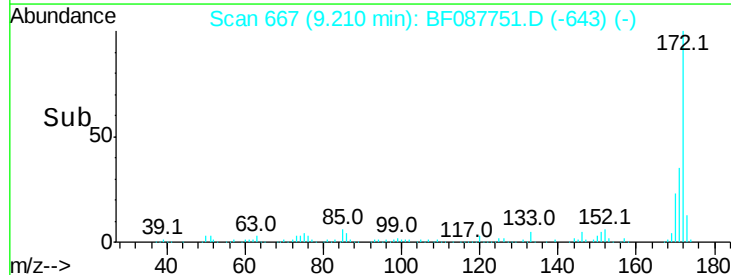
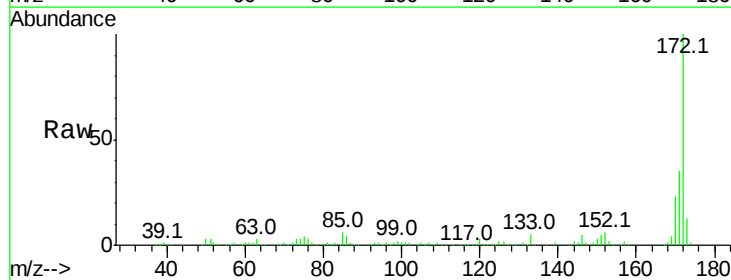
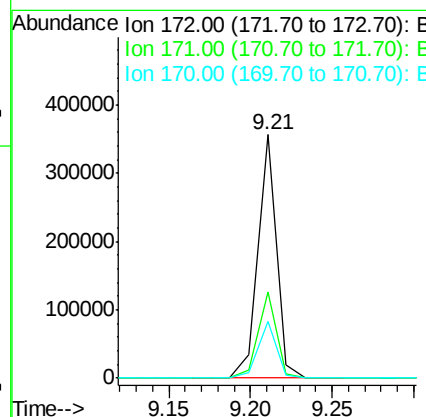
Manual Integrations  
 APPROVED

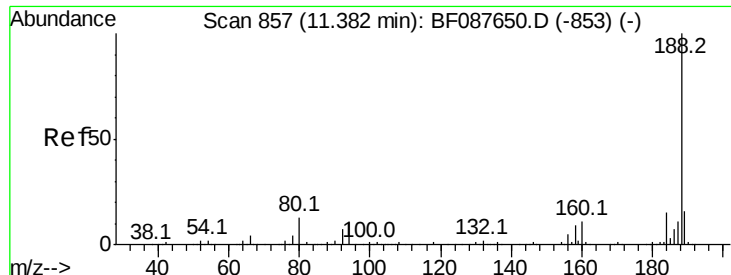
umangi  
 6/6/2016 7:31:38 PM



#44  
 2-Fluorobiphenyl  
 Concen: 15.94 ng  
 RT: 9.21 min Scan# 667  
 Delta R.T. -0.02 min  
 Lab File: BF087751.D  
 Acq: 6 Jun 2016 14:43

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 172     | 100   |      |       |       |
| 171     | 35.2  | 28.6 | 43.0  |       |
| 170     | 23.2  | 19.2 | 28.8  |       |





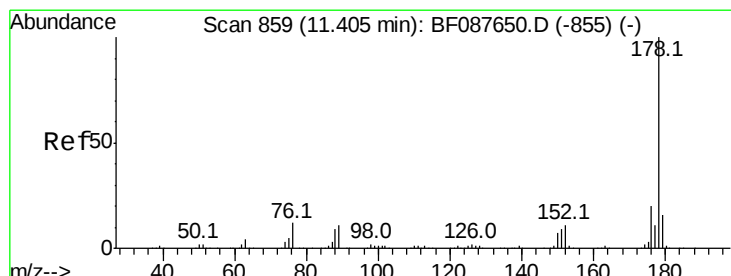
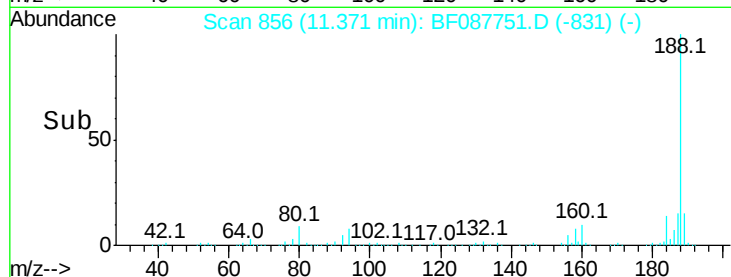
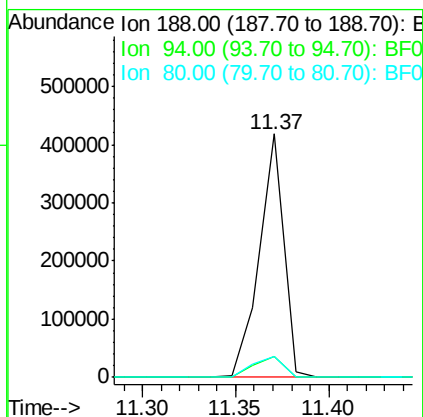
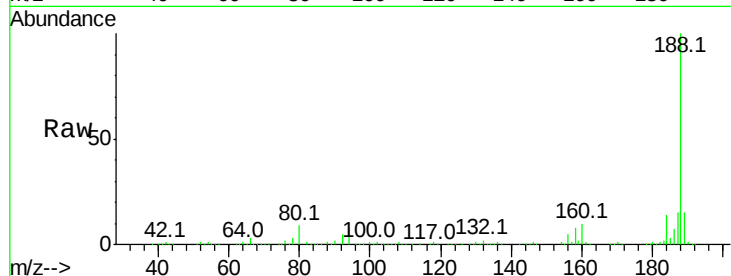
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.37 min Scan# 856  
Delta R.T. -0.01 min  
Lab File: BF087751.D  
Acq: 6 Jun 2016 14:43

Instrument :  
BNA\_F  
ClientSampleId :  
STA-TA-1257(0-4)

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 188     | 100   |            |       |
| 94      | 8.5   | 9.0        | 13.6# |
| 80      | 8.8   | 10.0       | 15.0# |

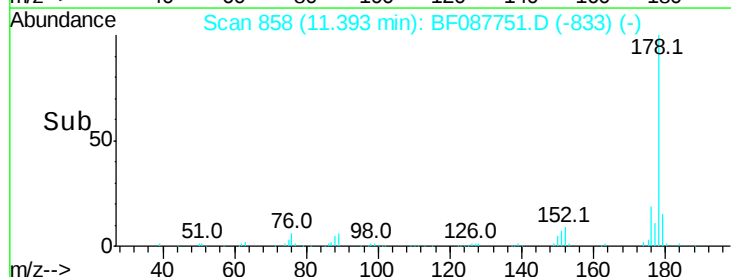
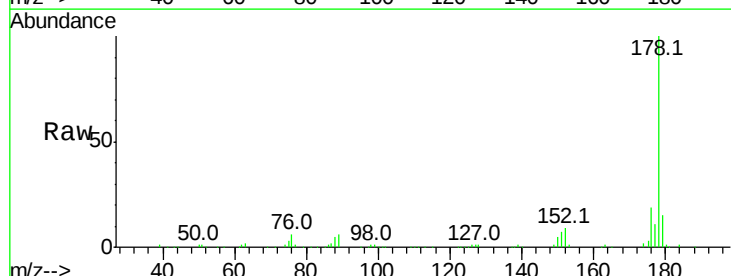
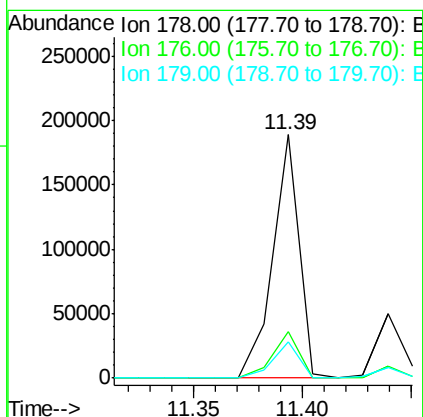
Manual Integrations  
APPROVED

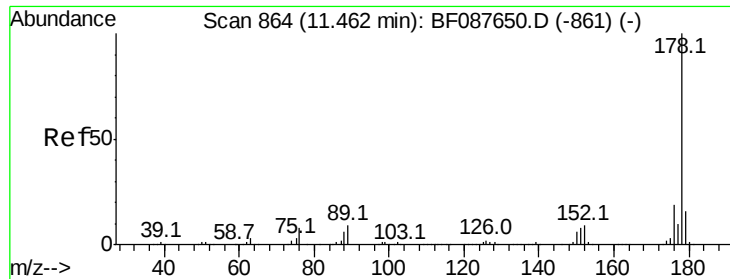
umangi  
6/6/2016 7:31:38 PM



#70  
Phenanthrene  
Concen: 7.89 ng  
RT: 11.39 min Scan# 858  
Delta R.T. -0.01 min  
Lab File: BF087751.D  
Acq: 6 Jun 2016 14:43

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 178     | 100   |            |       |
| 176     | 18.9  | 15.8       | 23.6  |
| 179     | 14.9  | 13.0       | 19.4  |





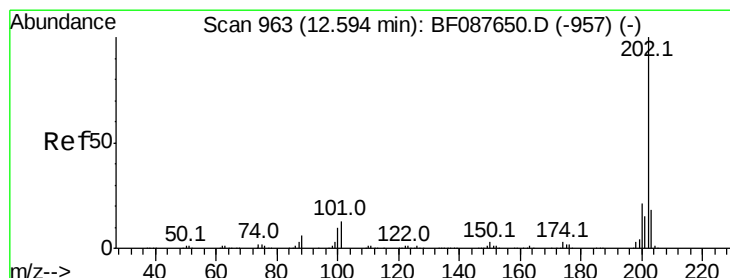
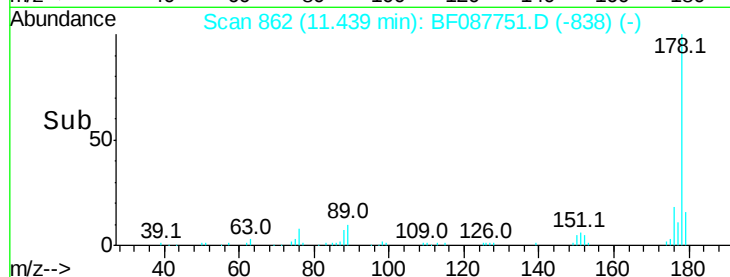
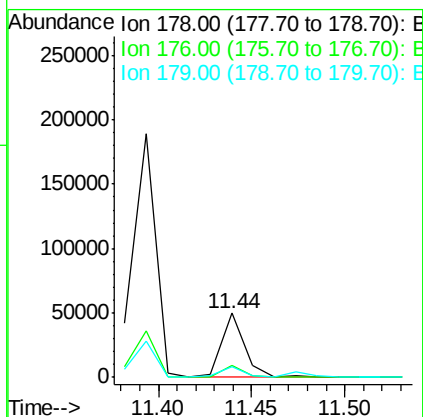
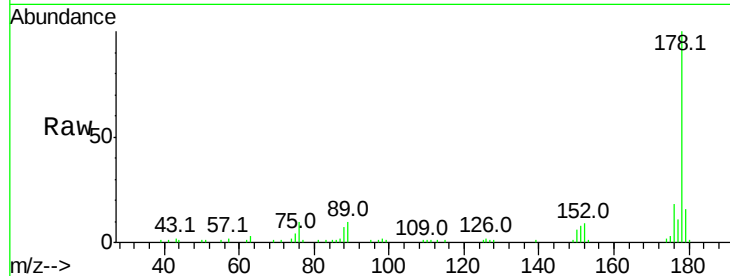
#71  
 Anthracene  
 Concen: 2.18 ng  
 RT: 11.44 min Scan# 862  
 Delta R.T. -0.02 min  
 Lab File: BF087751.D  
 Acq: 6 Jun 2016 14:43

Instrument :  
 BNA\_F  
 ClientSampleId :  
 STA-TA-1257(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.4  | 15.6  | 23.4  |
| 179     | 16.2  | 12.8  | 19.2  |

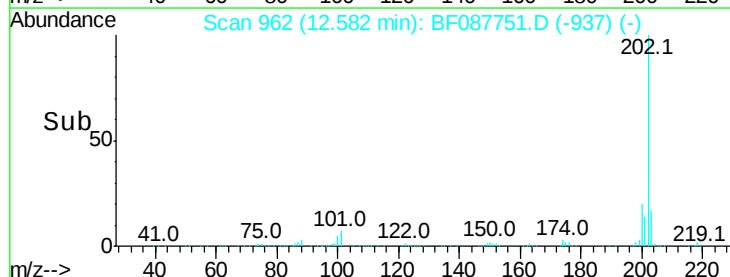
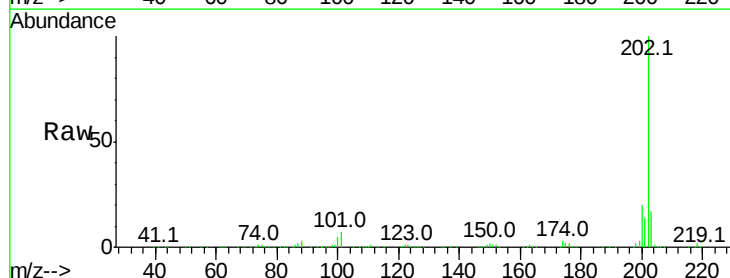
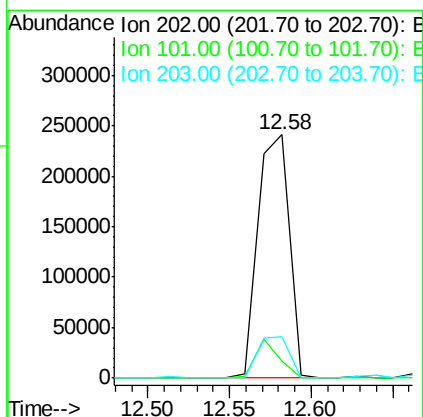
Manual Integrations  
 APPROVED

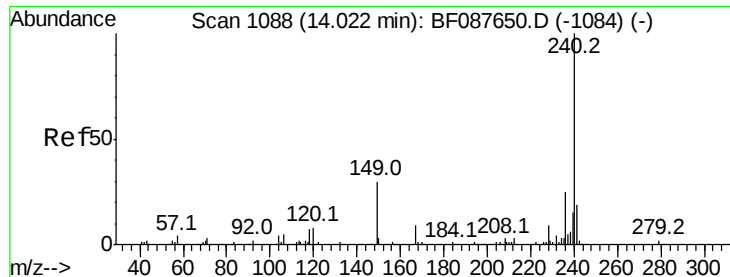
umangi  
 6/6/2016 7:31:38 PM



#74  
 Fluoranthene  
 Concen: 15.95 ng  
 RT: 12.58 min Scan# 962  
 Delta R.T. -0.01 min  
 Lab File: BF087751.D  
 Acq: 6 Jun 2016 14:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 7.0   | 0.0   | 33.1  |
| 203     | 17.2  | 0.0   | 38.1  |





#75

Chrysene-d12

Concen: 20.00 ng

RT: 14.00 min Scan# 1086

Delta R.T. -0.02 min

Lab File: BF087751.D

Acq: 6 Jun 2016 14:43

Instrument :

BNA\_F

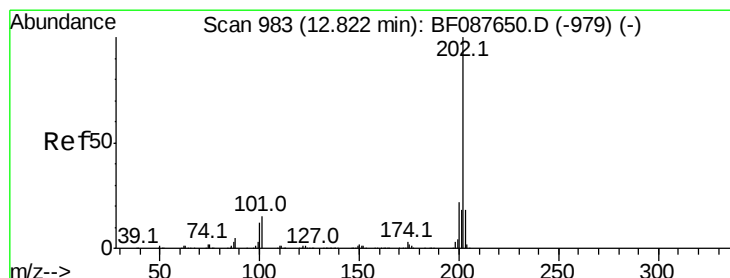
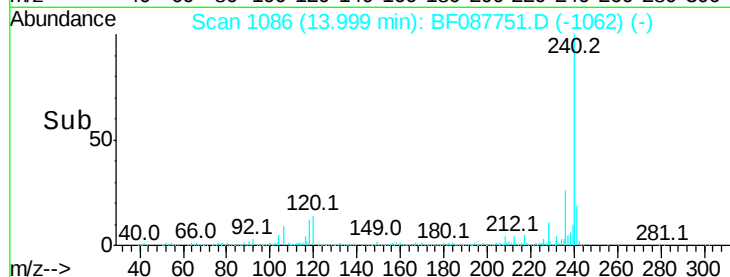
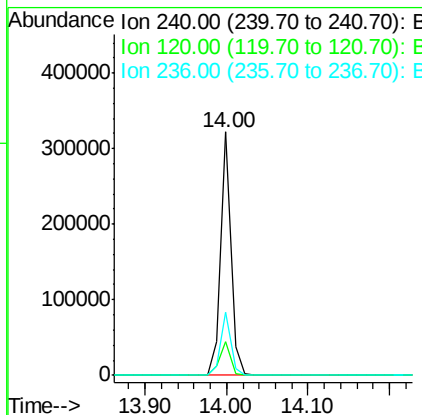
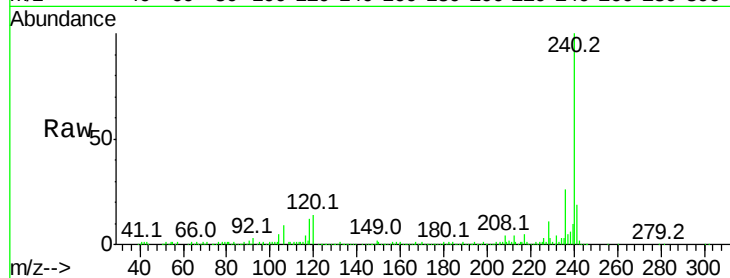
ClientSampleId :

STA-TA-1257(0-4)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 240   | Resp: | 282852 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 13.8  | 6.8   | 10.2#  |
| 236       | 25.9  | 20.2  | 30.2   |

Manual Integrations  
APPROVED

umangi  
6/6/2016 7:31:38 PM



#77

Pyrene

Concen: 13.91 ng

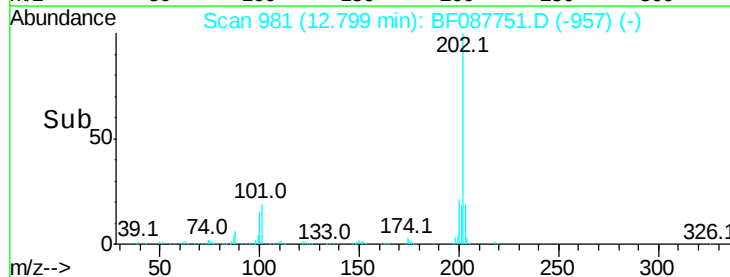
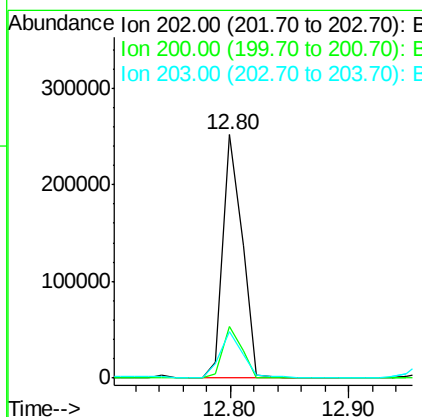
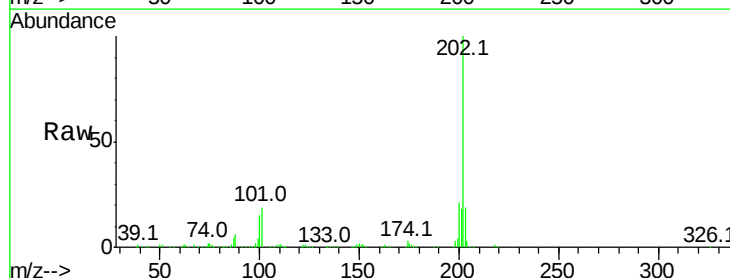
RT: 12.80 min Scan# 981

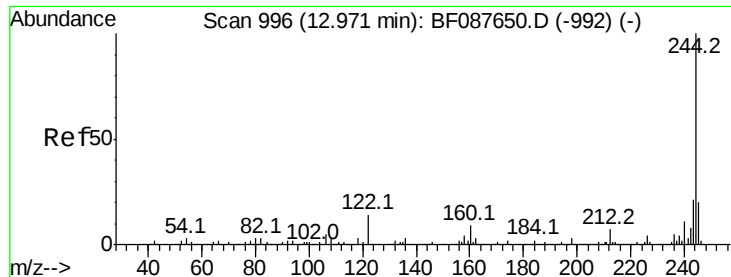
Delta R.T. -0.02 min

Lab File: BF087751.D

Acq: 6 Jun 2016 14:43

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 280130 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 200       | 21.1  | 17.4  | 26.2   |
| 203       | 19.3  | 14.5  | 21.7   |





#78

Terphenyl-d14

Concen: 15.24 ng

RT: 12.95 min Scan# 994

Delta R.T. -0.02 min

Lab File: BF087751.D

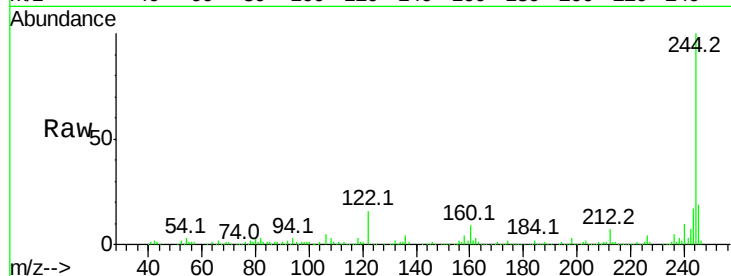
Acq: 6 Jun 2016 14:43

Instrument :

BNA\_F

ClientSampleId :

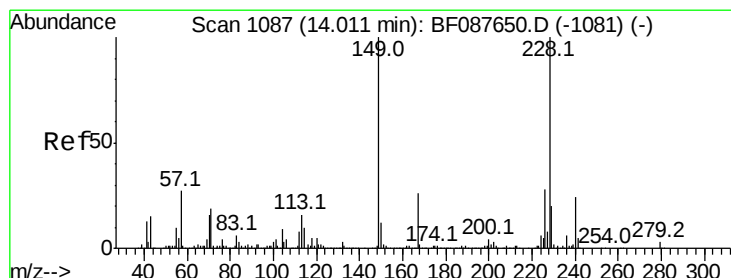
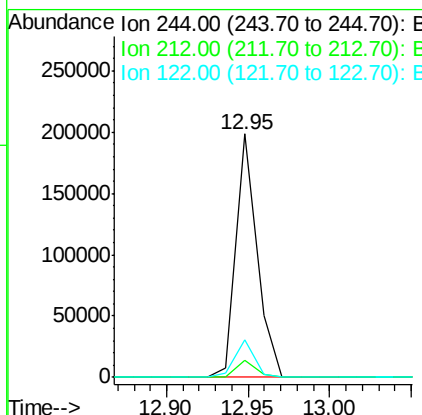
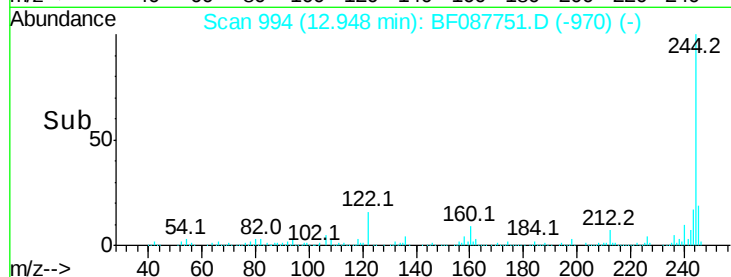
STA-TA-1257(0-4)



| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 244     | 100   |      |       |       |
| 212     | 7.0   | 6.0  | 9.0   |       |
| 122     | 15.6  | 11.2 | 16.8  |       |

Manual Integrations  
APPROVED

umangi  
6/6/2016 7:31:38 PM



#80

Benzo(a)anthracene

Concen: 10.16 ng

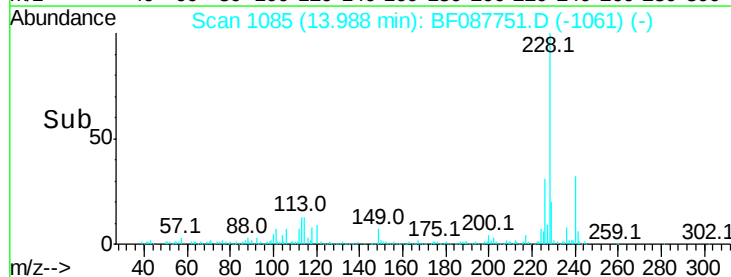
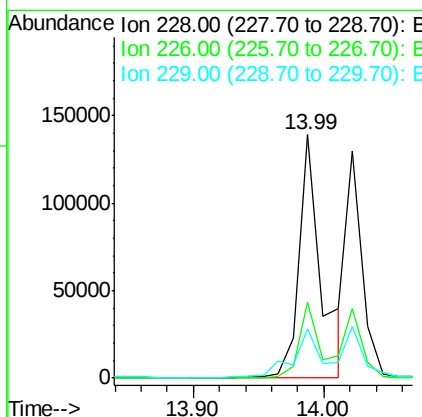
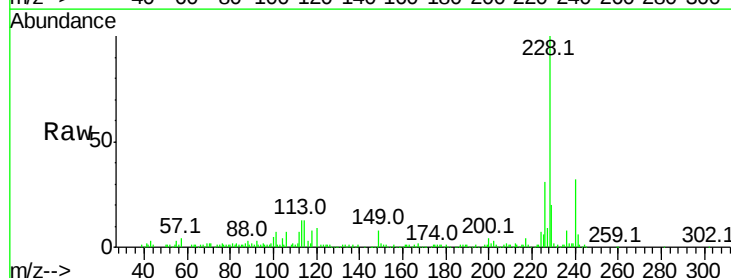
RT: 13.99 min Scan# 1085

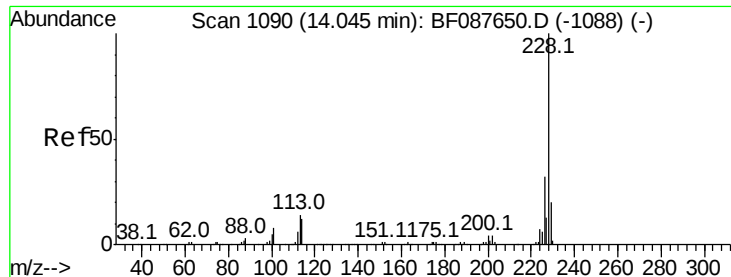
Delta R.T. -0.02 min

Lab File: BF087751.D

Acq: 6 Jun 2016 14:43

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 228     | 100   |      |       |       |
| 226     | 31.1  | 22.3 | 33.5  |       |
| 229     | 19.9  | 16.0 | 24.0  |       |





#82

Chrysene

Concen: 6.86 ng

RT: 14.02 min Scan# 1088

Delta R.T. -0.02 min

Lab File: BF087751.D

Acq: 6 Jun 2016 14:43

Instrument :

BNA\_F

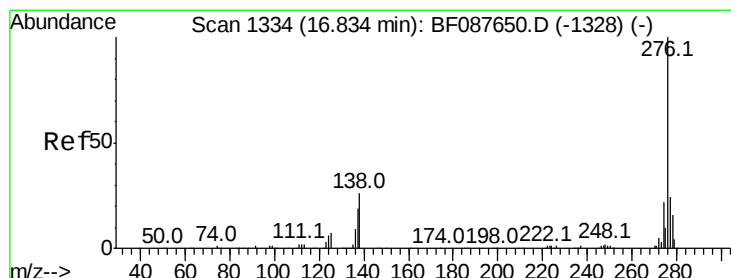
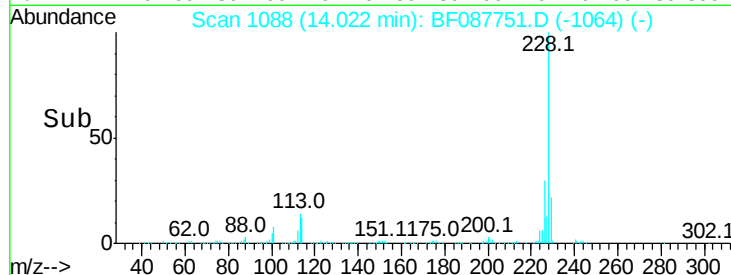
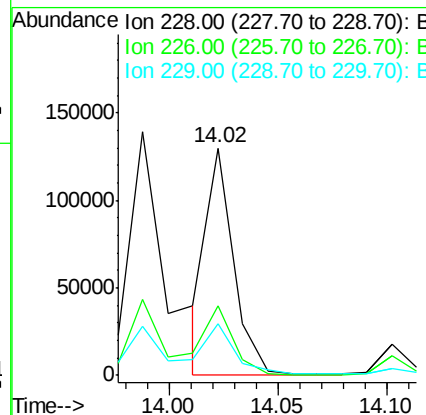
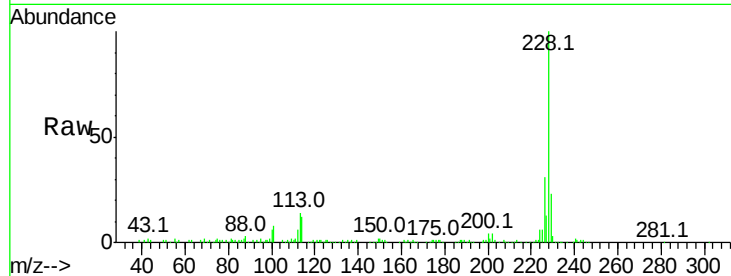
ClientSampleId :

STA-TA-1257(0-4)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 228   | Resp: | 111488 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 30.6  | 25.4  | 38.2   |
| 229       | 22.8  | 16.3  | 24.5   |

Manual Integrations  
APPROVED

umangi  
6/6/2016 7:31:38 PM



#85

Indeno(1,2,3-cd)pyrene

Concen: 5.03 ng

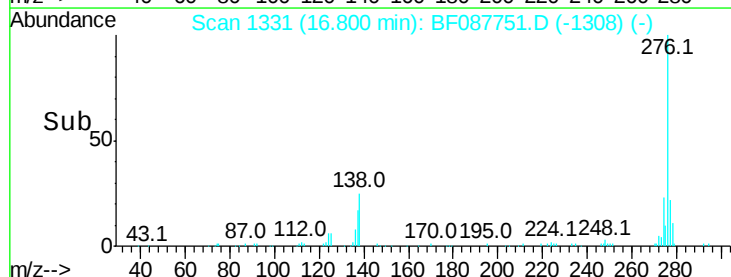
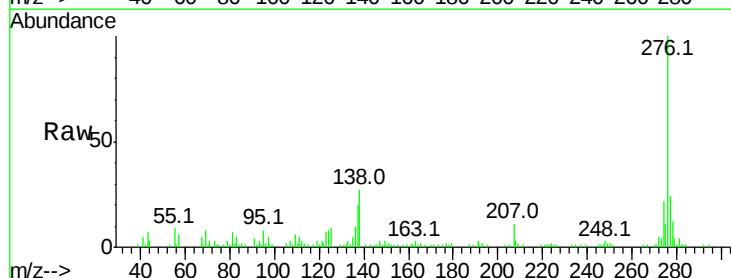
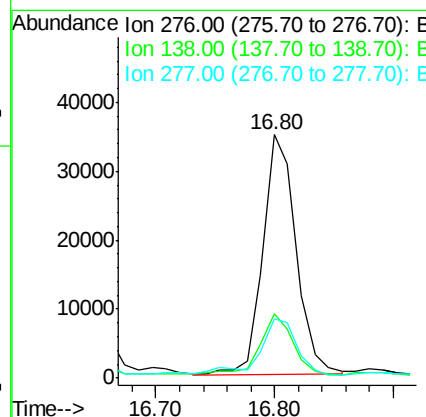
RT: 16.80 min Scan# 1331

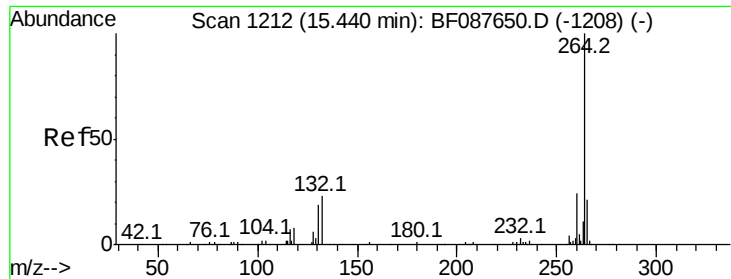
Delta R.T. -0.03 min

Lab File: BF087751.D

Acq: 6 Jun 2016 14:43

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 67588 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 25.4  | 0.0   | 0.0#  |
| 277       | 28.1  | 0.0   | 0.0#  |





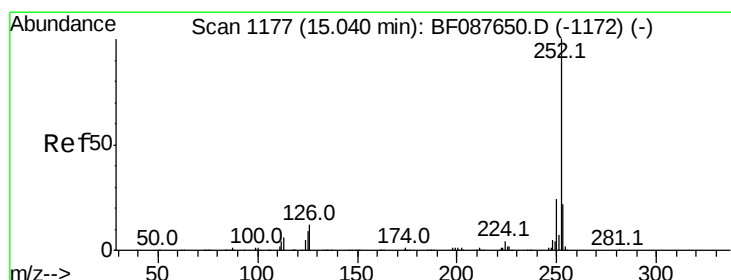
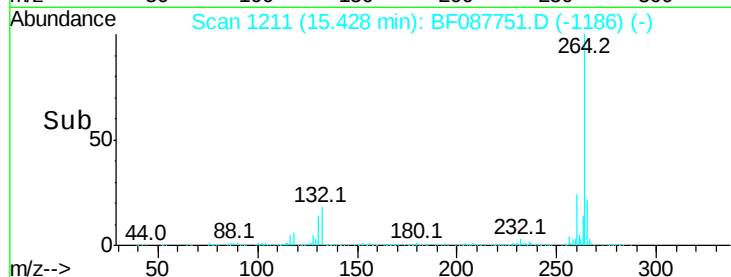
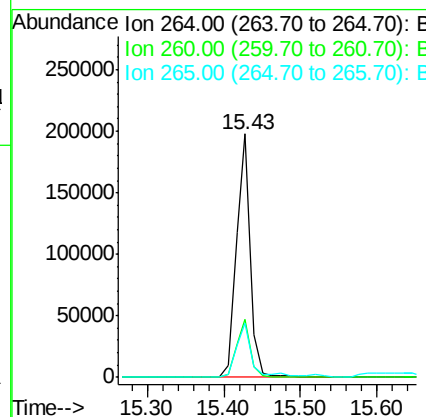
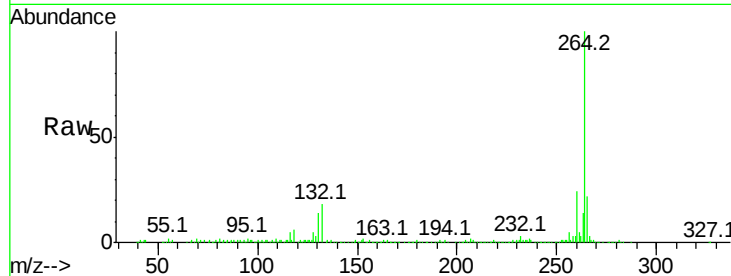
#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 15.43 min Scan# 1211  
Delta R.T. -0.01 min  
Lab File: BF087751.D  
Acq: 6 Jun 2016 14:43

Instrument :  
BNA\_F  
ClientSampleId :  
STA-TA-1257(0-4)

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 264     | 100   |      |       |       |
| 260     | 23.8  | 19.2 | 28.8  |       |
| 265     | 22.4  | 16.9 | 25.3  |       |

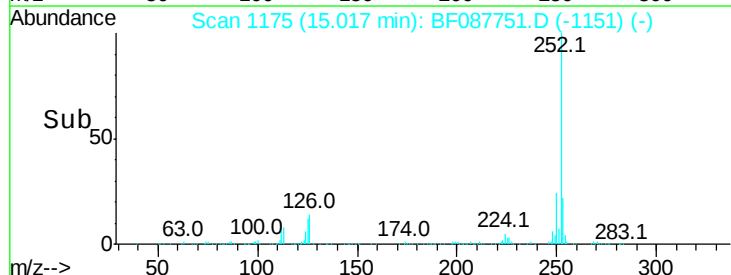
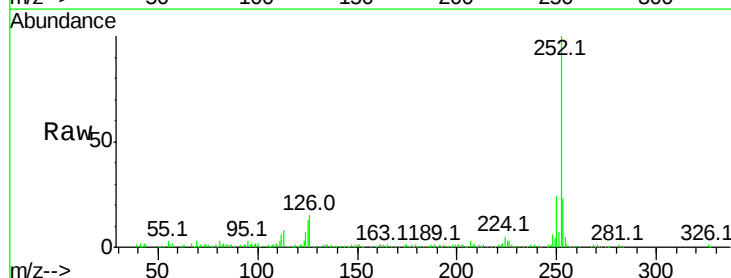
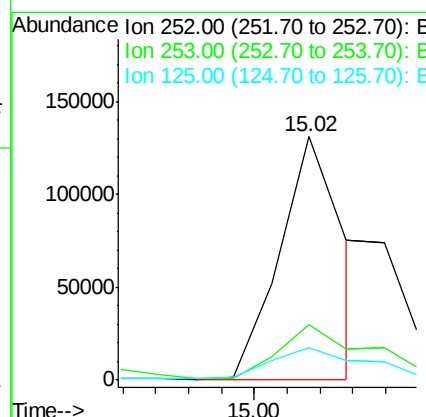
Manual Integrations  
APPROVED

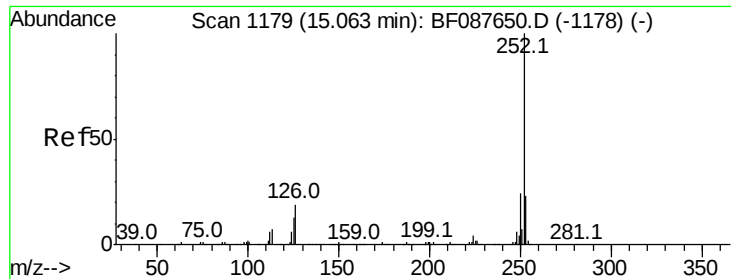
umangi  
6/6/2016 7:31:38 PM



#87  
Benzo(b)fluoranthene  
Concen: 10.73 ng m  
RT: 15.02 min Scan# 1175  
Delta R.T. -0.02 min  
Lab File: BF087751.D  
Acq: 6 Jun 2016 14:43

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 252     | 100   |      |       |       |
| 253     | 22.8  | 17.4 | 26.2  |       |
| 125     | 13.3  | 7.1  | 10.7# |       |





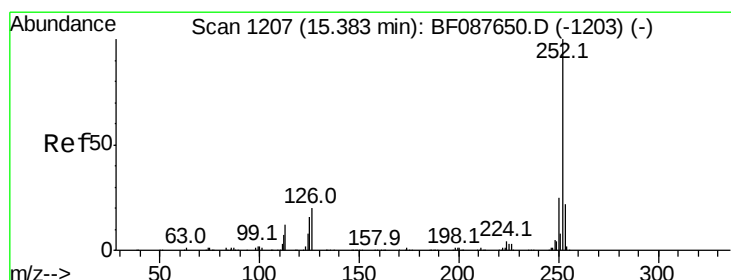
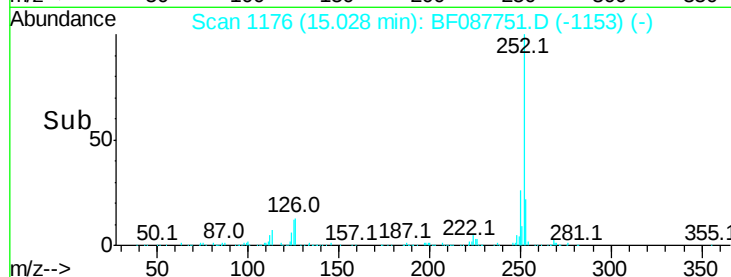
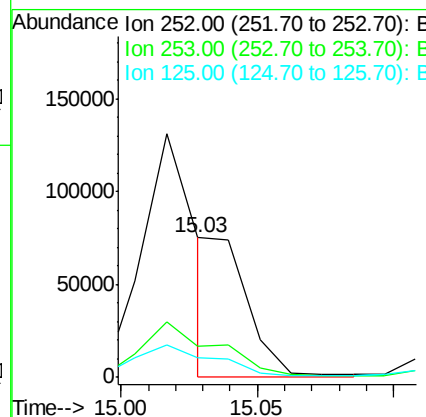
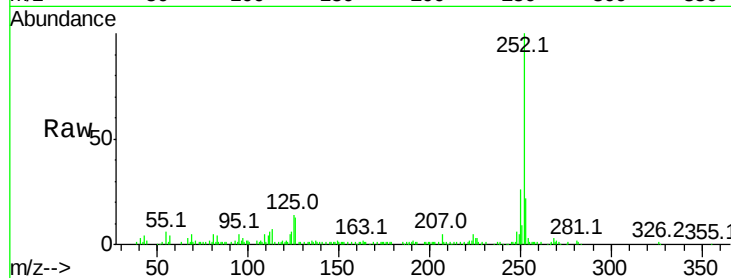
#88  
Benzo(k)fluoranthene  
Concen: 4.93 ng m  
RT: 15.03 min Scan# 1176  
Delta R.T. -0.03 min  
Lab File: BF087751.D  
Acq: 6 Jun 2016 14:43

Instrument :  
BNA\_F  
ClientSampleId :  
STA-TA-1257(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.2  | 18.0  | 27.0  |
| 125     | 13.6  | 11.2  | 16.8  |

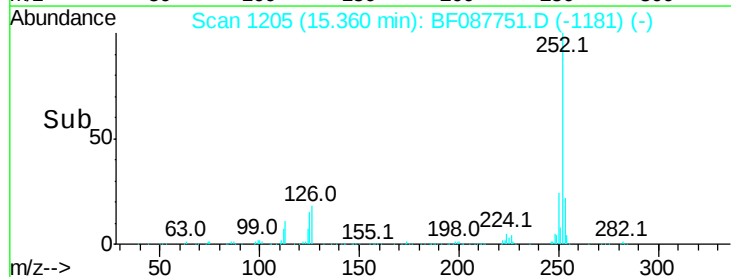
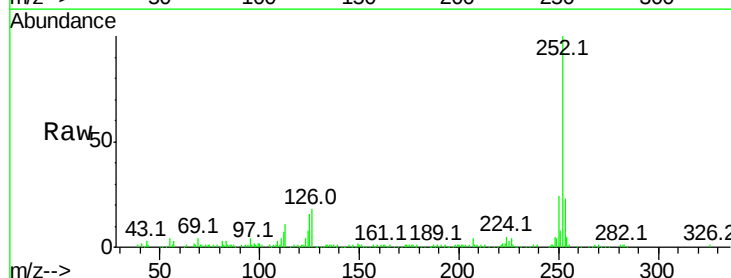
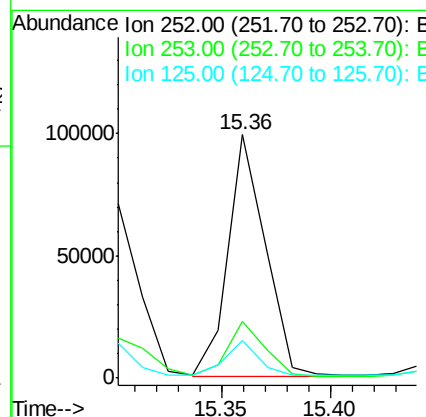
Manual Integrations  
APPROVED

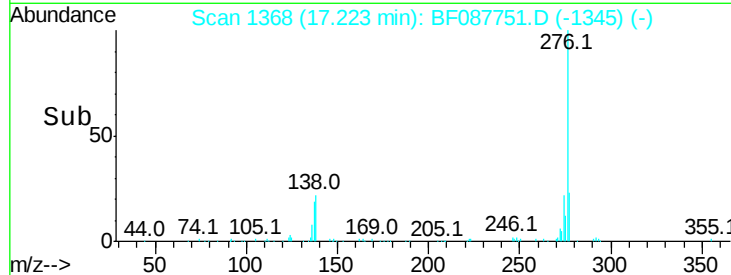
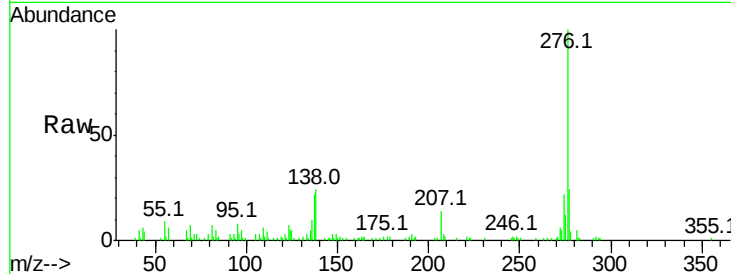
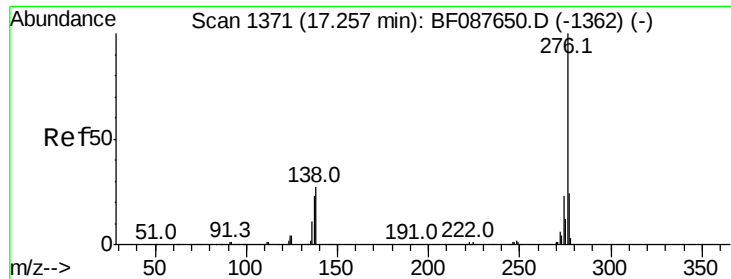
umangi  
6/6/2016 7:31:38 PM



#89  
Benzo(a)pyrene  
Concen: 8.51 ng  
RT: 15.36 min Scan# 1205  
Delta R.T. -0.02 min  
Lab File: BF087751.D  
Acq: 6 Jun 2016 14:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.1  | 17.9  | 26.9  |
| 125     | 15.5  | 12.5  | 18.7  |





#91  
 Benzo(a,h,i)perylene  
 Concen: 5.34 ng  
 RT: 17.22 min Scan# 1368  
 Delta R.T. -0.03 min  
 Lab File: BF087751.D  
 Acq: 6 Jun 2016 14:43

Instrument :  
 BNA\_F  
 ClientSampleId :  
 STA-TA-1257(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.2  | 18.9  | 28.3  |
| 138     | 24.4  | 21.4  | 32.2  |

Manual Integrations  
 APPROVED

umangi  
 6/6/2016 7:31:38 PM

