

Data Path : Z:\HPCHEM1\BNA F\DATA\BF051016\  
 Data File : BF086882.D  
 Acq On : 11 May 2016 5:41  
 Operator : UM/SJ  
 Sample : H2916-04  
 Misc :  
 ALS Vial : 41 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 VITALE-FILL-CSPH3-4K

Manual Integrations  
 APPROVED

sohil  
 5/11/2016 8:23:11 PM

Quant Time: May 11 08:29:41 2016  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF050916.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon May 09 16:04:56 2016  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.68  | 152  | 147543   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8          | 7.97  | 136  | 555567   | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10        | 9.72  | 164  | 219803   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10        | 11.20 | 188  | 358953   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12            | 13.83 | 240  | 286891   | 20.00 | ng    | -0.01    |
| 86) Perylene-d12            | 15.20 | 264  | 247132   | 20.00 | ng    | -0.01    |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.28  | 112  | 250357   | 28.74 | ng    | -0.01    |
| 7) Phenol-d6                | 6.34  | 99   | 382399   | 32.84 | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.25  | 82   | 238140   | 21.52 | ng    | -0.01    |
| 41) 2,4,6-Tribromophenol    | 10.51 | 330  | 148003   | 63.60 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.05  | 172  | 536082   | 40.99 | ng    | -0.01    |
| 78) Terphenyl-d14           | 12.77 | 244  | 648366   | 47.95 | ng    | -0.02    |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 31) Naphthalene             | 8.00  | 128  | 189936   | 6.83  | ng    | 99       |
| 49) Dimethylphthalate       | 9.45  | 163  | 65532    | 3.91  | ng    | 98       |
| 70) Phenanthrene            | 11.22 | 178  | 217285   | 11.34 | ng    | 98       |
| 71) Anthracene              | 11.28 | 178  | 59648    | 3.04  | ng    | 97       |
| 74) Fluoranthene            | 12.41 | 202  | 114328   | 5.80  | ng    | 90       |
| 77) Pyrene                  | 12.63 | 202  | 160183   | 7.29  | ng    | 99       |
| 80) Benzo(a)anthracene      | 13.81 | 228  | 44566m   | 2.77  | ng    |          |
| 82) Chrysene                | 13.85 | 228  | 45440m   | 2.77  | ng    |          |
| 87) Benzo(b)fluoranthene    | 14.82 | 252  | 34404m   | 2.14  | ng    |          |
| 89) Benzo(a)pyrene          | 15.14 | 252  | 41326    | 2.98  | ng    | # 95     |

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

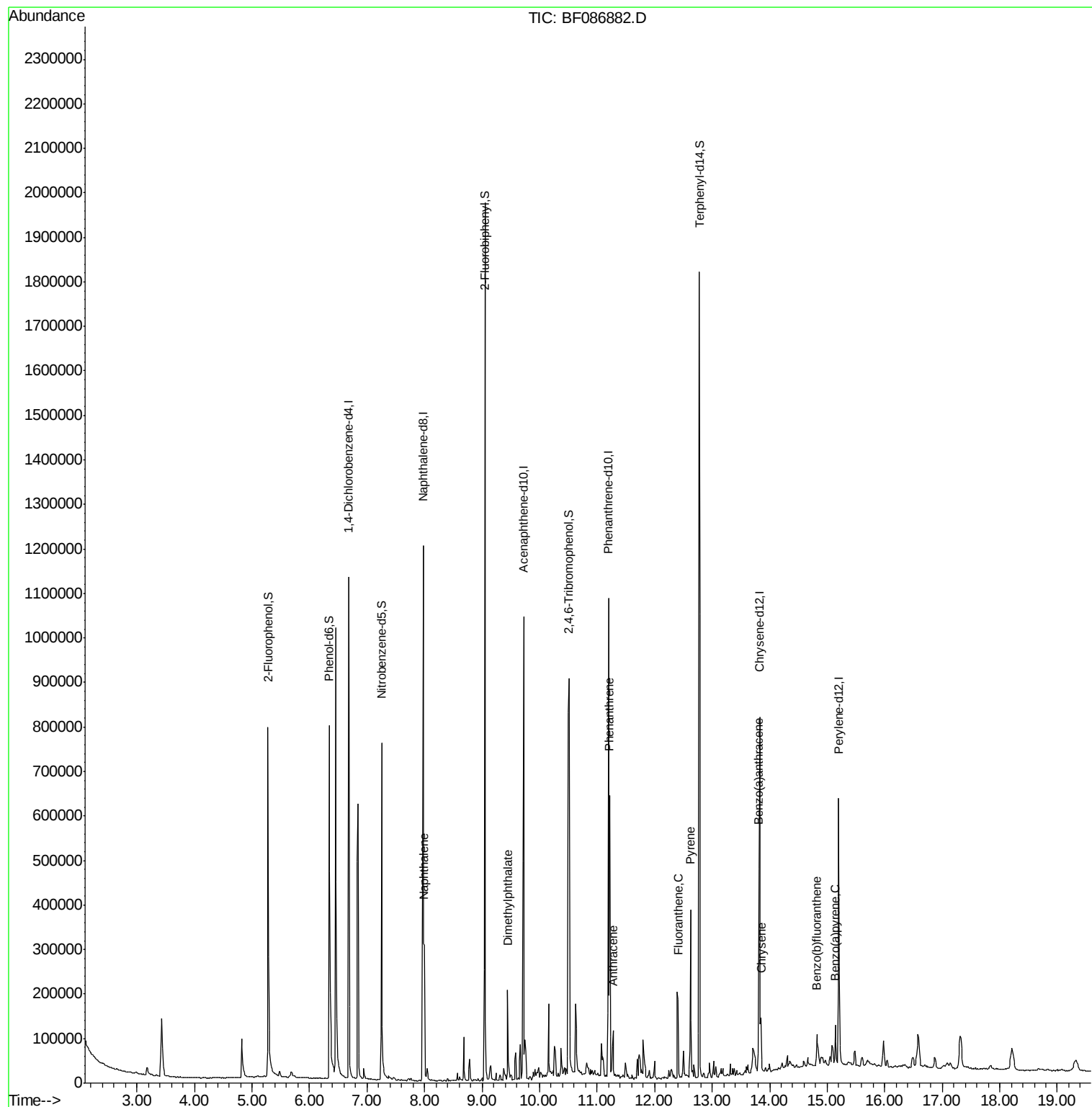
Data Path : Z:\HPCHEM1\BNA F\DATA\BF051016\  
Data File : BF086882.D  
Acq On : 11 May 2016 5:41  
Operator : UM/SJ  
Sample : H2916-04  
Misc :  
ALS Vial : 41 Sample Multiplier: 1

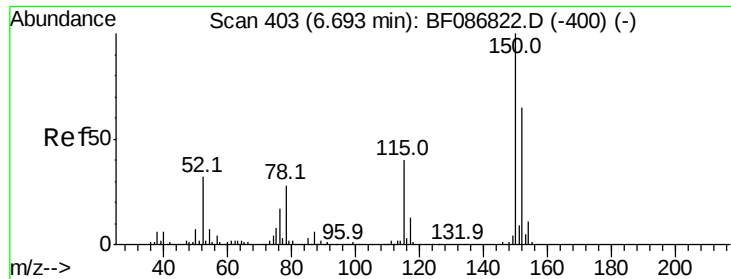
Instrument :  
BNA\_F  
ClientSampleId :  
VITALE-FILL-CSPH3-4K

Manual Integrations  
APPROVED

sohil  
5/11/2016 8:23:11 PM

Quant Time: May 11 08:29:41 2016  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF050916.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon May 09 16:04:56 2016  
Response via : Initial Calibration





#1

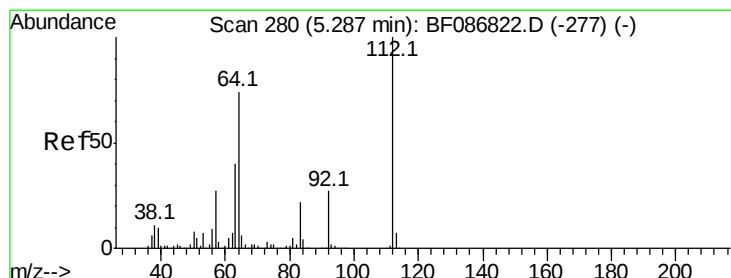
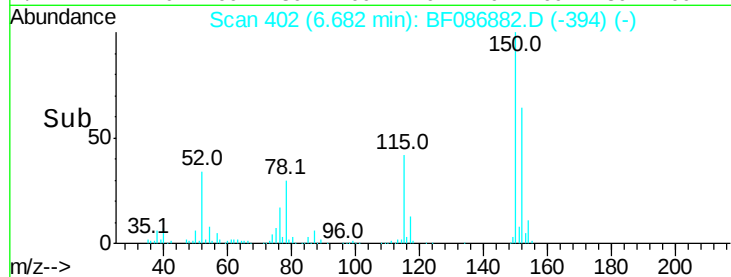
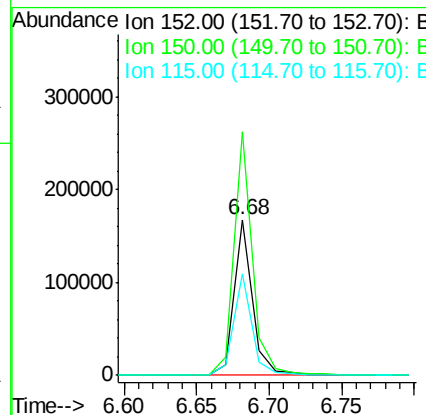
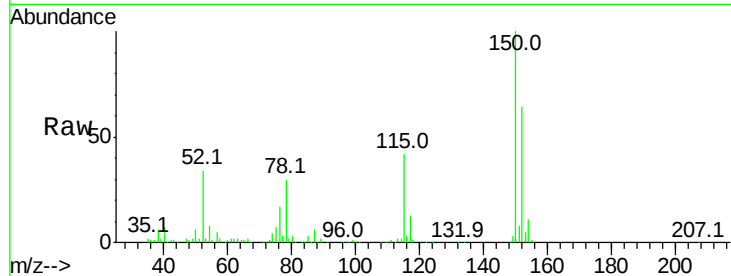
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.68 min Scan# 402  
Delta R.T. -0.01 min  
Lab File: BF086882.D  
Acq: 11 May 2016 5:41

Instrument :  
BNA\_F  
ClientSampleId :  
VITALE-FILL-CSPH3-4K

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 152     | 100   | 147543 |       |       |
| 150     | 156.5 | 125.8  | 188.6 |       |
| 115     | 65.4  | 51.5   | 77.3  |       |

Manual Integrations  
APPROVED

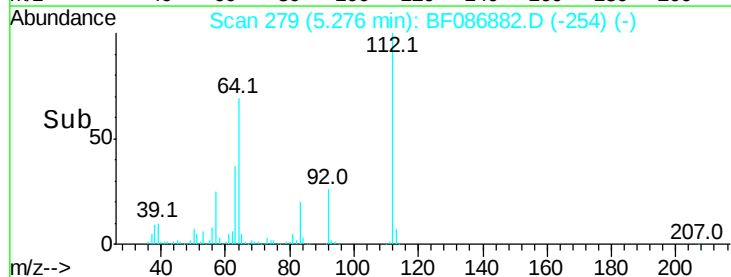
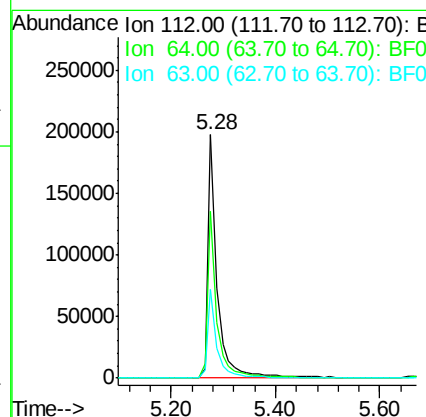
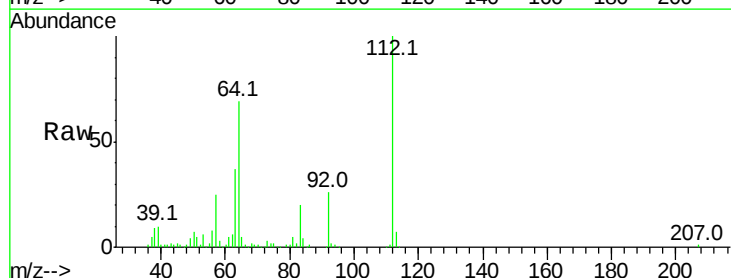
sohil  
5/11/2016 8:23:11 PM

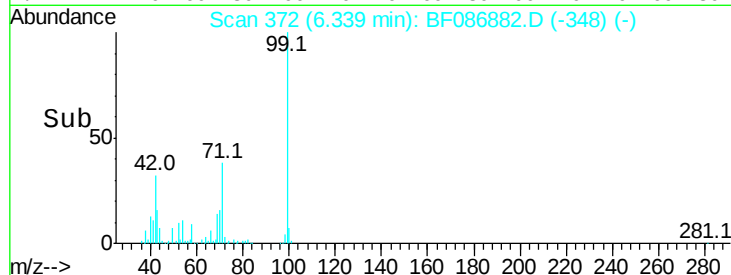
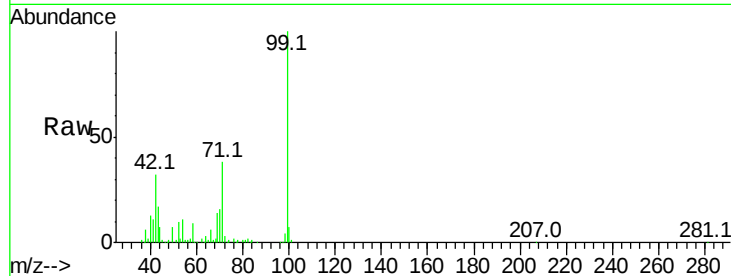
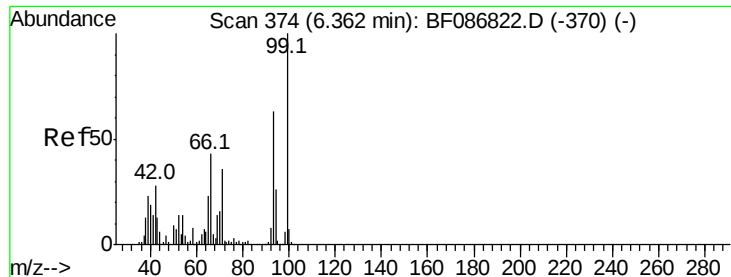


#5

2-Fluorophenol  
Concen: 28.74 ng  
RT: 5.28 min Scan# 279  
Delta R.T. -0.01 min  
Lab File: BF086882.D  
Acq: 11 May 2016 5:41

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 112     | 100   | 250357 |       |       |
| 64      | 68.7  | 52.1   | 78.1  |       |
| 63      | 36.7  | 25.7   | 38.5  |       |





#7

Phenol-d6

Concen: 32.84 ng

RT: 6.34 min Scan# 372

Delta R.T. -0.02 min

Lab File: BF086882.D

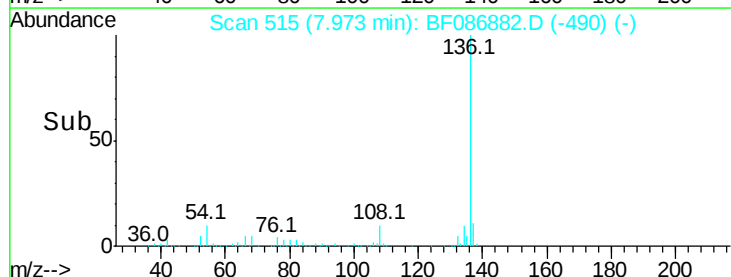
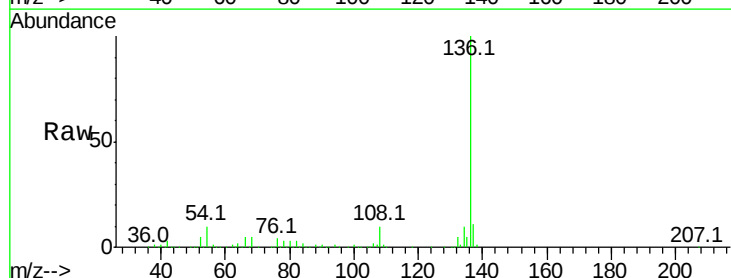
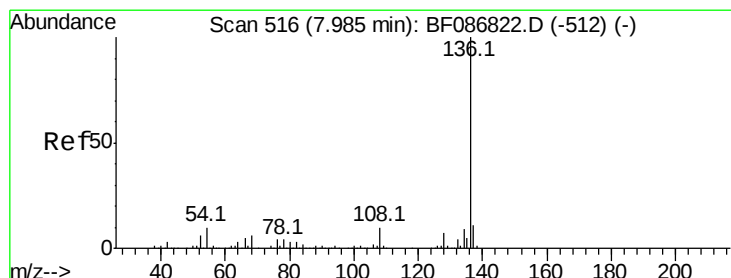
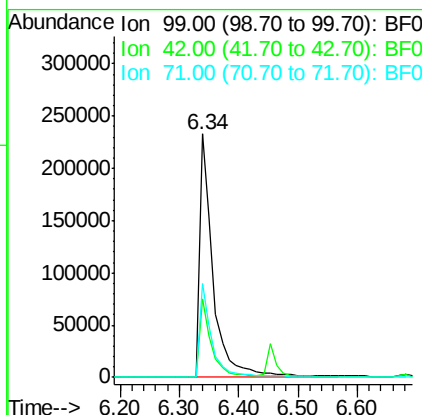
Acq: 11 May 2016 5:41

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 99      | 100  |       | 382399 |       |       |
| 42      | 32.5 | 13.6  | 20.4#  |       |       |
| 71      | 38.4 | 24.6  | 36.8#  |       |       |

Instrument :  
BNA\_F  
ClientSampleId :  
VITALE-FILL-CSPH3-4K

Manual Integrations  
APPROVED

sohil  
5/11/2016 8:23:11 PM



#21

Naphthalene-d8

Concen: 20.00 ng

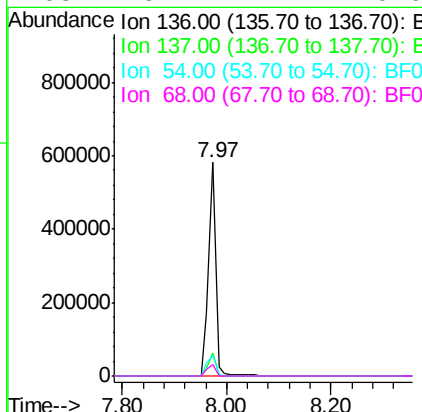
RT: 7.97 min Scan# 515

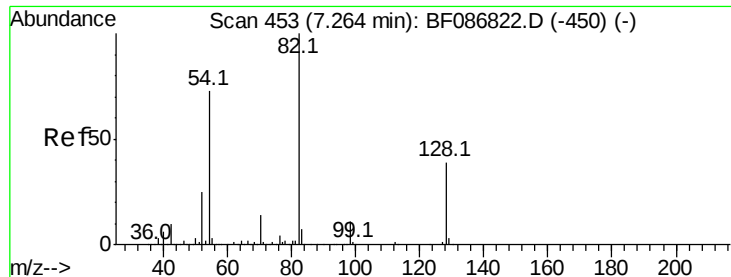
Delta R.T. -0.01 min

Lab File: BF086882.D

Acq: 11 May 2016 5:41

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 136     | 100  |       | 555567 |       |       |
| 137     | 10.9 | 8.8   | 13.2   |       |       |
| 54      | 9.6  | 5.0   | 7.4#   |       |       |
| 68      | 5.4  | 4.4   | 6.6    |       |       |





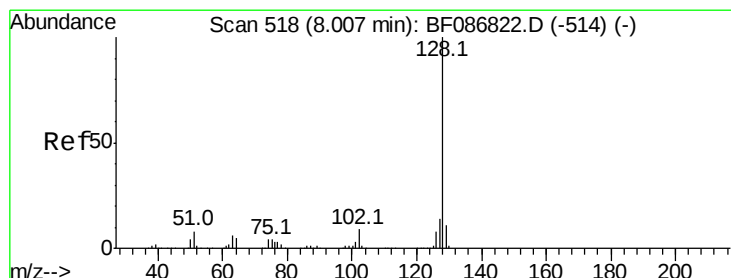
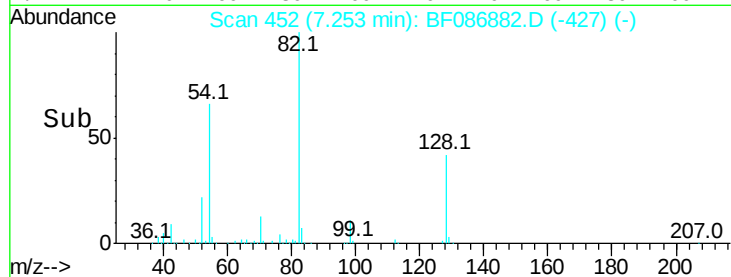
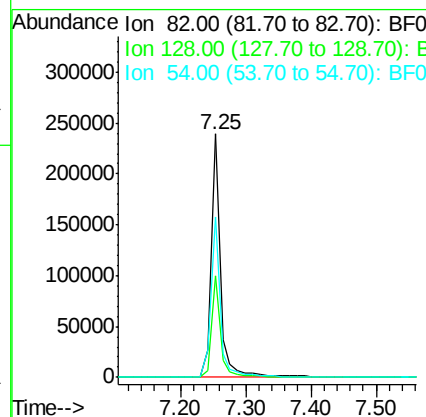
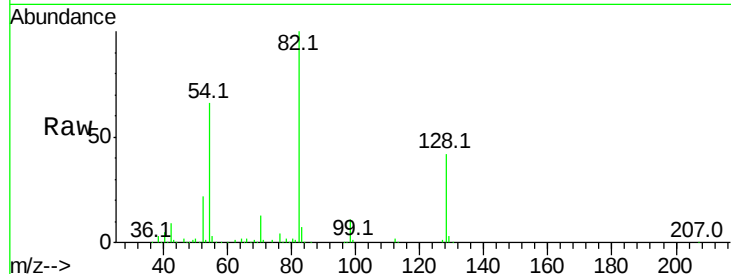
#23  
Nitrobenzene-d5  
Concen: 21.52 ng  
RT: 7.25 min Scan# 452  
Delta R.T. -0.01 min  
Lab File: BF086882.D  
Acq: 11 May 2016 5:41

Instrument :  
BNA\_F  
ClientSampleId :  
VITALE-FILL-CSPH3-4K

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 82      | 100   |            |       |
| 128     | 42.0  | 40.6       | 61.0  |
| 54      | 66.0  | 38.1       | 57.1# |

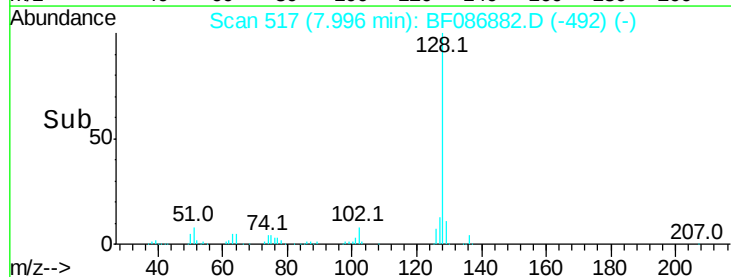
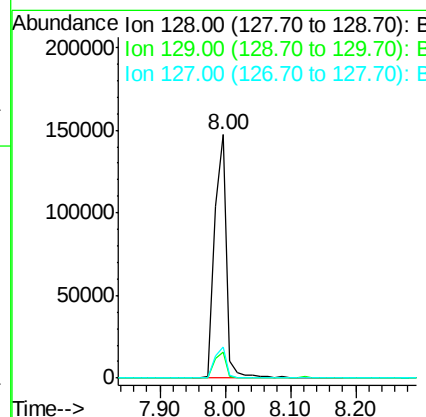
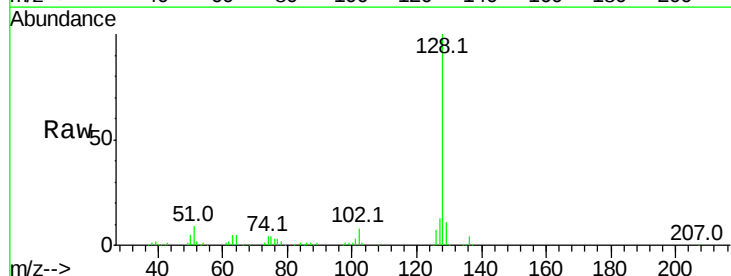
Manual Integrations  
APPROVED

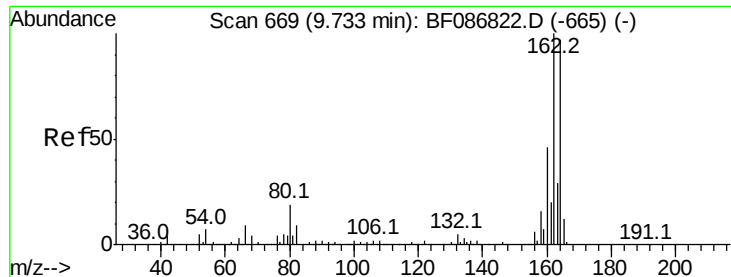
sohil  
5/11/2016 8:23:11 PM



#31  
Naphthalene  
Concen: 6.83 ng  
RT: 8.00 min Scan# 517  
Delta R.T. -0.01 min  
Lab File: BF086882.D  
Acq: 11 May 2016 5:41

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 128     | 100   |            |       |
| 129     | 10.6  | 8.6        | 13.0  |
| 127     | 12.8  | 10.8       | 16.2  |





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.72 min Scan# 668

Delta R.T. -0.01 min

Lab File: BF086882.D

Acq: 11 May 2016 5:41

Instrument :

BNA\_F

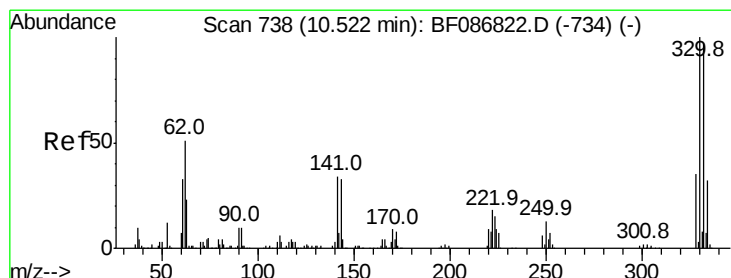
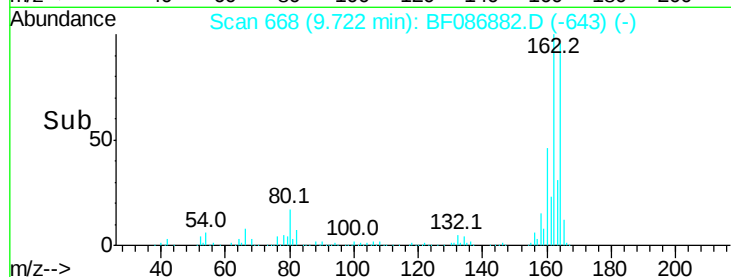
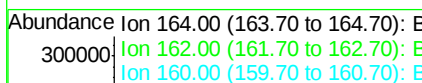
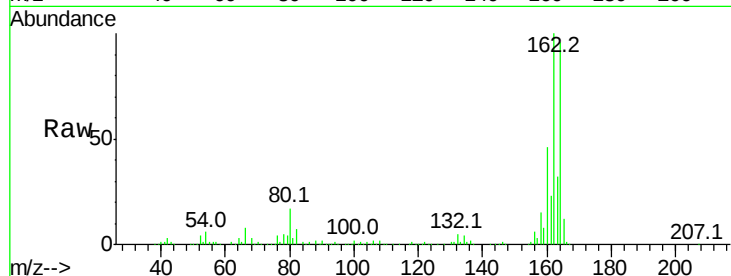
ClientSampleId :

VITALE-FILL-CSPH3-4K

Manual Integrations  
APPROVED

sohil  
5/11/2016 8:23:11 PM

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 164   | Resp: | 219803 |
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 162       | 104.2 | 82.8  | 124.2  |
| 160       | 48.0  | 36.9  | 55.3   |



#41

2,4,6-Tribromophenol

Concen: 63.60 ng

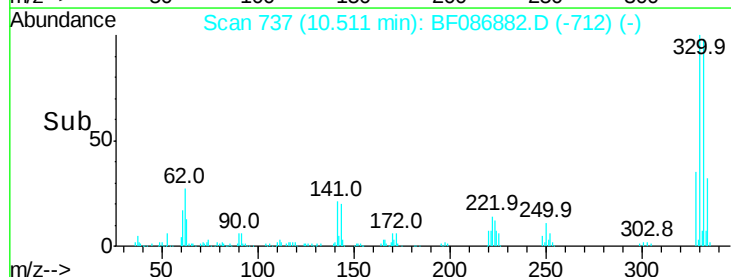
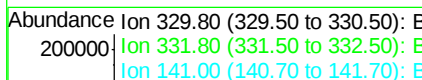
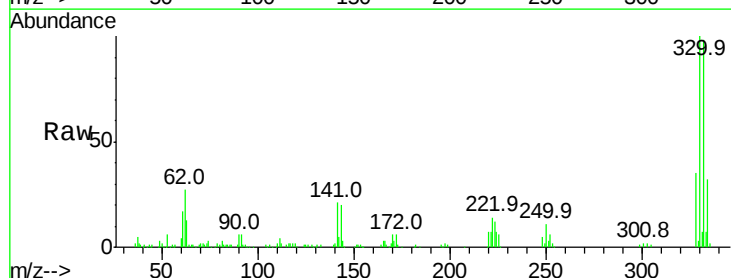
RT: 10.51 min Scan# 737

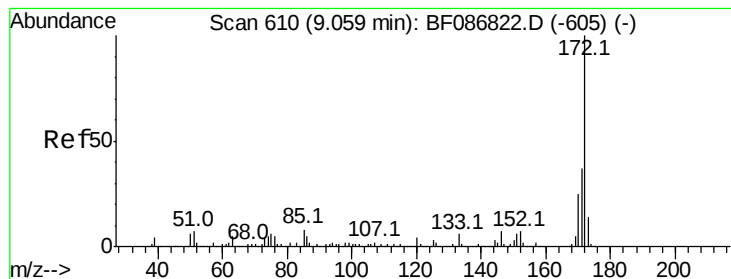
Delta R.T. -0.01 min

Lab File: BF086882.D

Acq: 11 May 2016 5:41

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 330   | Resp: | 148003 |
| Ion Ratio | Lower | Upper |        |
| 330       | 100   |       |        |
| 332       | 97.6  | 79.0  | 118.4  |
| 141       | 37.1  | 31.2  | 46.8   |





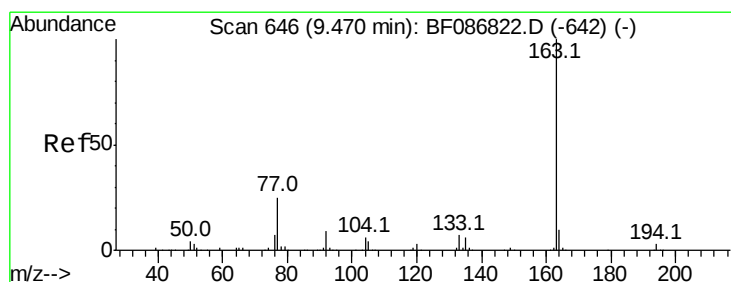
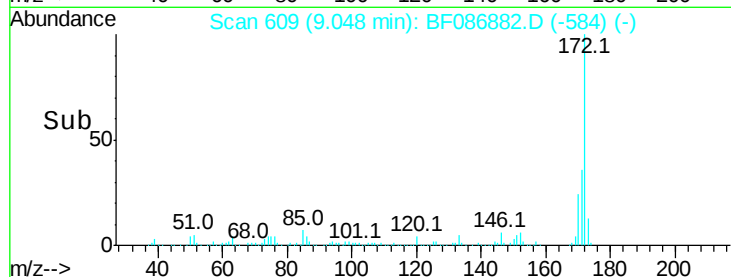
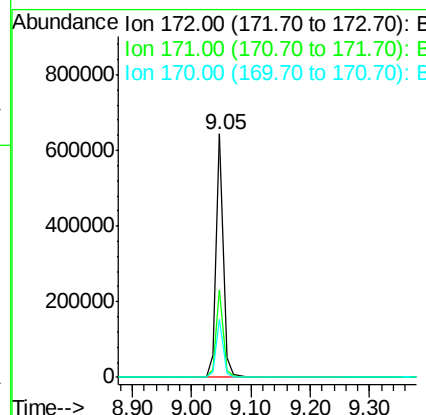
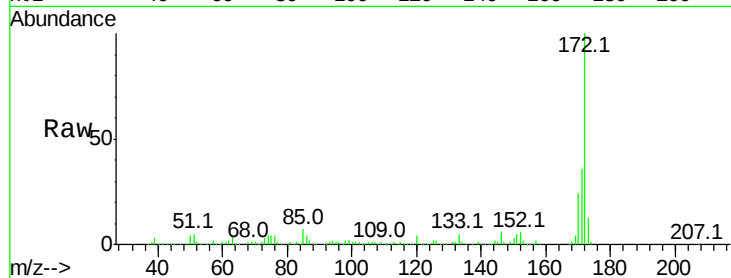
#44  
2-Fluorobiphenyl  
Concen: 40.99 ng  
RT: 9.05 min Scan# 609  
Delta R.T. -0.01 min  
Lab File: BF086882.D  
Acq: 11 May 2016 5:41

Instrument :  
BNA\_F  
ClientSampleId :  
VITALE-FILL-CSPH3-4K

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 172     | 100   |      |       |       |
| 171     | 35.7  | 29.0 | 43.6  |       |
| 170     | 24.0  | 19.8 | 29.8  |       |

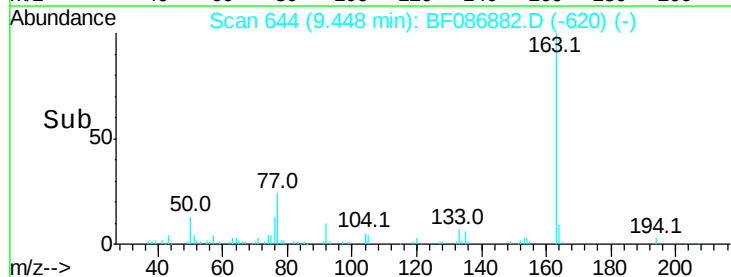
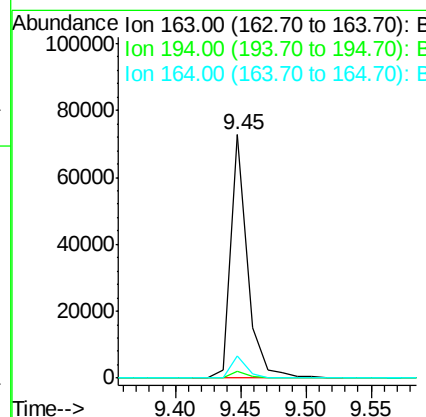
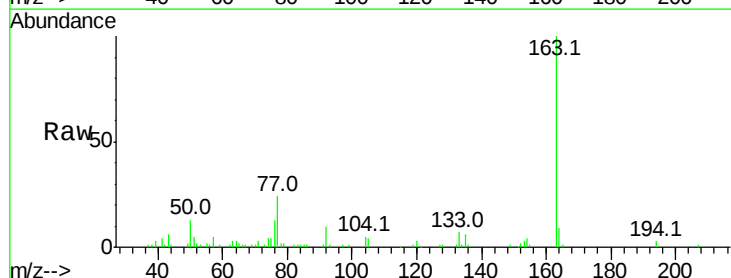
Manual Integrations  
APPROVED

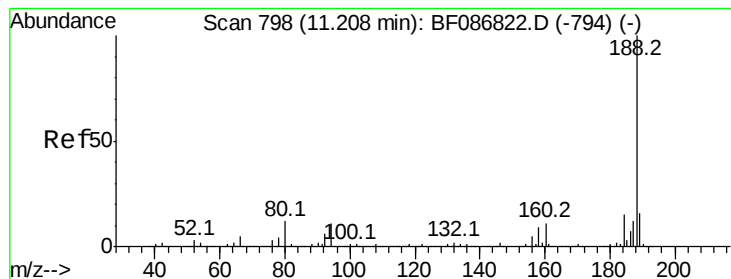
sohil  
5/11/2016 8:23:11 PM



#49  
Dimethylphthalate  
Concen: 3.91 ng  
RT: 9.45 min Scan# 644  
Delta R.T. -0.02 min  
Lab File: BF086882.D  
Acq: 11 May 2016 5:41

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 163     | 100   |      |       |       |
| 194     | 2.9   | 2.6  | 4.0   |       |
| 164     | 9.4   | 8.2  | 12.4  |       |





#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 11.20 min Scan# 797

Delta R.T. -0.01 min

Lab File: BF086882.D

Acq: 11 May 2016 5:41

Instrument :

BNA\_F

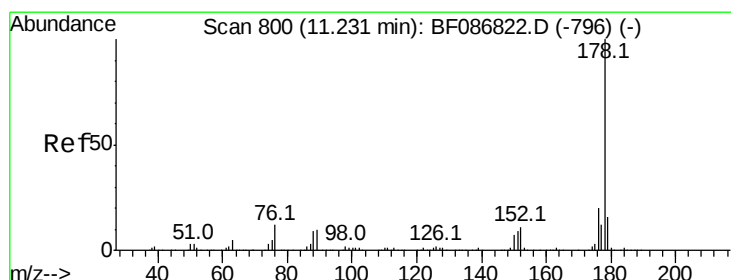
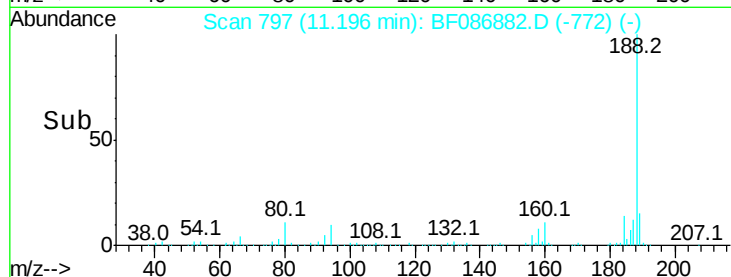
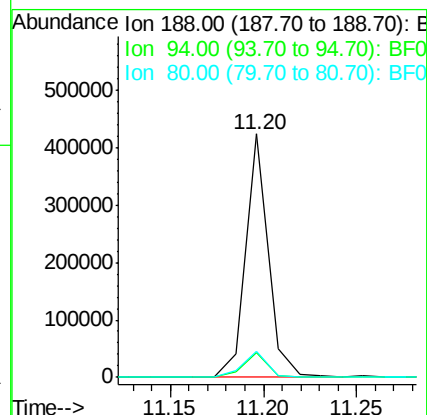
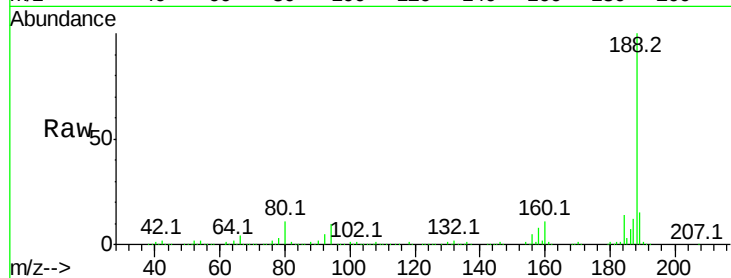
ClientSampleId :

VITALE-FILL-CSPH3-4K

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 188   | Resp: | 358953 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 9.9   | 6.8   | 10.2   |
| 80        | 10.6  | 7.1   | 10.7   |

Manual Integrations  
APPROVED

sohil  
5/11/2016 8:23:11 PM



#70

Phenanthrene

Concen: 11.34 ng

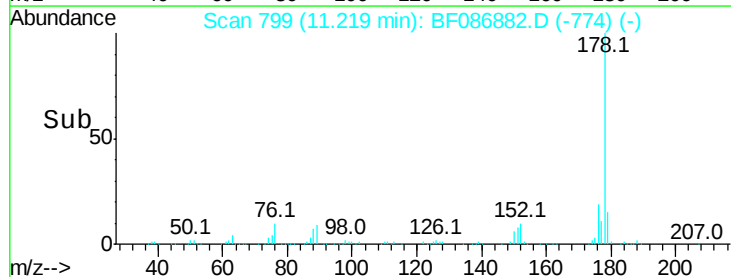
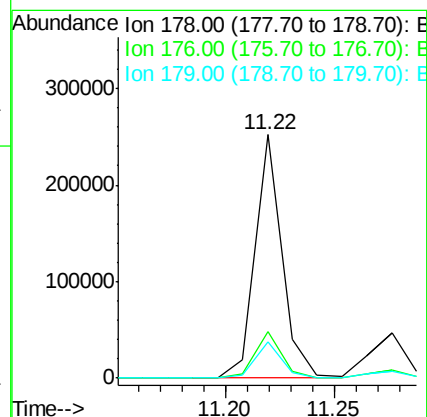
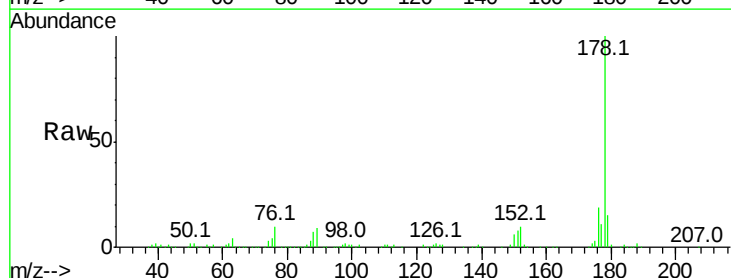
RT: 11.22 min Scan# 799

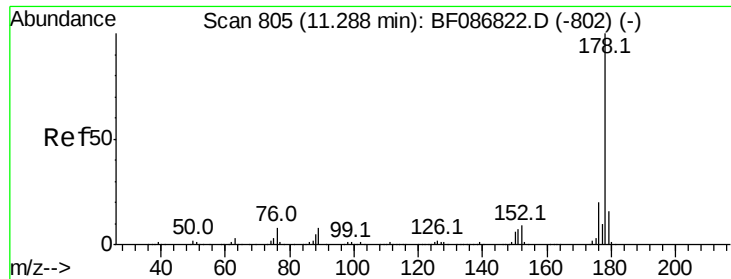
Delta R.T. -0.01 min

Lab File: BF086882.D

Acq: 11 May 2016 5:41

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 178   | Resp: | 217285 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 19.2  | 16.0  | 24.0   |
| 179       | 14.9  | 12.6  | 18.8   |





#71

Anthracene

Concen: 3.04 ng

RT: 11.28 min Scan# 804

Delta R.T. -0.01 min

Lab File: BF086882.D

Acq: 11 May 2016 5:41

Instrument :

BNA\_F

ClientSampleId :

VITALE-FILL-CSPH3-4K

Tot Ion:178 Resp: 59648

Ion Ratio Lower Upper

178 100

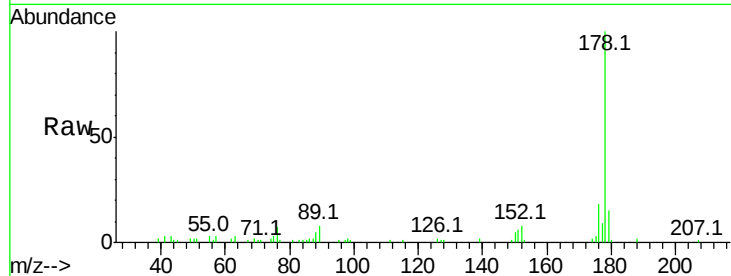
176 17.7 15.6 23.4

179 14.7 12.7 19.1

Manual Integrations  
APPROVED

sohil

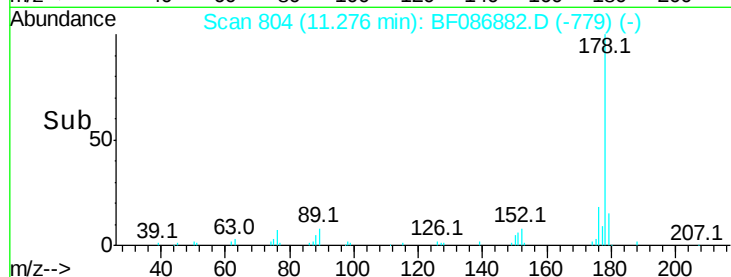
5/11/2016 8:23:11 PM



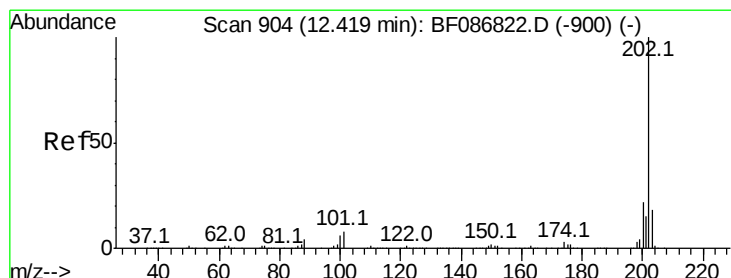
Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



Time-->



#74

Fluoranthene

Concen: 5.80 ng

RT: 12.41 min Scan# 903

Delta R.T. -0.01 min

Lab File: BF086882.D

Acq: 11 May 2016 5:41

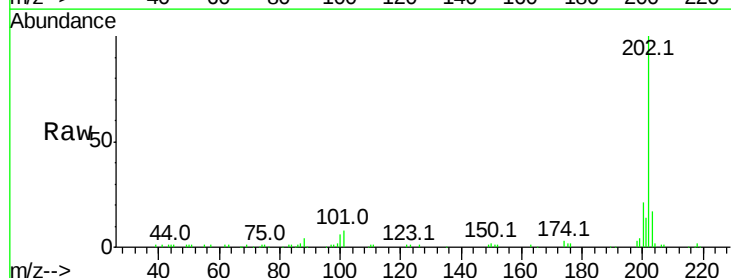
Tgt Ion:202 Resp: 114328

Ion Ratio Lower Upper

202 100

101 7.9 0.0 35.4

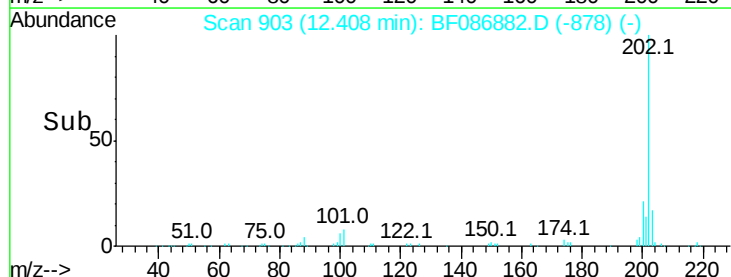
203 17.1 0.0 38.1



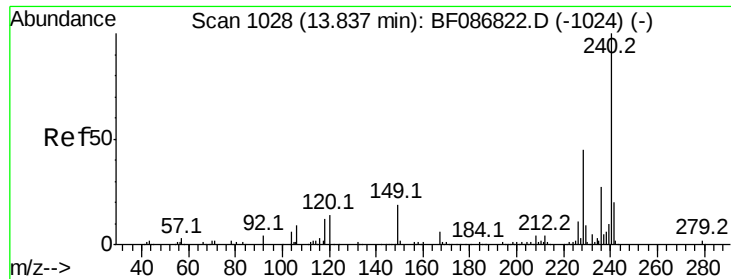
Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



Time-->



#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.83 min Scan# 1027

Delta R.T. -0.01 min

Lab File: BF086882.D

Acq: 11 May 2016 5:41

Instrument :

BNA\_F

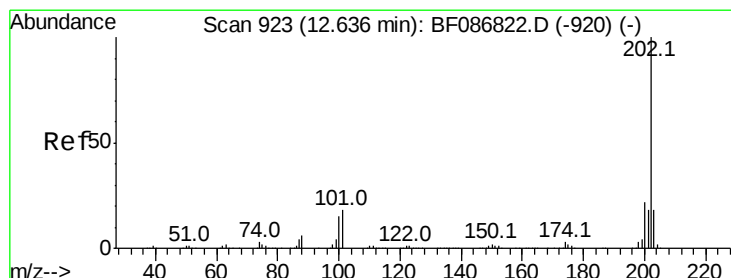
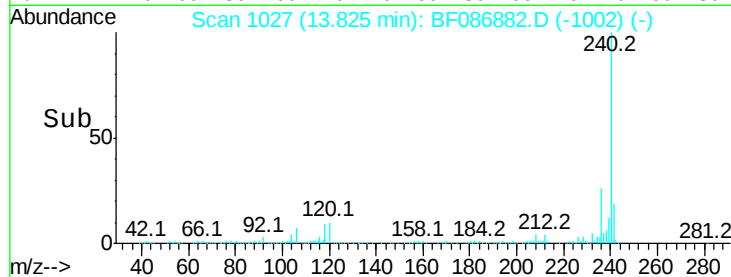
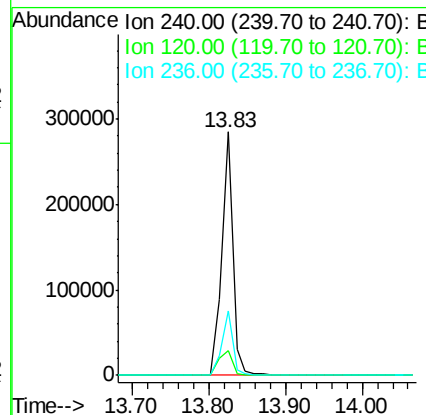
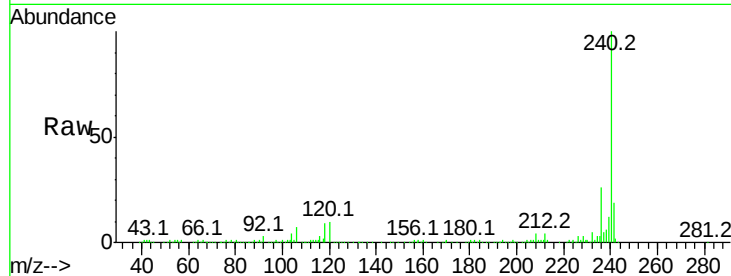
ClientSampleId :

VITALE-FILL-CSPH3-4K

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 240     | 100   | 286891 |       |       |
| 120     | 10.2  | 11.2   | 16.8# |       |
| 236     | 26.5  | 21.2   | 31.8  |       |

Manual Integrations  
APPROVED

sohil  
5/11/2016 8:23:11 PM



#77

Pyrene

Concen: 7.29 ng

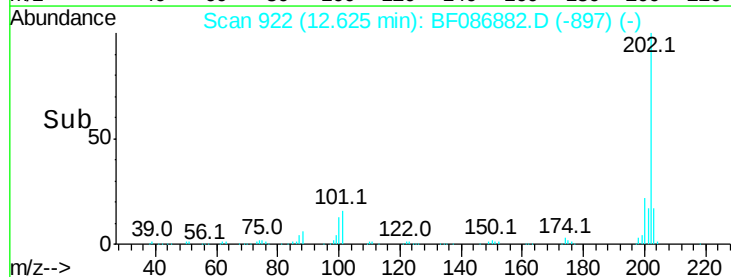
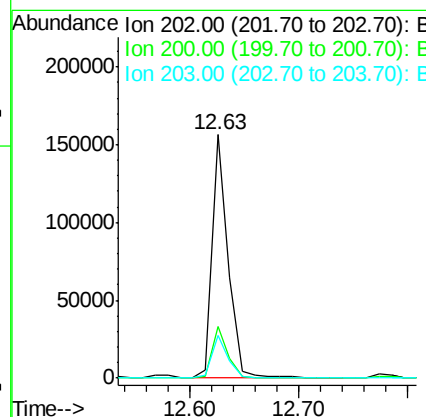
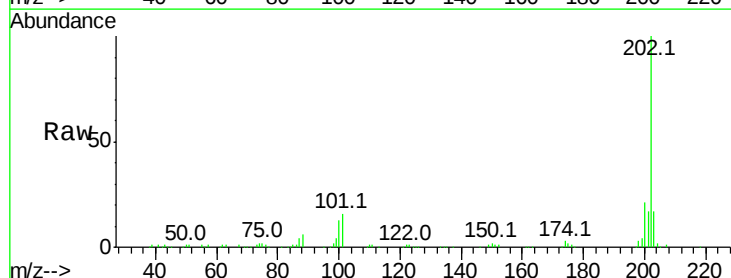
RT: 12.63 min Scan# 922

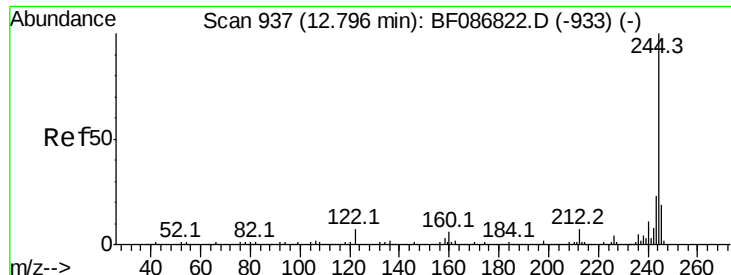
Delta R.T. -0.01 min

Lab File: BF086882.D

Acq: 11 May 2016 5:41

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 160183 |       |       |
| 200     | 21.4  | 17.7   | 26.5  |       |
| 203     | 17.3  | 14.2   | 21.4  |       |





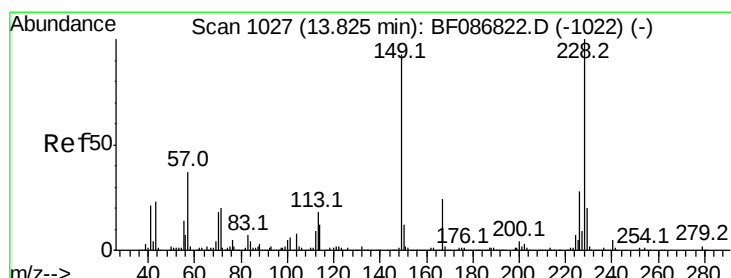
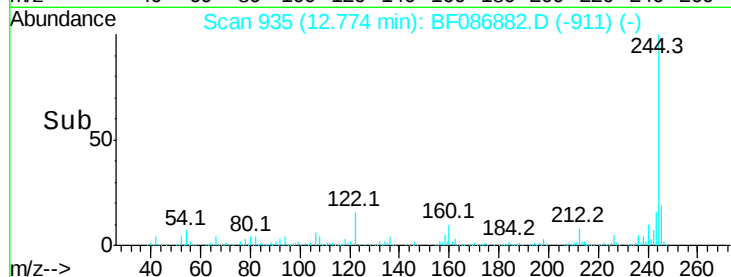
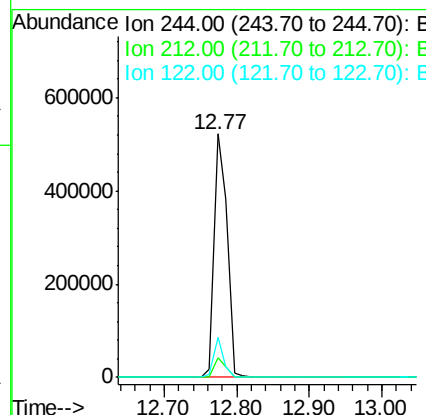
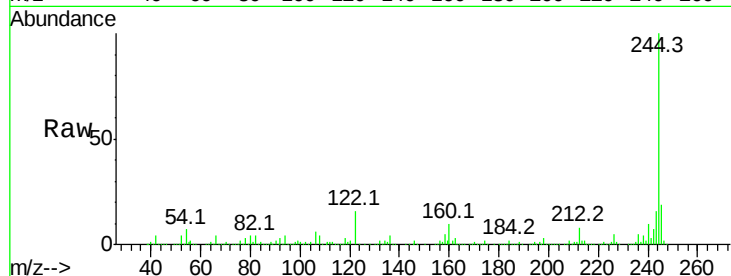
#78  
 Terphenyl-d14  
 Concen: 47.95 ng  
 RT: 12.77 min Scan# 935  
 Delta R.T. -0.02 min  
 Lab File: BF086882.D  
 Acq: 11 May 2016 5:41

Instrument :  
 BNA\_F  
 ClientSampleId :  
 VITALE-FILL-CSPH3-4K

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 7.9   | 6.2   | 9.2   |
| 122     | 16.4  | 12.0  | 18.0  |

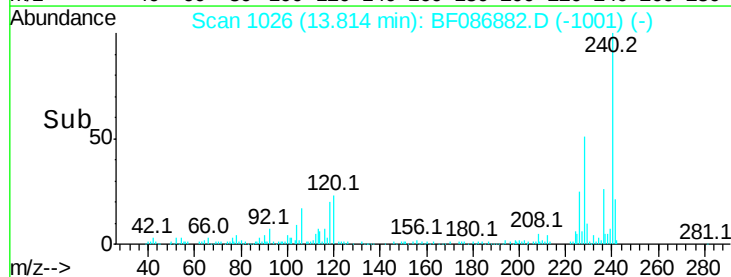
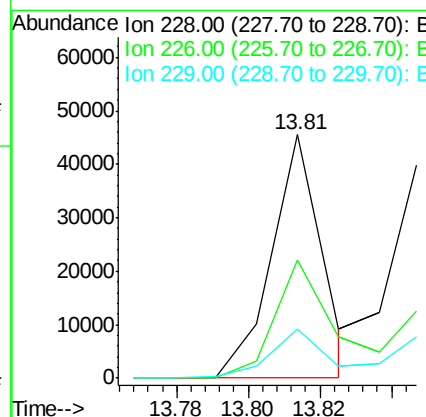
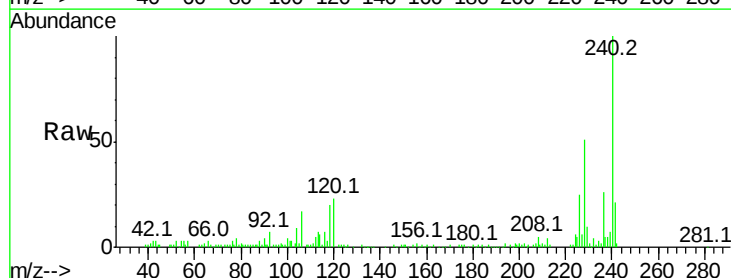
Manual Integrations  
 APPROVED

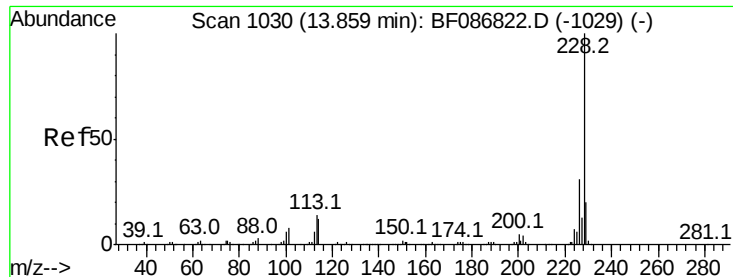
sohil  
 5/11/2016 8:23:11 PM



#80  
 Benzo(a)anthracene  
 Concen: 2.77 ng m  
 RT: 13.81 min Scan# 1026  
 Delta R.T. -0.01 min  
 Lab File: BF086882.D  
 Acq: 11 May 2016 5:41

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 48.3  | 22.5  | 33.7# |
| 229     | 20.1  | 16.6  | 25.0  |





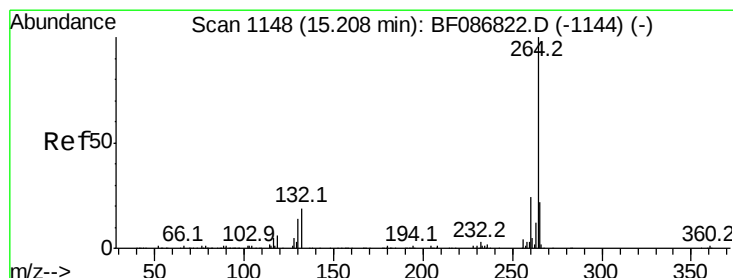
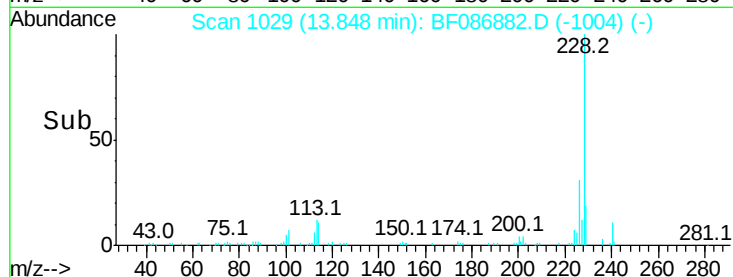
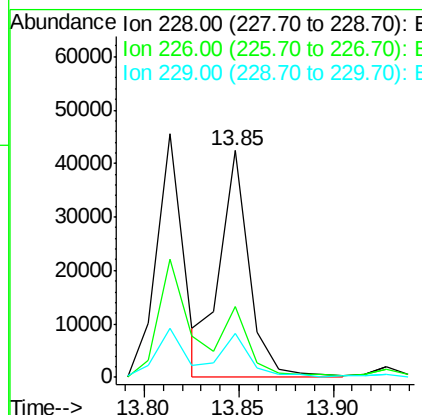
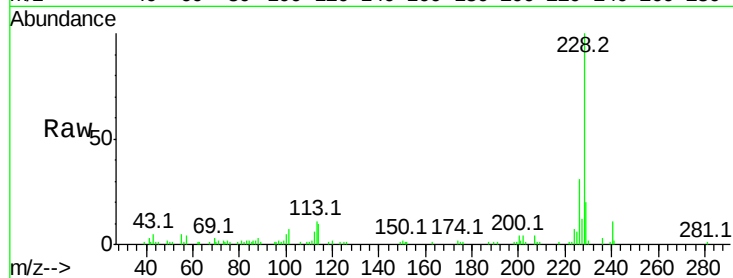
#82  
Chrysene  
Concen: 2.77 ng/ml  
RT: 13.85 min Scan# 1029  
Delta R.T. -0.01 min  
Lab File: BF086882.D  
Acq: 11 May 2016 5:41

Instrument :  
BNA\_F  
ClientSampleId :  
VITALE-FILL-CSPH3-4K

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 228   | Resp: | 45440 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 31.2  | 24.4  | 36.6  |
| 229       | 19.6  | 15.8  | 23.8  |

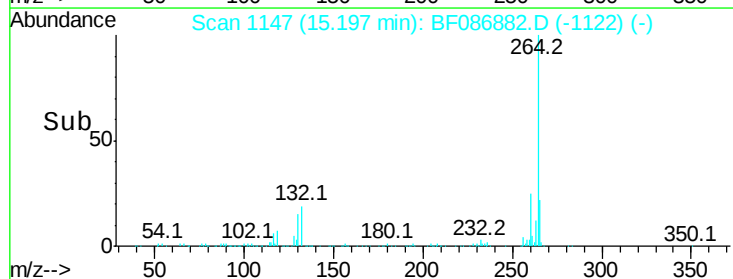
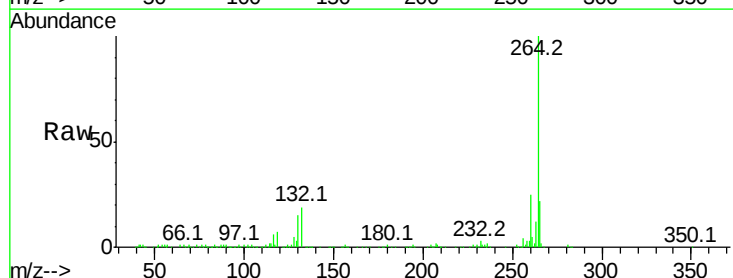
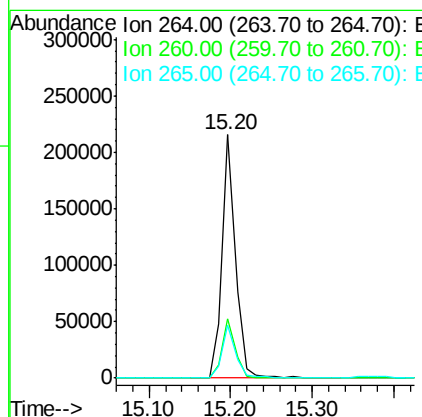
Manual Integrations  
APPROVED

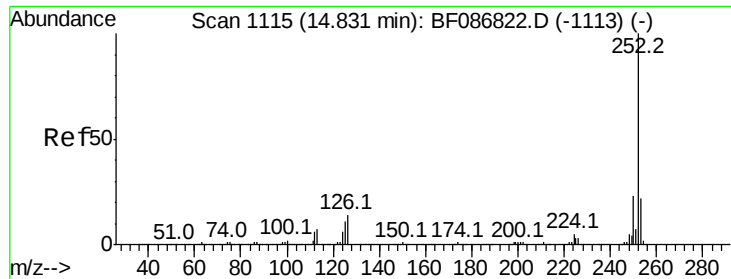
sohil  
5/11/2016 8:23:11 PM



#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 15.20 min Scan# 1147  
Delta R.T. -0.01 min  
Lab File: BF086882.D  
Acq: 11 May 2016 5:41

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 264   | Resp: | 247132 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 24.6  | 19.5  | 29.3   |
| 265       | 21.9  | 17.3  | 25.9   |





#87

Benzo(b)fluoranthene

Concen: 2.14 ng

RT: 14.82 min Scan# 1114

Delta R.T. -0.01 min

Lab File: BF086882.D

Acq: 11 May 2016 5:41

Instrument :

BNA\_F

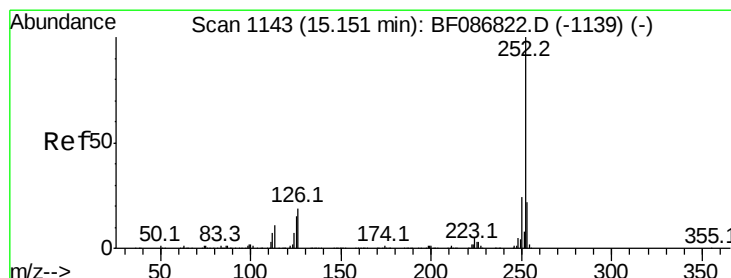
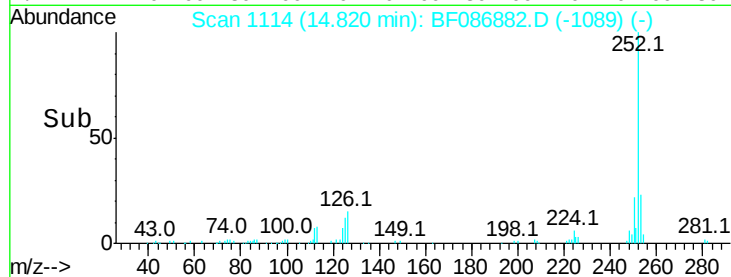
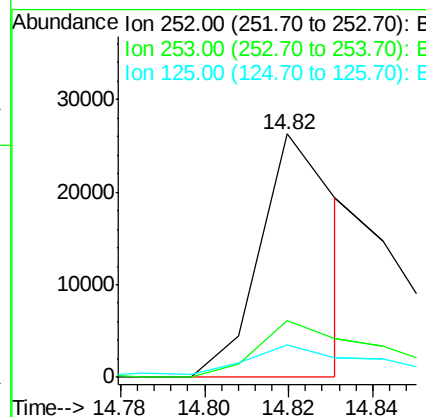
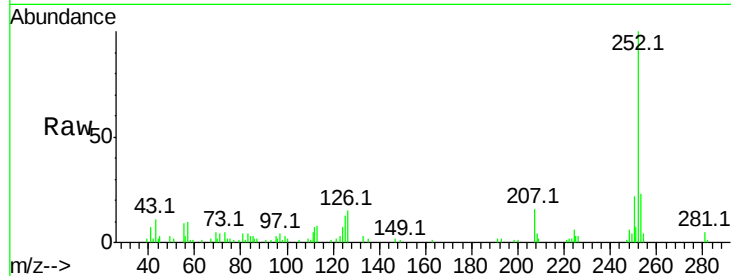
ClientSampleId :

VITALE-FILL-CSPH3-4K

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 34404 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 23.1  | 17.8  | 26.6  |
| 125       | 13.4  | 11.4  | 17.0  |

Manual Integrations  
APPROVED

sohil  
5/11/2016 8:23:11 PM



#89

Benzo(a)pyrene

Concen: 2.98 ng

RT: 15.14 min Scan# 1142

Delta R.T. -0.01 min

Lab File: BF086882.D

Acq: 11 May 2016 5:41

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 41326 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 23.0  | 17.2  | 25.8  |
| 125       | 14.4  | 9.0   | 13.6# |

