

Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP090220\  
 Data File : BP003185.D  
 Acq On : 02 Sep 2020 14:12  
 Operator : CG/JU  
 Sample : L3848-15DL 2X  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 LINDEN-BH-04-CDL

Manual Integrations  
 APPROVED

mohammad  
 9/3/2020 1:48:24 PM

Quant Time: Sep 02 17:46:44 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP082420.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Sep 01 14:37:05 2020  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.66  | 152  | 191351   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 10.43 | 136  | 808063   | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 14.29 | 164  | 516588   | 20.00  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 17.05 | 188  | 1163463  | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12            | 21.14 | 240  | 1249325  | 20.00  | ng    | 0.00     |
| 86) Perylene-d12            | 23.38 | 264  | 1354375  | 20.00  | ng    | 0.01     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.26  | 112  | 421434   | 38.94  | ng    | 0.00     |
| 7) Phenol-d6                | 6.84  | 99   | 522903   | 38.54  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 8.80  | 82   | 305843   | 27.29  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 15.79 | 330  | 280658   | 40.17  | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 12.92 | 172  | 917593   | 26.01  | ng    | 0.00     |
| 79) Terphenyl-d14           | 19.63 | 244  | 1433430  | 25.25  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 49) Acenaphthylene          | 14.02 | 152  | 462954   | 9.653  | ng    | 100      |
| 50) Dimethylphthalate       | 13.75 | 163  | 159690   | 4.054  | ng    | 100      |
| 71) Phenanthrene            | 17.09 | 178  | 935819   | 14.844 | ng    | 99       |
| 72) Anthracene              | 17.18 | 178  | 453259   | 7.512  | ng    | 99       |
| 75) Fluoranthene            | 19.07 | 202  | 3856532  | 52.928 | ng    | 99       |
| 78) Pyrene                  | 19.42 | 202  | 3837196  | 47.323 | ng    | 99       |
| 81) Benzo(a)anthracene      | 21.13 | 228  | 2784186  | 35.578 | ng    | 95       |
| 83) Chrysene                | 21.18 | 228  | 2136690  | 28.517 | ng    | 97       |
| 87) Indeno(1,2,3-cd)pyrene  | 25.65 | 276  | 1238387  | 12.261 | ng    | 97       |
| 88) Benzo(b)fluoranthene    | 22.72 | 252  | 2835970  | 33.690 | ng    | 98       |
| 89) Benzo(k)fluoranthene    | 22.75 | 252  | 1094893m | 13.613 | ng    |          |
| 90) Benzo(a)pyrene          | 23.29 | 252  | 2244240  | 28.737 | ng    | 97       |
| 91) Dibenzo(a,h)anthracene  | 25.65 | 278  | 382952m  | 4.616  | ng    |          |
| 92) Benzo(g,h,i)perylene    | 26.34 | 276  | 1032751  | 12.403 | ng    | 99       |

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

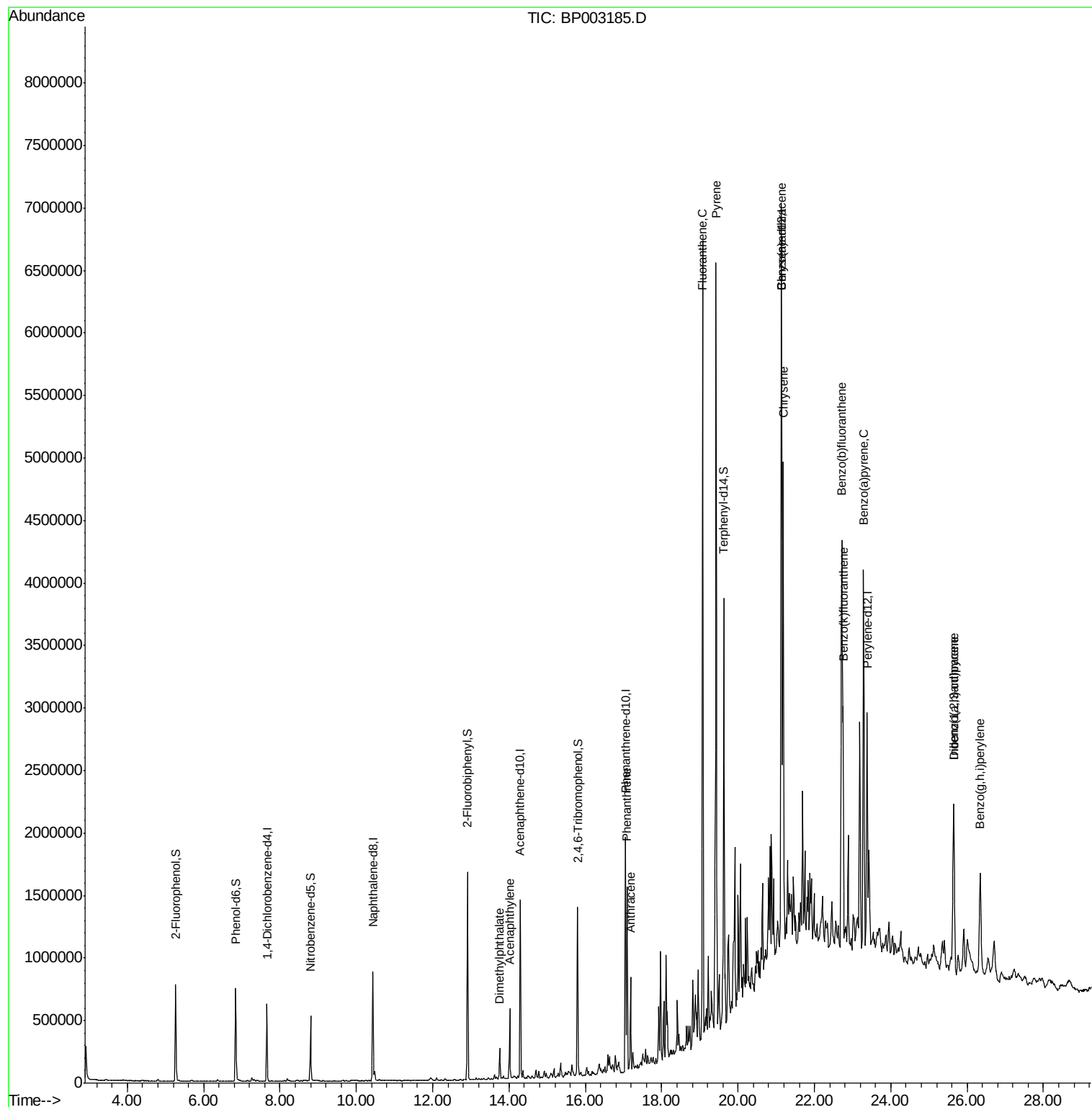
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP090220\  
Data File : BP003185.D  
Acq On : 02 Sep 2020 14:12  
Operator : CG/JU  
Sample : L3848-15DL 2X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

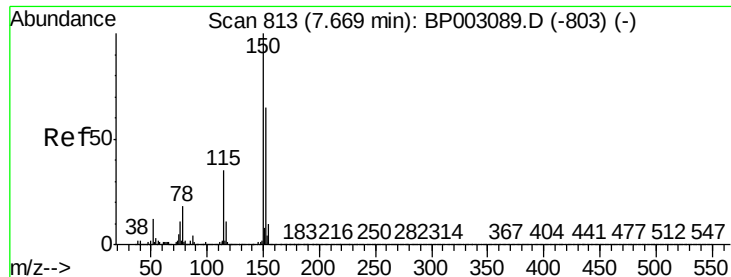
Instrument :  
BNA\_P  
ClientSampleId :  
LINDEN-BH-04-CDL

Manual Integrations  
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Quant Time: Sep 02 17:46:44 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP082420.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Sep 01 14:37:05 2020  
Response via : Initial Calibration





#1

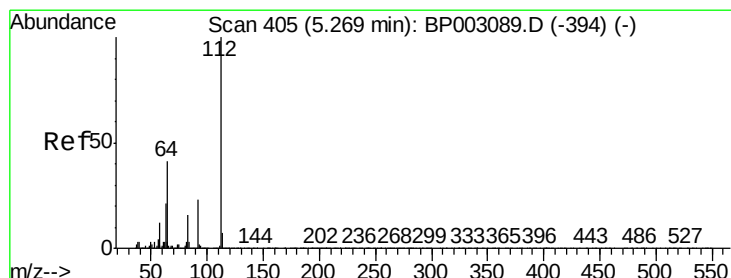
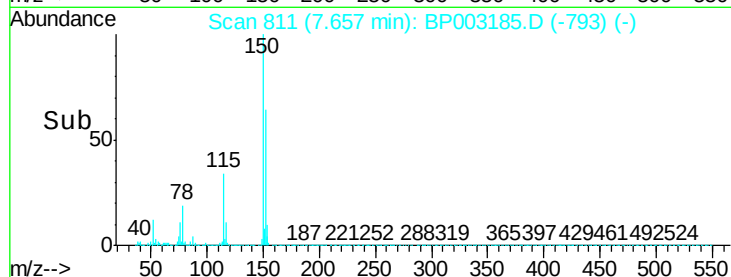
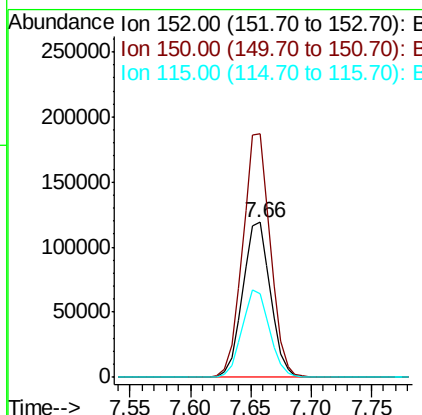
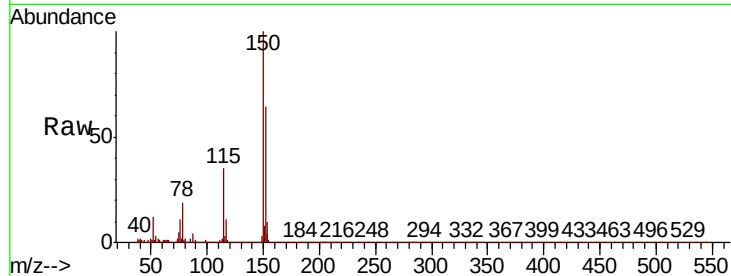
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 7.66 min Scan# 811  
Delta R.T. 0.01 min  
Lab File: BP003185.D  
Acq: 02 Sep 2020 14:12

Instrument :  
BNA\_P  
ClientSampleId :  
LINDEN-BH-04-CDL

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 152     | 100   | 191351 |       |       |
| 150     | 157.3 | 123.8  | 185.6 |       |
| 115     | 54.4  | 43.8   | 65.6  |       |

Manual Integrations  
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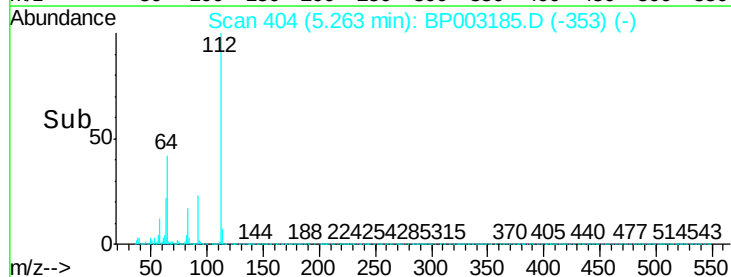
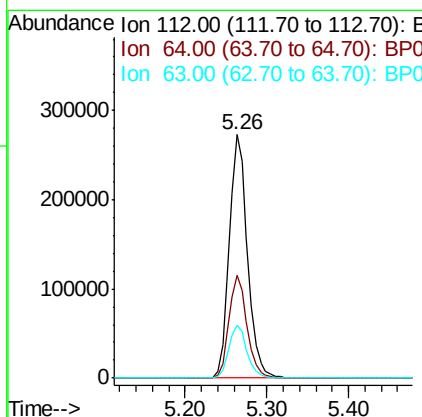
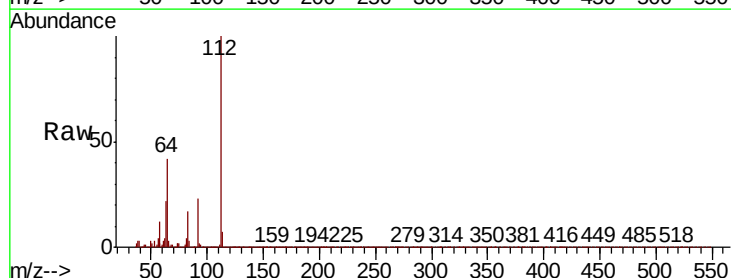
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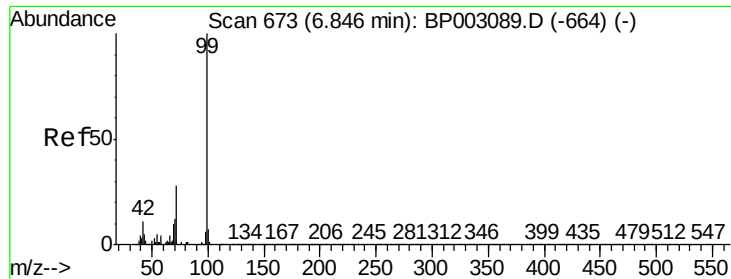


#5

2-Fluorophenol  
Concen: 38.939 ng  
RT: 5.26 min Scan# 404  
Delta R.T. -0.00 min  
Lab File: BP003185.D  
Acq: 02 Sep 2020 14:12

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 112     | 100   | 421434 |       |       |
| 64      | 42.1  | 32.8   | 49.2  |       |
| 63      | 21.6  | 17.0   | 25.4  |       |





#7

Phenol-d6

Concen: 38.542 ng

RT: 6.84 min Scan# 672

Delta R.T. 0.01 min

Lab File: BP003185.D

Acq: 02 Sep 2020 14:12

Instrument :

BNA\_P

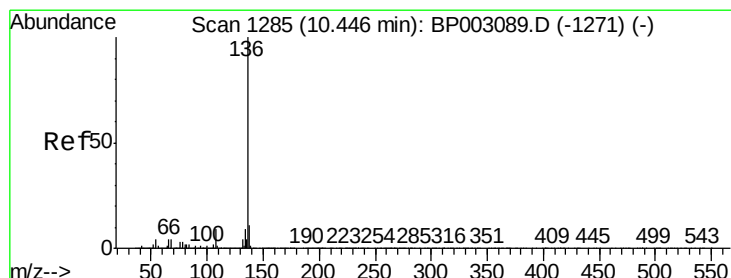
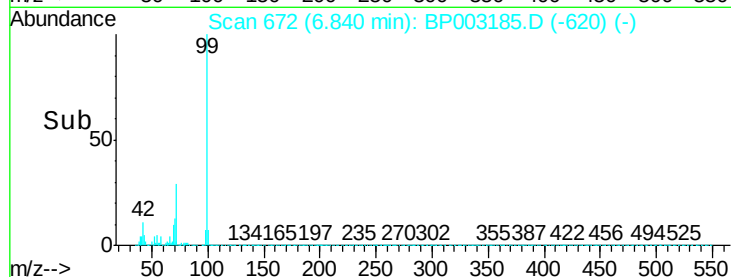
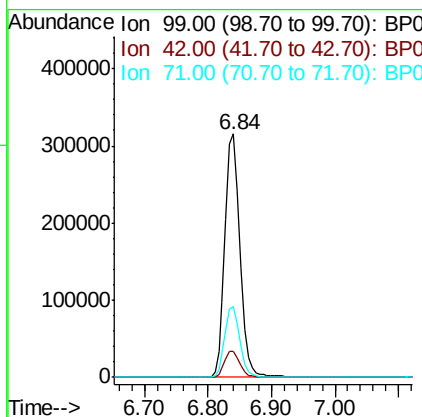
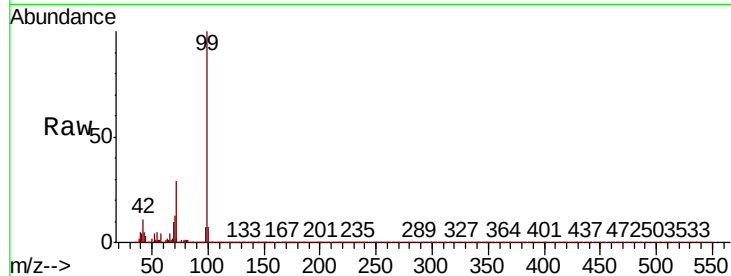
ClientSampleId :

LINDEN-BH-04-CDL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 522903 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 10.9  | 8.6   | 13.0   |
| 71        | 29.2  | 23.4  | 35.2   |

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#21

Naphthalene-d8

Concen: 20.000 ng

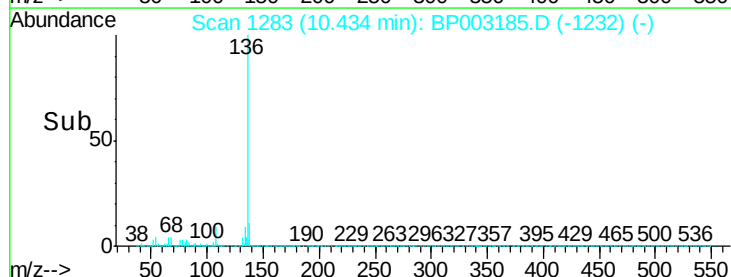
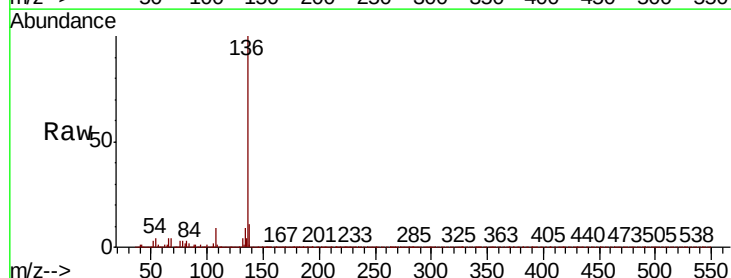
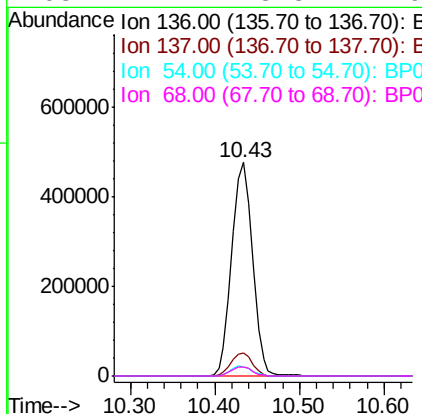
RT: 10.43 min Scan# 1283

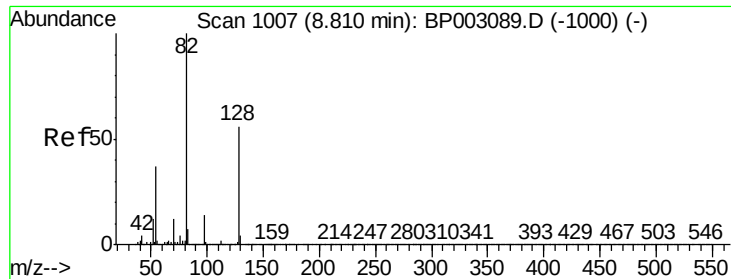
Delta R.T. -0.00 min

Lab File: BP003185.D

Acq: 02 Sep 2020 14:12

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 808063 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 10.9  | 8.6   | 13.0   |
| 54        | 4.5   | 3.6   | 5.4    |
| 68        | 4.4   | 3.3   | 4.9    |





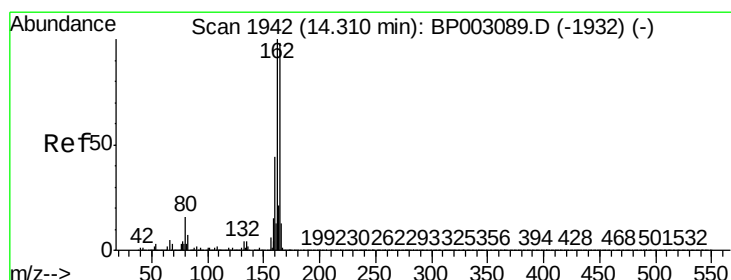
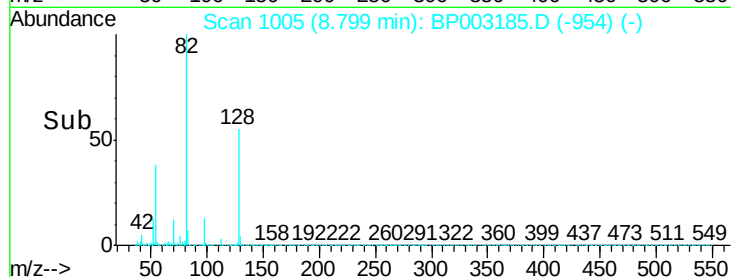
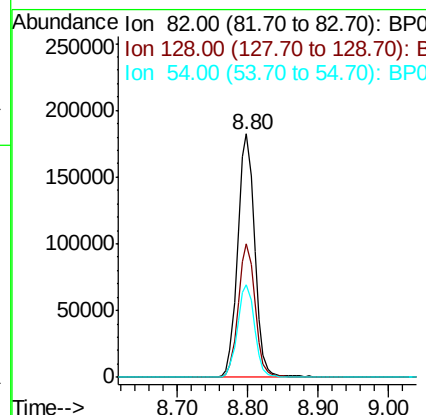
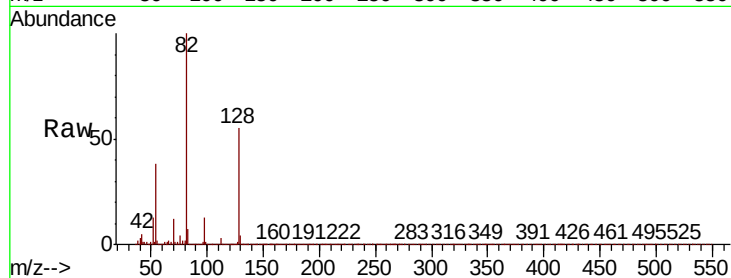
#23  
Nitrobenzene-d5  
Concen: 27.286 ng  
RT: 8.80 min Scan# 1005  
Delta R.T. -0.00 min  
Lab File: BP003185.D  
Acq: 02 Sep 2020 14:12

Instrument :  
BNA\_P  
ClientSampleId :  
LINDEN-BH-04-CDL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 55.0  | 45.6  | 68.4  |
| 54      | 38.2  | 30.1  | 45.1  |

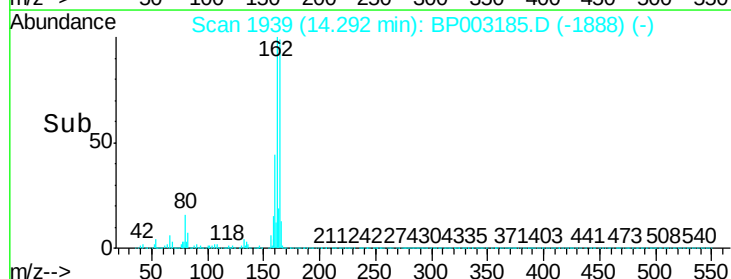
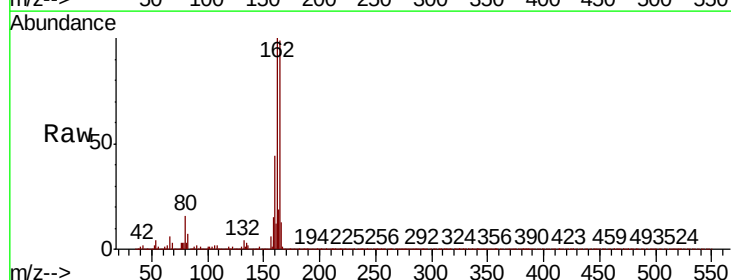
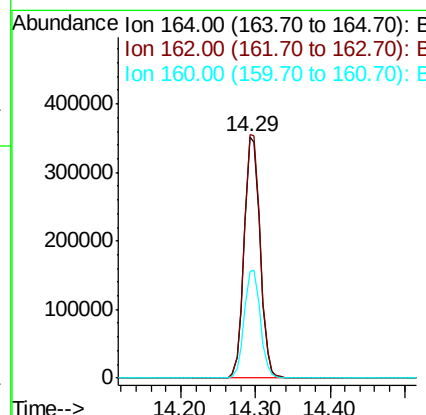
Manual Integrations  
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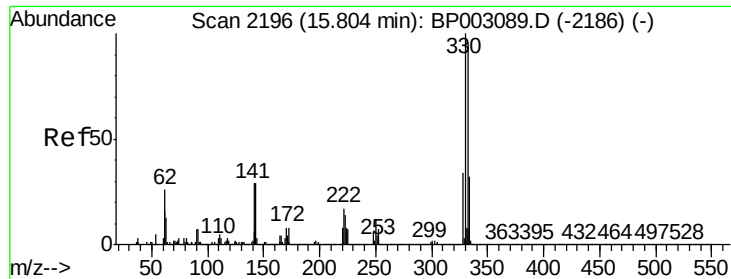
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#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.29 min Scan# 1939  
Delta R.T. -0.00 min  
Lab File: BP003185.D  
Acq: 02 Sep 2020 14:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 100.8 | 79.4  | 119.2 |
| 160     | 44.2  | 36.1  | 54.1  |





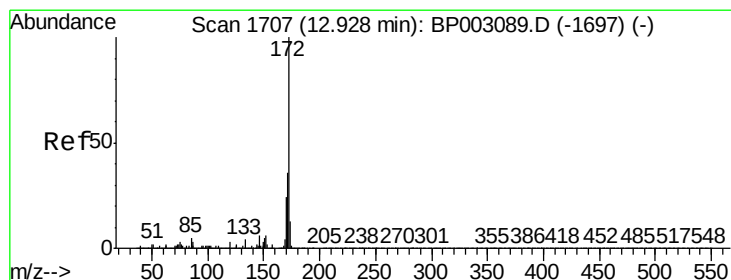
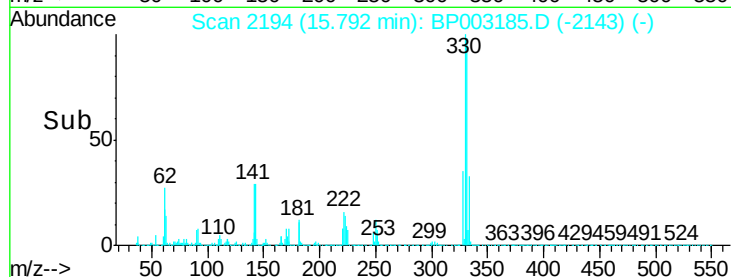
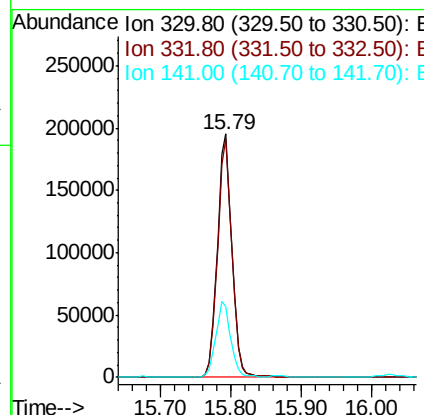
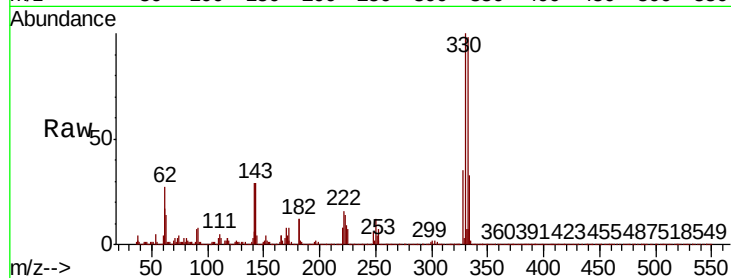
#42  
2,4,6-Tribromophenol  
Concen: 40.170 ng  
RT: 15.79 min Scan# 2194  
Delta R.T. -0.00 min  
Lab File: BP003185.D  
Acq: 02 Sep 2020 14:12

Instrument :  
BNA\_P  
ClientSampleId :  
LINDEN-BH-04-CDL

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 280658 |       |       |
| 332     | 96.9  | 77.1   | 115.7 |       |
| 141     | 30.9  | 23.4   | 35.2  |       |

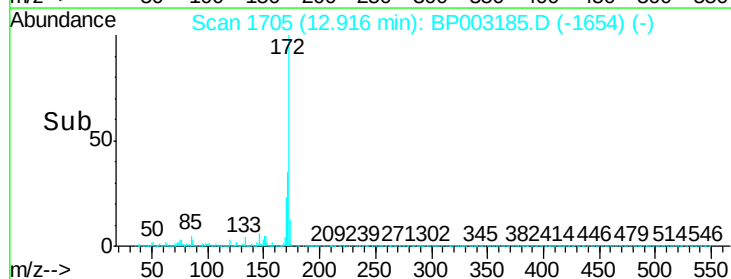
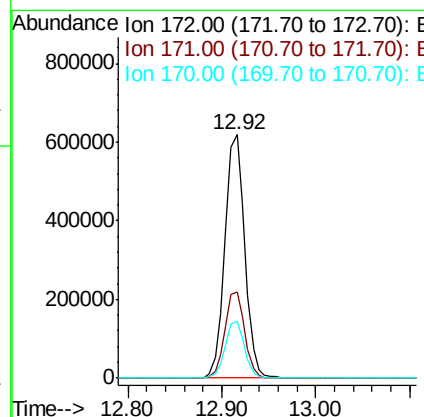
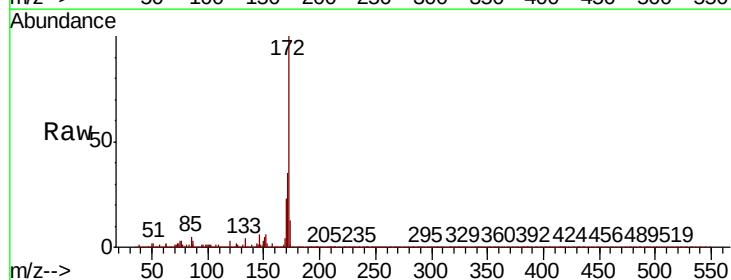
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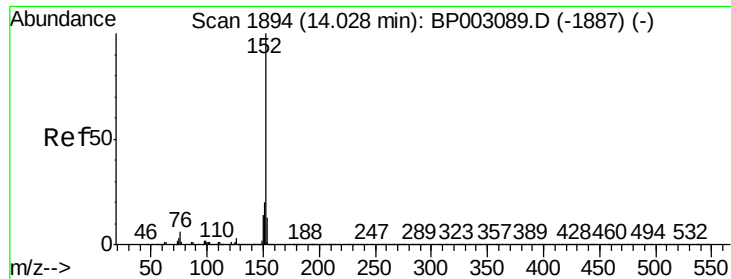
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#45  
2-Fluorobiphenyl  
Concen: 26.012 ng  
RT: 12.92 min Scan# 1705  
Delta R.T. -0.00 min  
Lab File: BP003185.D  
Acq: 02 Sep 2020 14:12

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 172     | 100   | 917593 |       |       |
| 171     | 35.4  | 28.5   | 42.7  |       |
| 170     | 23.5  | 19.2   | 28.8  |       |





#49

Acenaphthylene

Concen: 9.653 ng

RT: 14.02 min Scan# 1892

Delta R.T. 0.01 min

Lab File: BP003185.D

Acq: 02 Sep 2020 14:12

Instrument :

BNA\_P

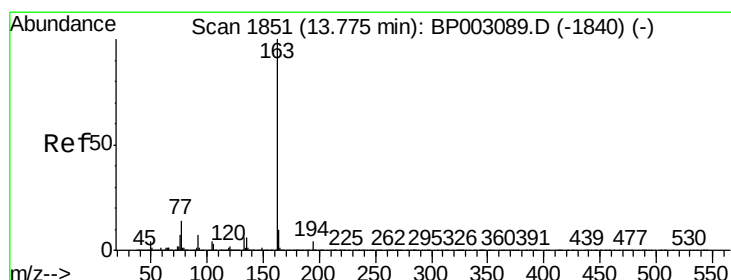
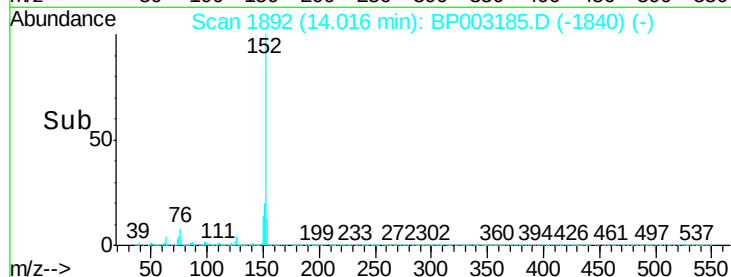
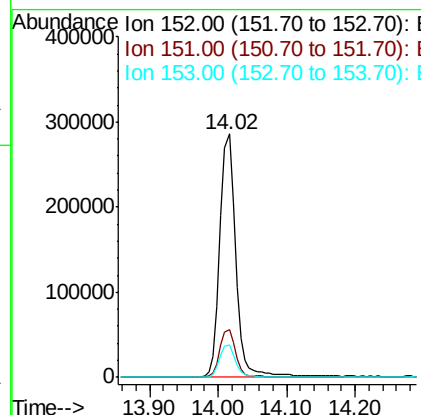
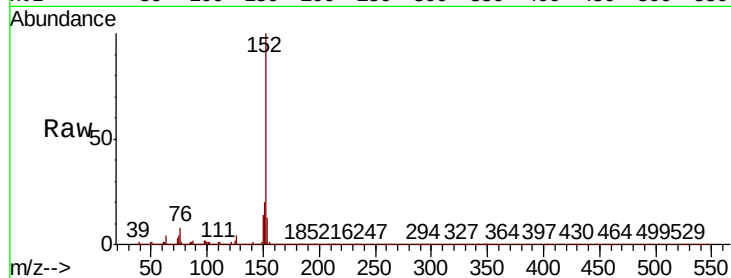
ClientSampleId :

LINDEN-BH-04-CDL

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 152     | 100   | 462954 |       |       |
| 151     | 19.7  |        | 15.9  | 23.9  |
| 153     | 13.4  |        | 10.5  | 15.7  |

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#50

Dimethylphthalate

Concen: 4.054 ng

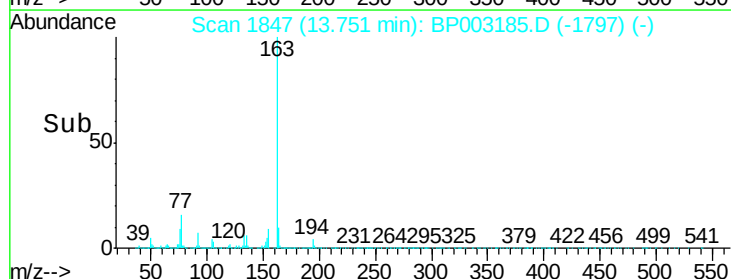
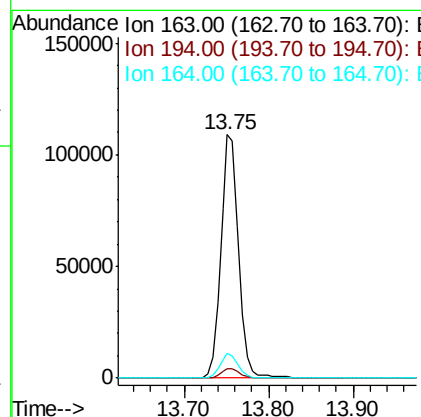
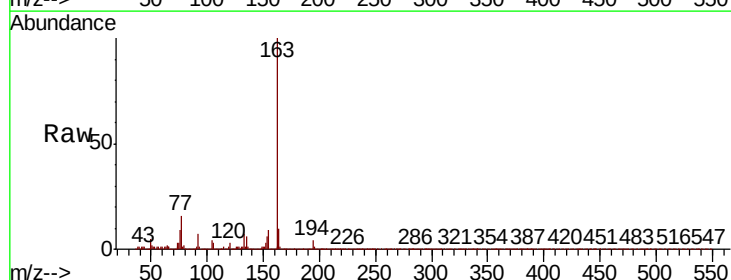
RT: 13.75 min Scan# 1847

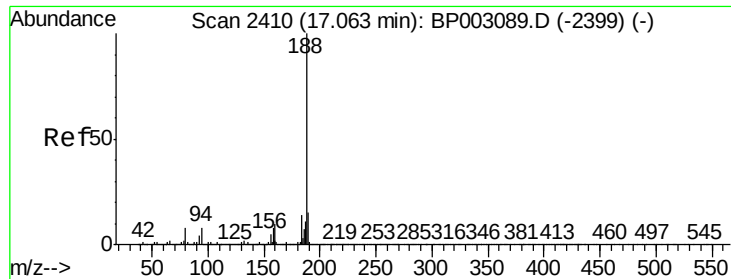
Delta R.T. -0.01 min

Lab File: BP003185.D

Acq: 02 Sep 2020 14:12

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 163     | 100   | 159690 |       |       |
| 194     | 3.6   |        | 3.3   | 4.9   |
| 164     | 10.2  |        | 8.2   | 12.2  |





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 17.05 min Scan# 2408

Delta R.T. 0.01 min

Lab File: BP003185.D

Acq: 02 Sep 2020 14:12

Instrument :

BNA\_P

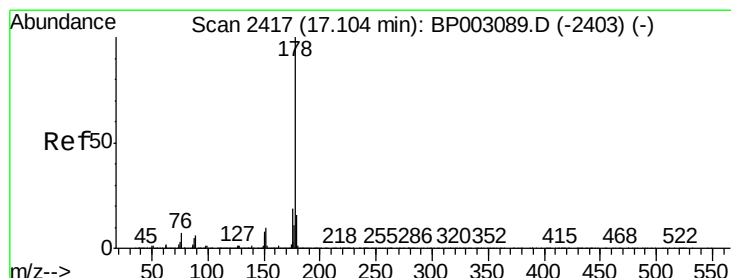
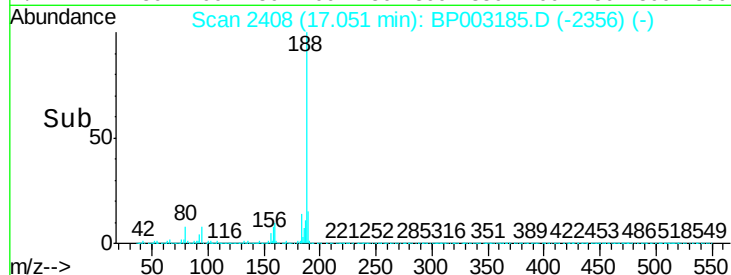
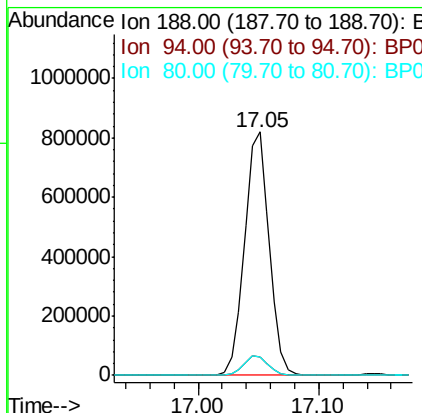
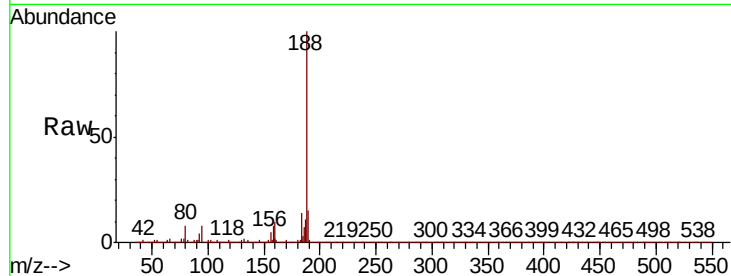
ClientSampleId :

LINDEN-BH-04-CDL

|             |               |
|-------------|---------------|
| Tot Ion:188 | Resp: 1163463 |
| Ion Ratio   | Lower Upper   |
| 188 100     |               |
| 94 7.6      | 6.2 9.2       |
| 80 7.7      | 6.2 9.2       |

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#71

Phenanthrene

Concen: 14.844 ng

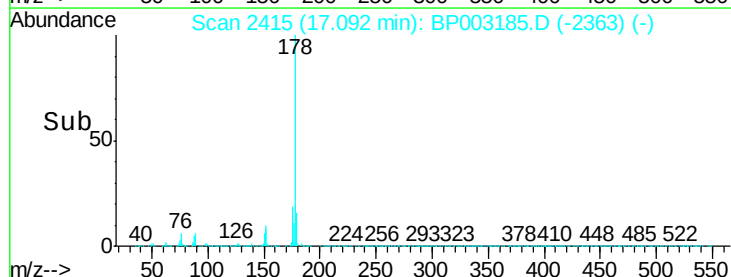
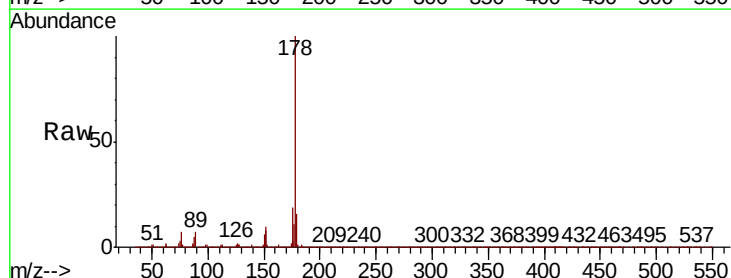
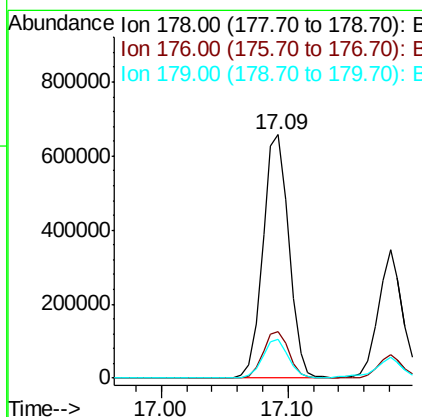
RT: 17.09 min Scan# 2415

Delta R.T. 0.01 min

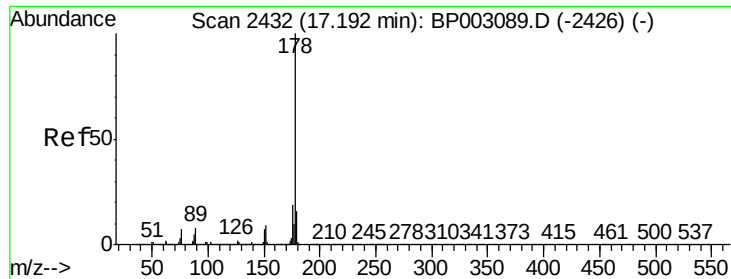
Lab File: BP003185.D

Acq: 02 Sep 2020 14:12

|             |              |
|-------------|--------------|
| Tgt Ion:178 | Resp: 935819 |
| Ion Ratio   | Lower Upper  |
| 178 100     |              |
| 176 19.3    | 15.3 22.9    |
| 179 15.9    | 12.5 18.7    |







#72

Anthracene

Concen: 7.512 ng

RT: 17.18 min Scan# 2430

Delta R.T. -0.00 min

Lab File: BP003185.D

Acq: 02 Sep 2020 14:12

Instrument :

BNA\_P

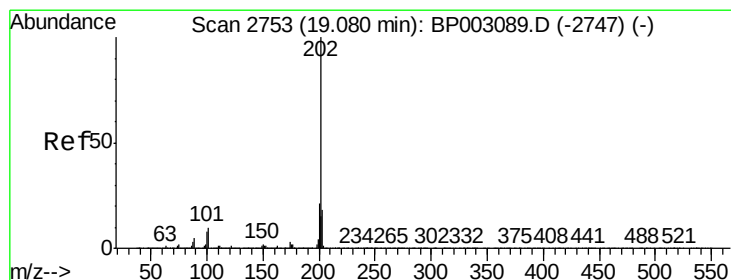
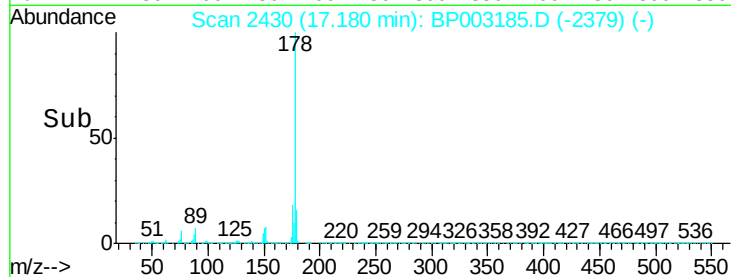
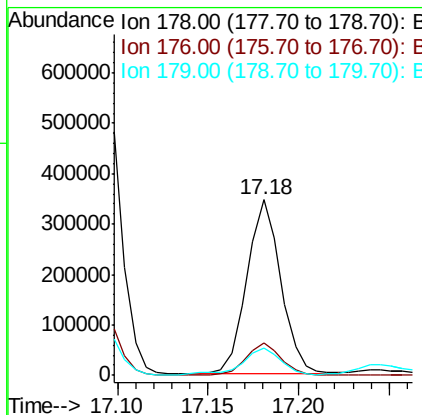
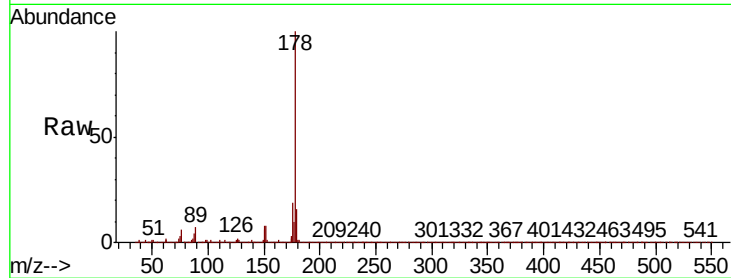
ClientSampleId :

LINDEN-BH-04-CDL

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:178 | Resp: | 453259    |
| Ion Ratio   | Lower | Upper     |
| 178         | 100   |           |
| 176         | 18.5  | 15.0 22.4 |
| 179         | 15.9  | 12.5 18.7 |

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#75

Fluoranthene

Concen: 52.928 ng

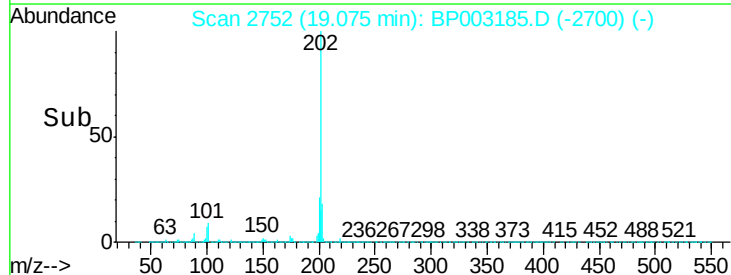
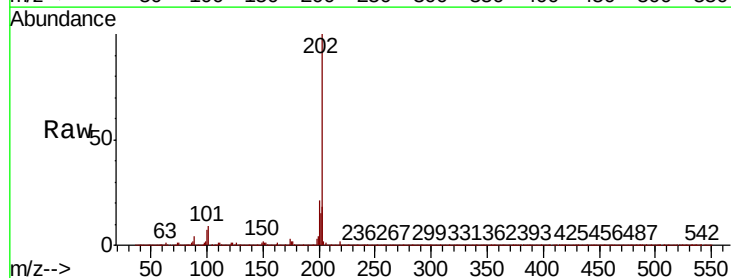
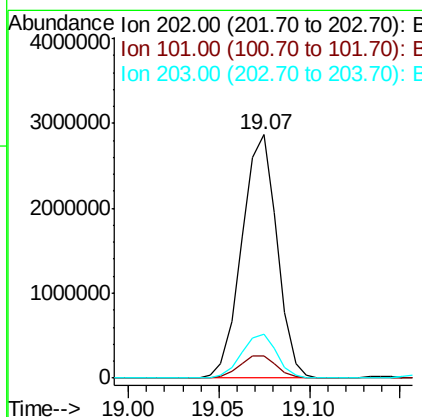
RT: 19.07 min Scan# 2752

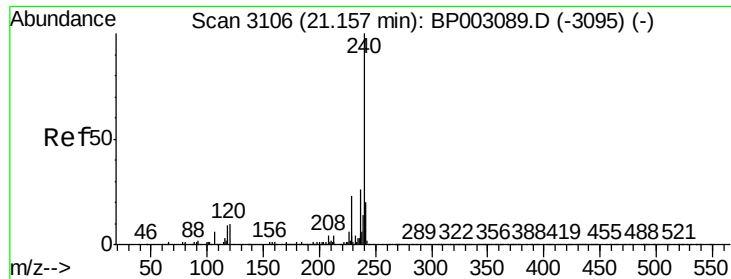
Delta R.T. 0.01 min

Lab File: BP003185.D

Acq: 02 Sep 2020 14:12

|             |       |          |
|-------------|-------|----------|
| Tgt Ion:202 | Resp: | 3856532  |
| Ion Ratio   | Lower | Upper    |
| 202         | 100   |          |
| 101         | 9.3   | 0.0 29.4 |
| 203         | 18.2  | 0.0 37.8 |





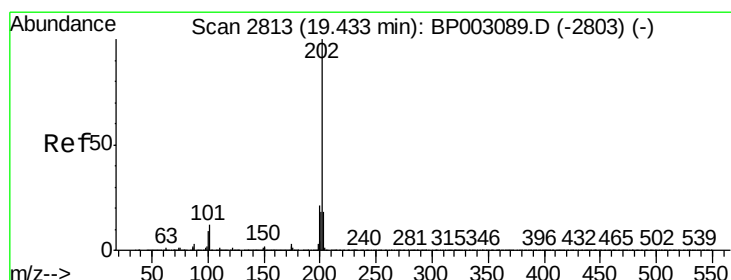
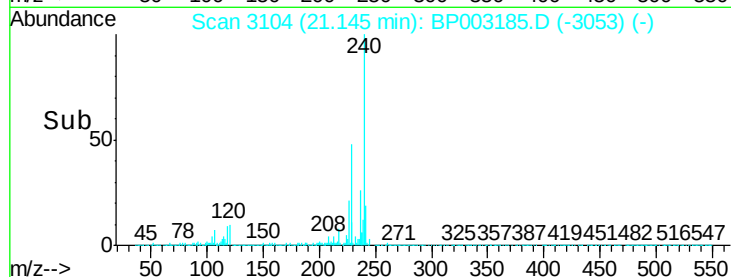
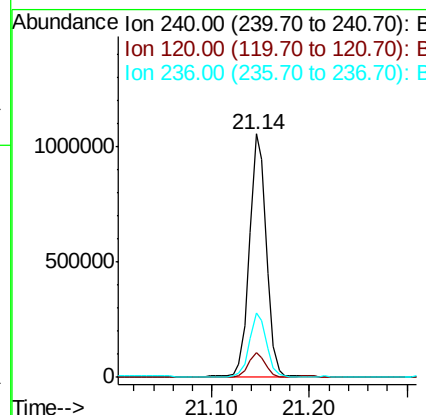
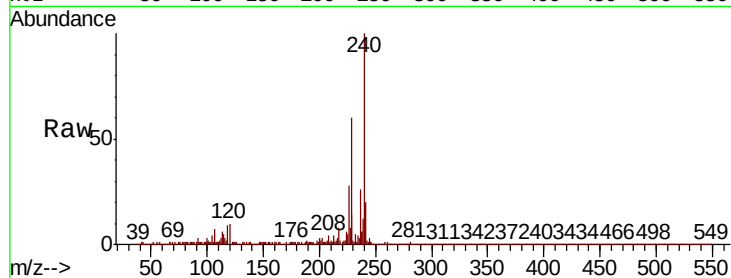
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.14 min Scan# 3104  
Delta R.T. -0.00 min  
Lab File: BP003185.D  
Acq: 02 Sep 2020 14:12

Instrument :  
BNA\_P  
ClientSampleId :  
LINDEN-BH-04-CDL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 10.3  | 7.8   | 11.6  |
| 236     | 26.3  | 20.8  | 31.2  |

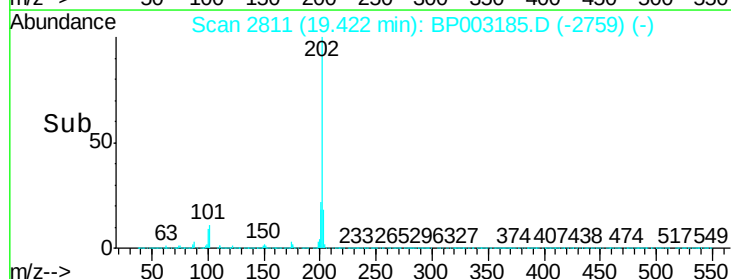
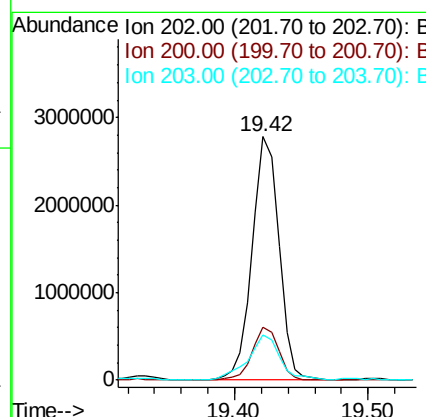
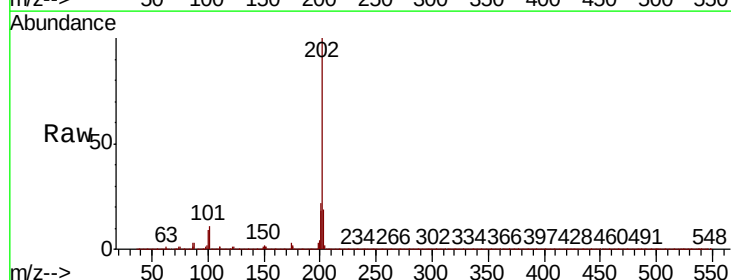
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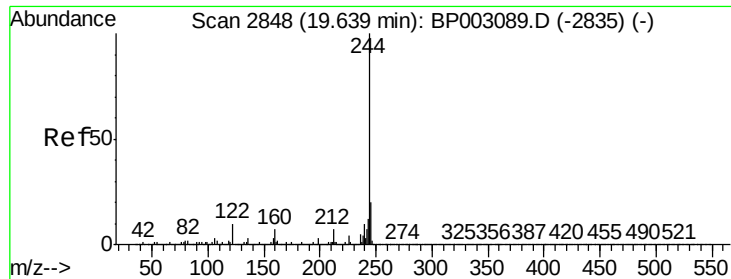
mohammad  
9/3/2020 1:48:24 PM



#78  
Pyrene  
Concen: 47.323 ng  
RT: 19.42 min Scan# 2811  
Delta R.T. 0.01 min  
Lab File: BP003185.D  
Acq: 02 Sep 2020 14:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.8  | 17.1  | 25.7  |
| 203     | 18.5  | 14.2  | 21.2  |





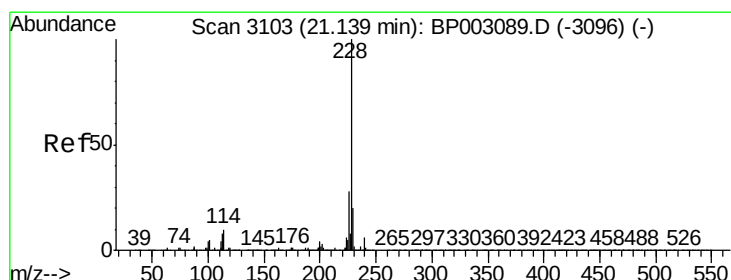
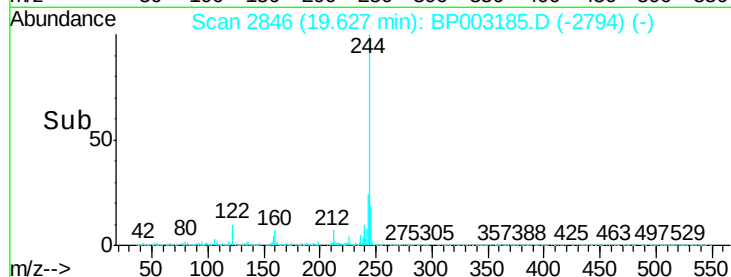
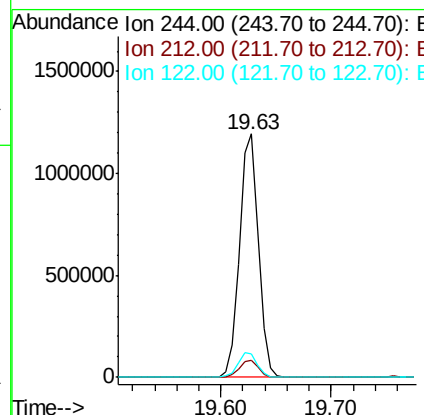
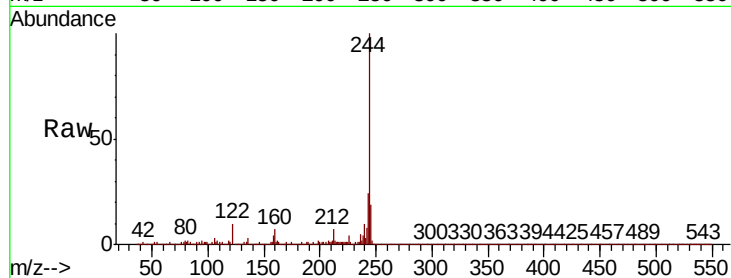
#79  
 Terphenyl-d14  
 Concen: 25.247 ng  
 RT: 19.63 min Scan# 2846  
 Delta R.T. 0.01 min  
 Lab File: BP003185.D  
 Acq: 02 Sep 2020 14:12

Instrument :  
 BNA\_P  
 ClientSampleId :  
 LINDEN-BH-04-CDL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 7.1   | 5.8   | 8.6   |
| 122     | 9.6   | 7.8   | 11.8  |

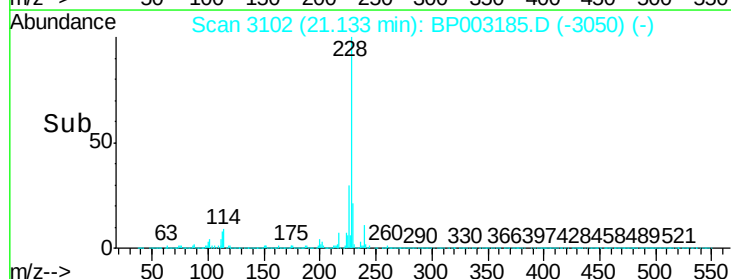
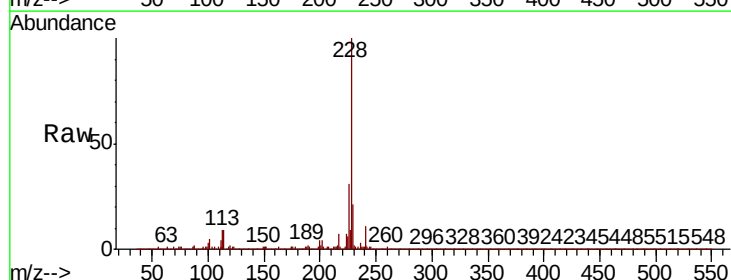
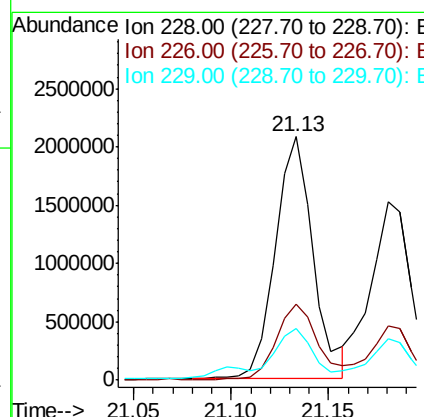
Manual Integrations  
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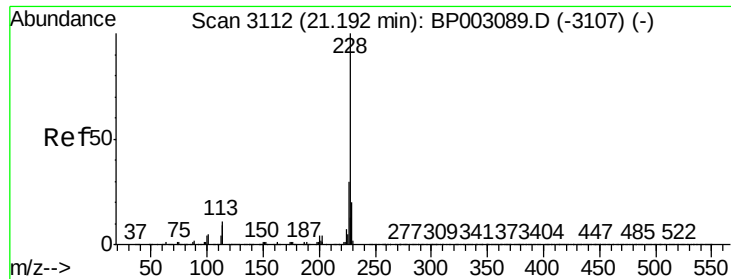
mohammad  
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#81  
 Benzo(a)anthracene  
 Concen: 35.578 ng  
 RT: 21.13 min Scan# 3102  
 Delta R.T. 0.01 min  
 Lab File: BP003185.D  
 Acq: 02 Sep 2020 14:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.3  | 22.1  | 33.1  |
| 229     | 21.4  | 15.9  | 23.9  |





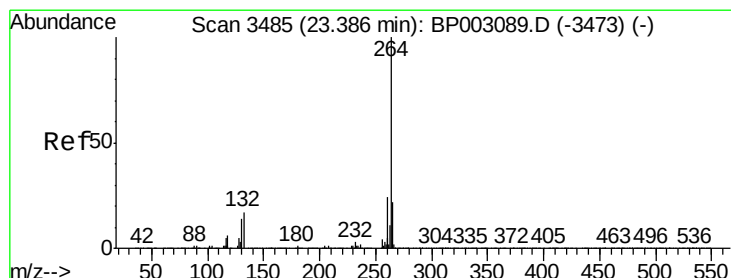
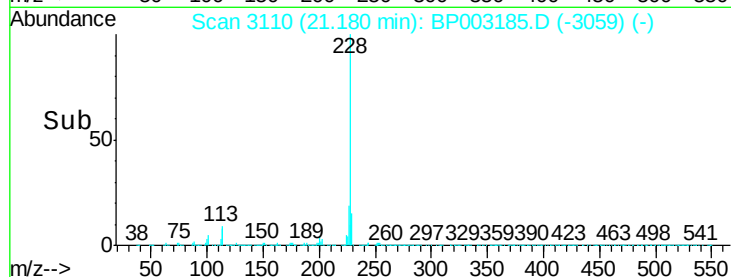
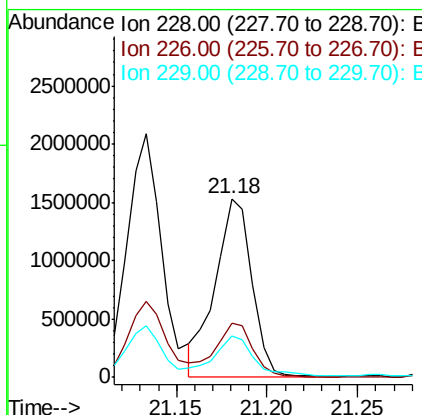
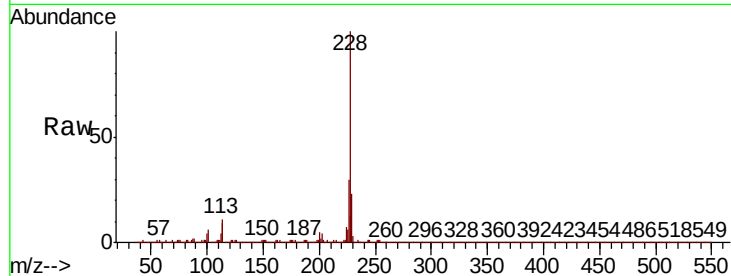
#83  
Chrysene  
Concen: 28.517 ng  
RT: 21.18 min Scan# 3110  
Delta R.T. -0.00 min  
Lab File: BP003185.D  
Acq: 02 Sep 2020 14:12

Instrument :  
BNA\_P  
ClientSampleId :  
LINDEN-BH-04-CDL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.4  | 24.4  | 36.6  |
| 229     | 23.1  | 15.8  | 23.6  |

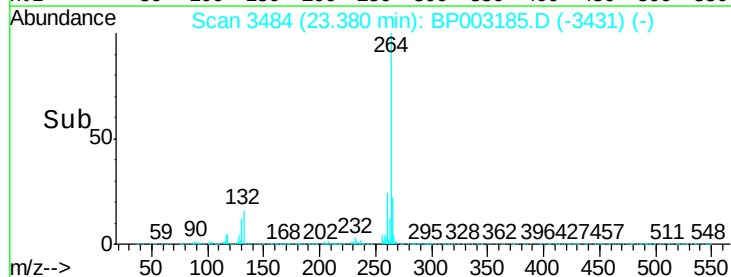
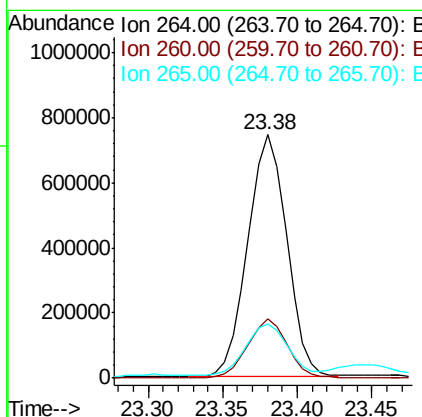
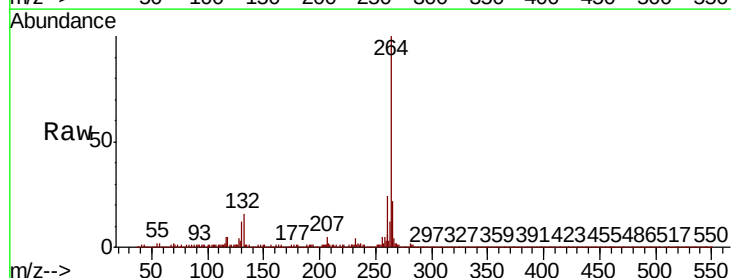
Manual Integrations  
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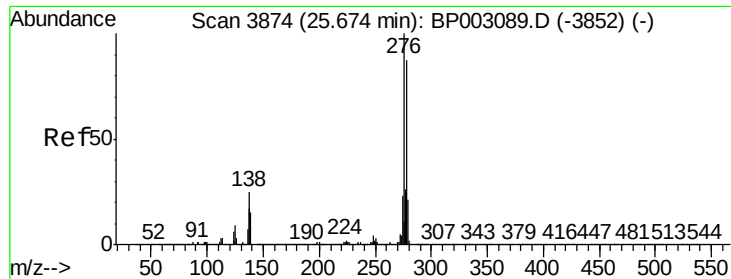
mohammad  
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#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 23.38 min Scan# 3484  
Delta R.T. 0.01 min  
Lab File: BP003185.D  
Acq: 02 Sep 2020 14:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.3  | 18.8  | 28.2  |
| 265     | 22.4  | 17.4  | 26.2  |





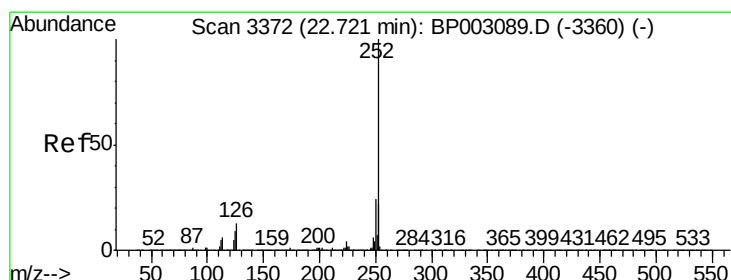
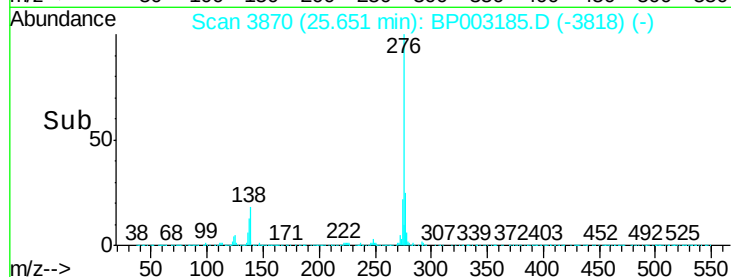
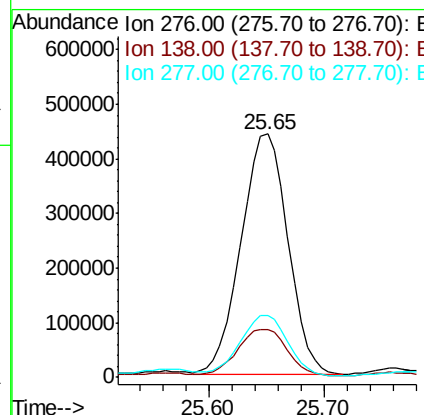
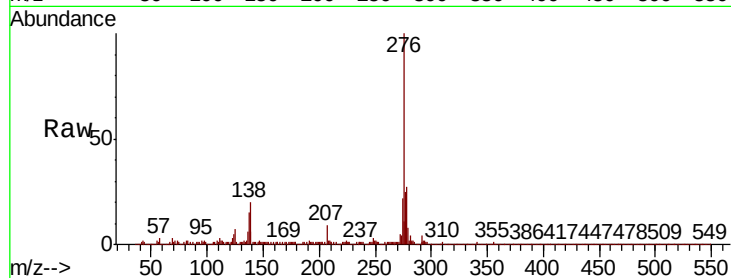
#87  
 Indeno(1,2,3-cd)pyrene  
 Concen: 12.261 ng  
 RT: 25.65 min Scan# 3870  
 Delta R.T. 0.01 min  
 Lab File: BP003185.D  
 Acq: 02 Sep 2020 14:12

Instrument :  
 BNA\_P  
 ClientSampleId :  
 LINDEN-BH-04-CDL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 20.5  | 18.7  | 28.1  |
| 277     | 25.6  | 20.4  | 30.6  |

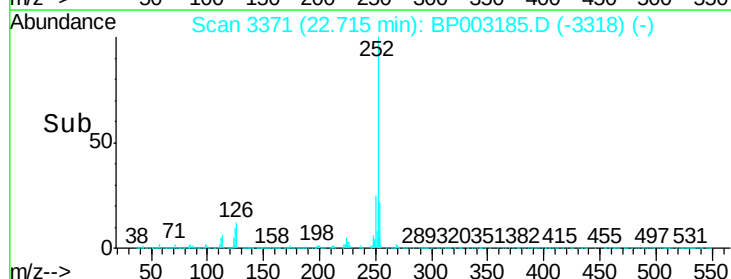
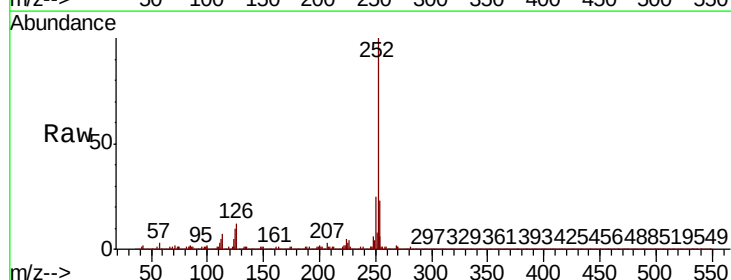
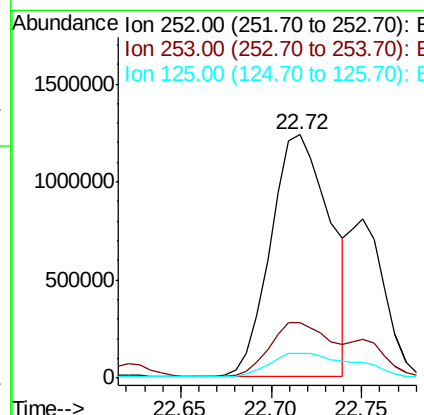
Manual Integrations  
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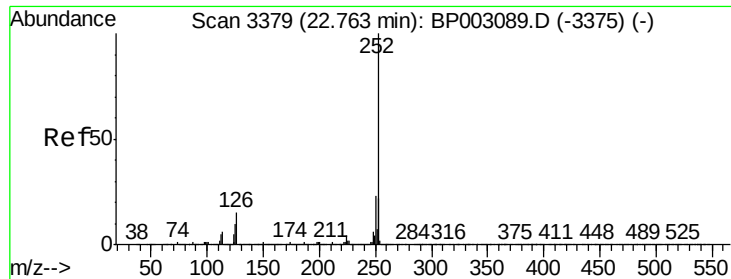
mohammad  
 9/3/2020 1:48:24 PM



#88  
 Benzo(b)fluoranthene  
 Concen: 33.690 ng  
 RT: 22.72 min Scan# 3371  
 Delta R.T. 0.01 min  
 Lab File: BP003185.D  
 Acq: 02 Sep 2020 14:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.9  | 17.6  | 26.4  |
| 125     | 10.4  | 7.3   | 10.9  |





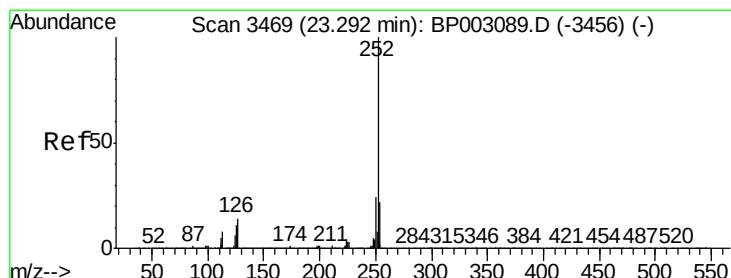
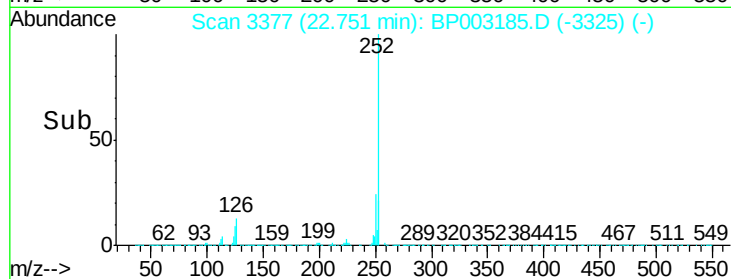
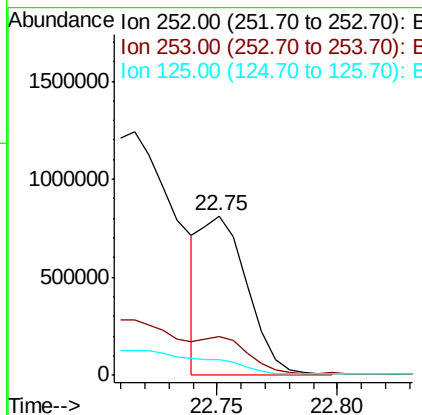
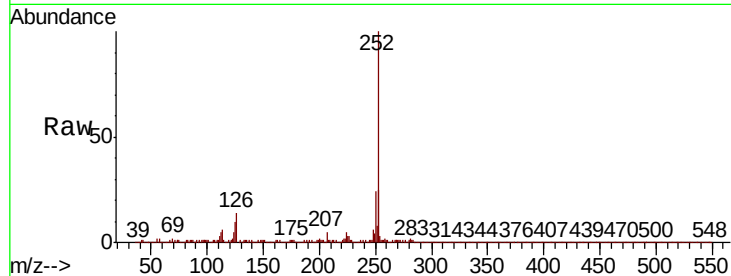
#89  
Benzo(k)fluoranthene  
Concen: 13.613 ng m  
RT: 22.75 min Scan# 3377  
Delta R.T. 0.01 min  
Lab File: BP003185.D  
Acq: 02 Sep 2020 14:12

Instrument :  
BNA\_P  
ClientSampleId :  
LINDEN-BH-04-CDL

Tot Ion:252 Resp: 1094893  
Ion Ratio Lower Upper  
252 100  
253 24.7 17.8 26.8  
125 9.6 7.4 11.2

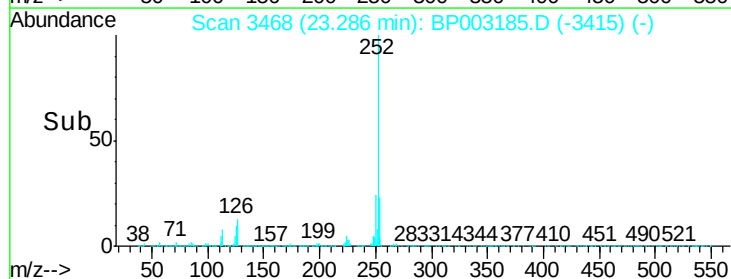
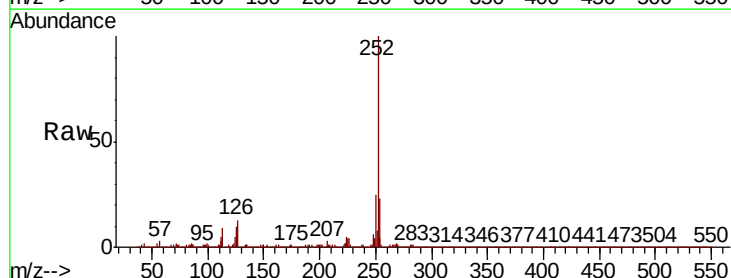
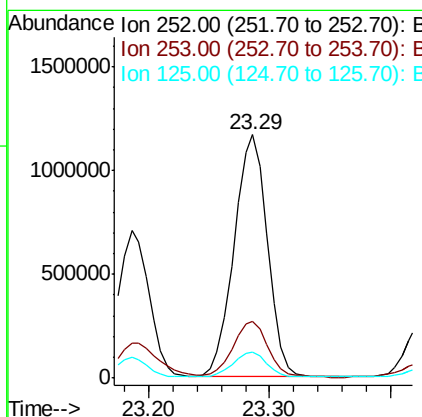
Manual Integrations  
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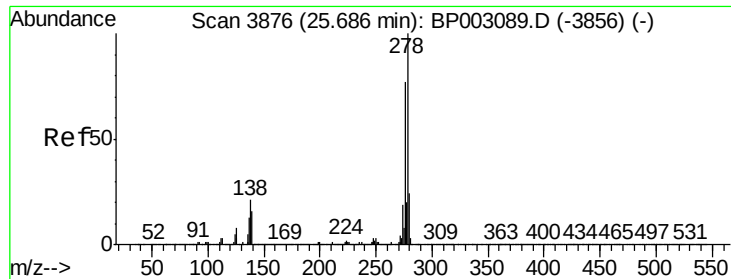
mohammad  
9/3/2020 1:48:24 PM



#90  
Benzo(a)pyrene  
Concen: 28.737 ng  
RT: 23.29 min Scan# 3468  
Delta R.T. 0.01 min  
Lab File: BP003185.D  
Acq: 02 Sep 2020 14:12

Tgt Ion:252 Resp: 2244240  
Ion Ratio Lower Upper  
252 100  
253 23.4 17.4 26.0  
125 10.4 8.2 12.4





#91

Dibenzo(a,h)anthracene

Concen: 4.616 ng

RT: 25.65 min Scan# 3870

Delta R.T. -0.01 min

Lab File: BP003185.D

Acq: 02 Sep 2020 14:12

Instrument :

BNA\_P

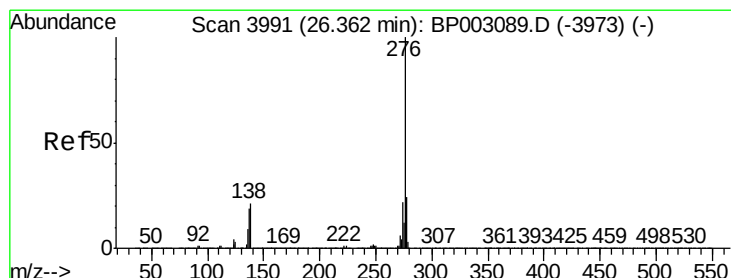
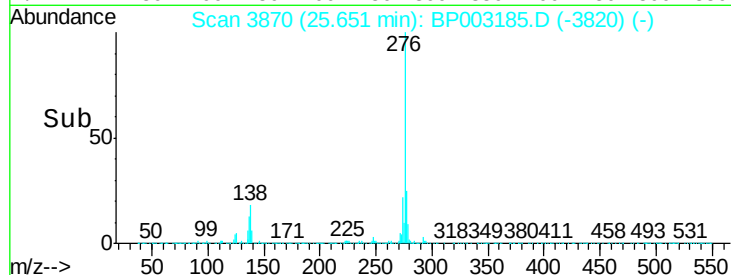
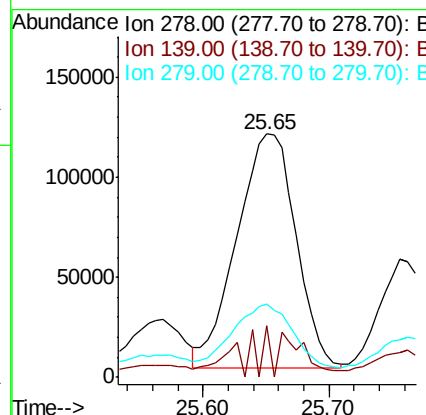
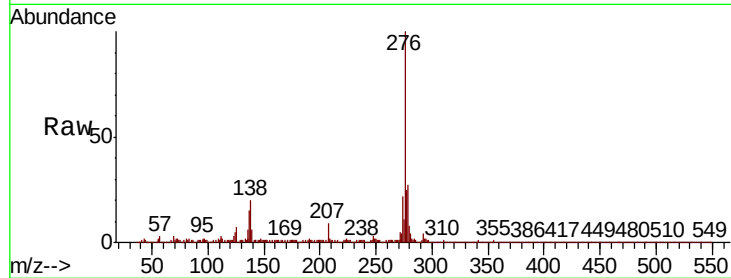
ClientSampleId :

LINDEN-BH-04-CDL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 278   | Resp: | 382952 |
| Ion Ratio | Lower | Upper |        |
| 278       | 100   |       |        |
| 139       | 21.4  | 12.4  | 18.6#  |
| 279       | 30.3  | 19.0  | 28.6#  |

Manual Integrations  
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#92

Benzo(g,h,i)perylene

Concen: 12.403 ng

RT: 26.34 min Scan# 3988

Delta R.T. 0.01 min

Lab File: BP003185.D

Acq: 02 Sep 2020 14:12

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 276   | Resp: | 1032751 |
| Ion Ratio | Lower | Upper |         |
| 276       | 100   |       |         |
| 277       | 24.3  | 19.0  | 28.6    |
| 138       | 20.1  | 16.6  | 24.8    |

