

Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\  
 Data File : BP000377.D  
 Acq On : 23 Sep 2019 21:54  
 Operator : HP/JU  
 Sample : K4980-04  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 SAND-STOCKPILE-1

Manual Integrations  
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Quant Time: Sep 24 05:07:49 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Sep 19 14:44:51 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.79  | 152  | 180367   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.07  | 136  | 647311   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.83  | 164  | 366805   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.33 | 188  | 738550   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 13.99 | 240  | 628450   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.47 | 264  | 722776   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.42  | 112  | 1490110  | 142.62 | ng    | 0.02     |
| 7) Phenol-d6                | 6.43  | 99   | 1860032  | 145.24 | ng    | 0.01     |
| 23) Nitrobenzene-d5         | 7.35  | 82   | 829016   | 82.63  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.63 | 330  | 548382   | 150.73 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.15  | 172  | 1814798  | 89.05  | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.93 | 244  | 2403296  | 80.23  | ng    | 0.00     |

| Target Compounds           | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|----------------------------|-------|------|----------|-------|-------|--------|
| 49) Acenaphthylene         | 9.69  | 152  | 89931    | 2.811 | ng    | 99     |
| 50) Dimethylphthalate      | 9.55  | 163  | 204232   | 8.172 | ng    | 99     |
| 71) Phenanthrene           | 11.35 | 178  | 127788   | 3.453 | ng    | 98     |
| 75) Fluoranthene           | 12.55 | 202  | 219265   | 5.517 | ng    | 98     |
| 78) Pyrene                 | 12.78 | 202  | 313980   | 6.678 | ng    | 98     |
| 81) Benzo(a)anthracene     | 13.98 | 228  | 158106m  | 3.983 | ng    |        |
| 83) Chrysene               | 14.02 | 228  | 148549   | 3.811 | ng    | 98     |
| 86) Indeno(1,2,3-cd)pyrene | 16.95 | 276  | 95862m   | 2.018 | ng    |        |
| 88) Benzo(b)fluoranthene   | 15.04 | 252  | 186461m  | 4.324 | ng    |        |
| 90) Benzo(a)pyrene         | 15.41 | 252  | 151559   | 3.863 | ng    | 97     |
| 92) Benzo(g,h,i)perylene   | 17.39 | 276  | 97210    | 2.585 | ng    | 94     |

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

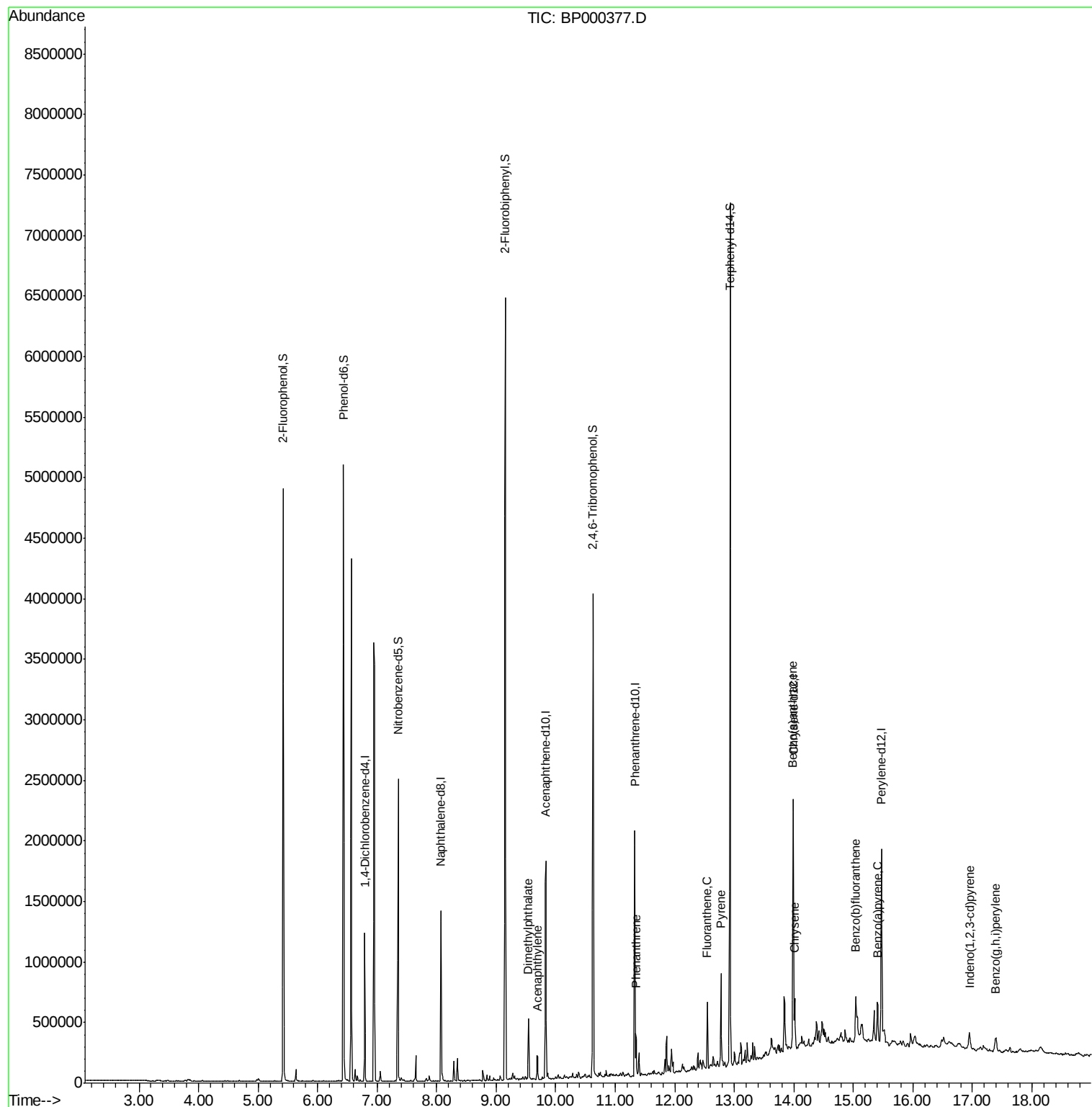
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\  
Data File : BP000377.D  
Acq On : 23 Sep 2019 21:54  
Operator : HP/JU  
Sample : K4980-04  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

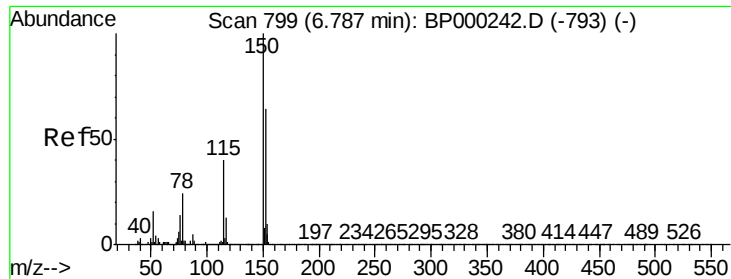
Instrument :  
BNA\_P  
ClientSampleId :  
SAND-STOCKPILE-1

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Quant Time: Sep 24 05:07:49 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Sep 19 14:44:51 2019  
Response via : Initial Calibration





#1

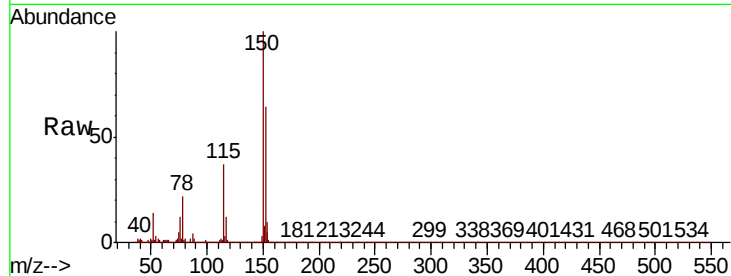
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.79 min Scan# 800  
Delta R.T. 0.01 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

Instrument :  
BNA\_P  
ClientSampleId :  
SAND-STOCKPILE-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 155.1 | 125.2 | 187.8 |
| 115     | 57.9  | 49.7  | 74.5  |

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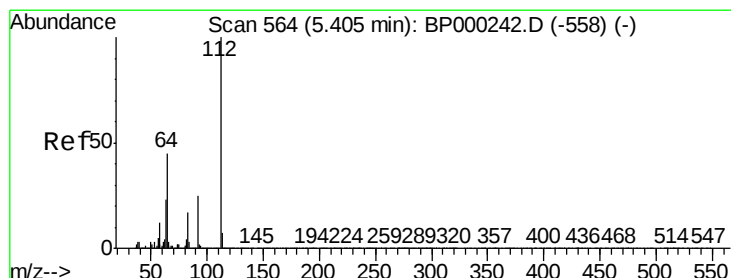
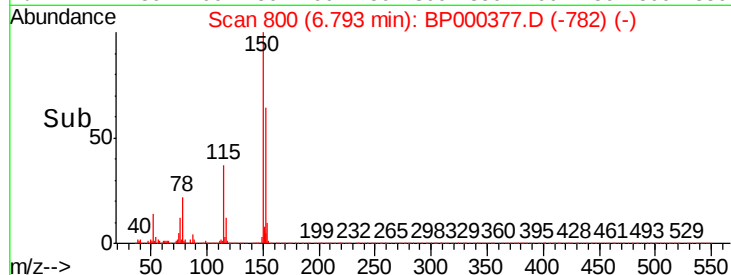
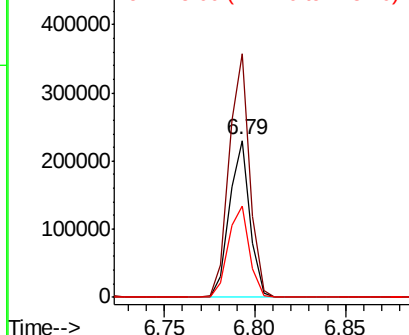


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

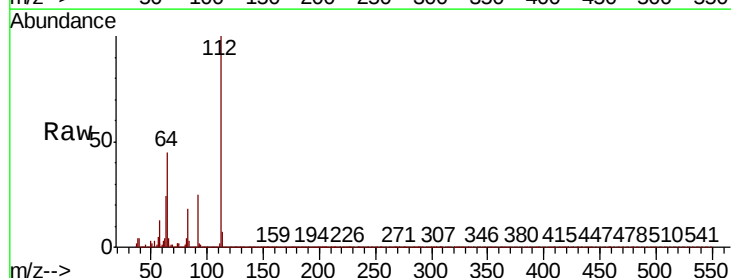
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 142.623 ng  
RT: 5.42 min Scan# 567  
Delta R.T. 0.02 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 45.1  | 36.2  | 54.4  |
| 63      | 23.7  | 18.3  | 27.5  |

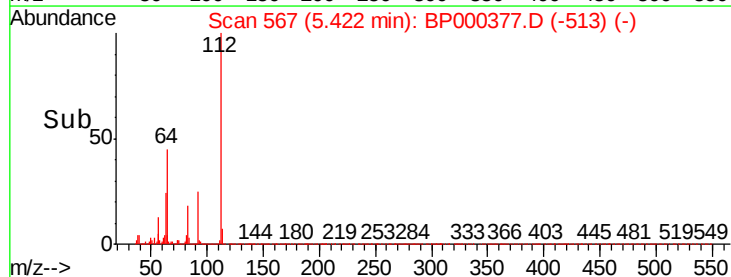
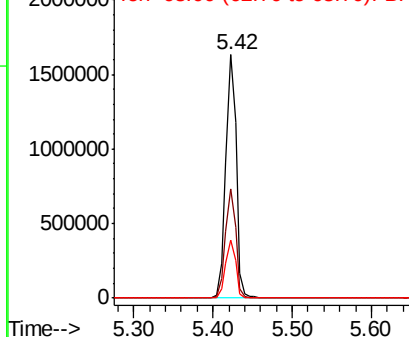


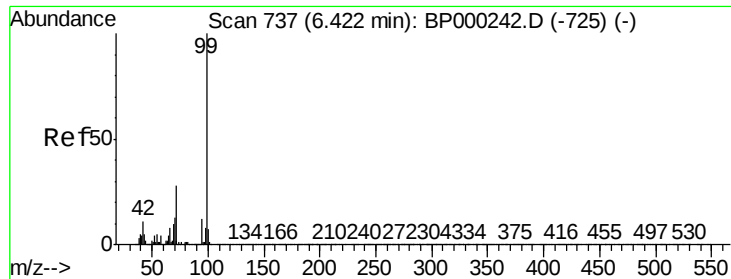
Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BP0

Ion 63.00 (62.70 to 63.70): BP0





#7

Phenol-d6

Concen: 145.237 ng

RT: 6.43 min Scan# 739

Delta R.T. 0.01 min

Lab File: BP000377.D

Acq: 23 Sep 2019 21:54

Instrument :

BNA\_P

ClientSampleId :

SAND-STOCKPILE-1

Tot Ion: 99 Resp: 1860032

Ion Ratio Lower Upper

99 100

42 11.3 8.5 12.7

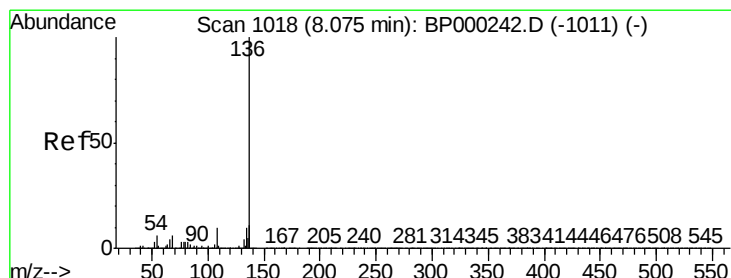
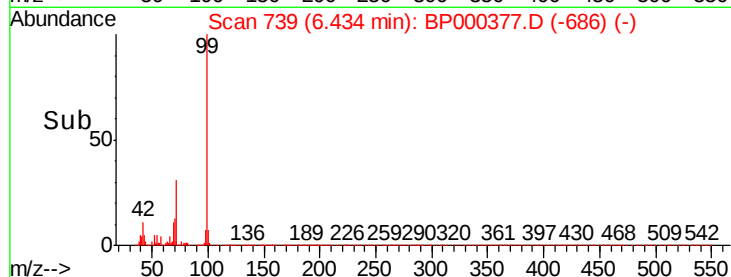
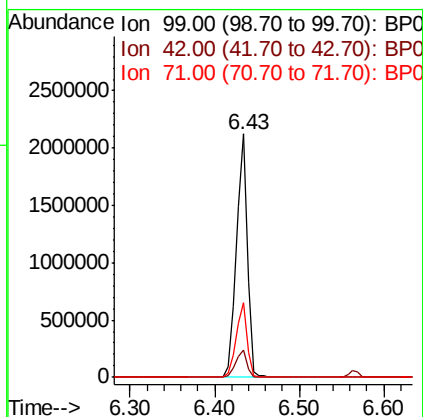
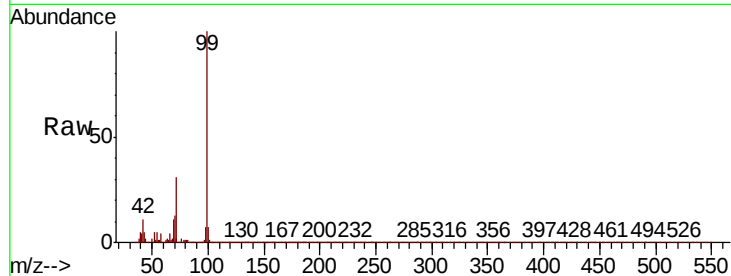
71 30.7 22.6 34.0

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#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.07 min Scan# 1017

Delta R.T. -0.01 min

Lab File: BP000377.D

Acq: 23 Sep 2019 21:54

Tgt Ion: 136 Resp: 647311

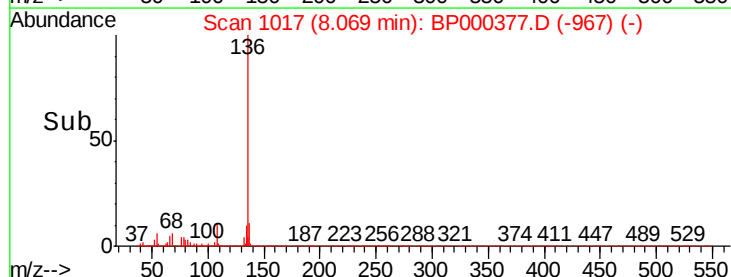
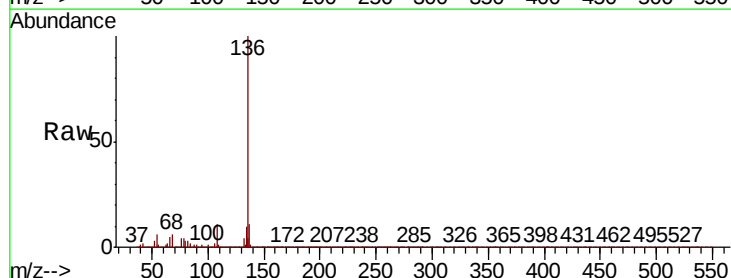
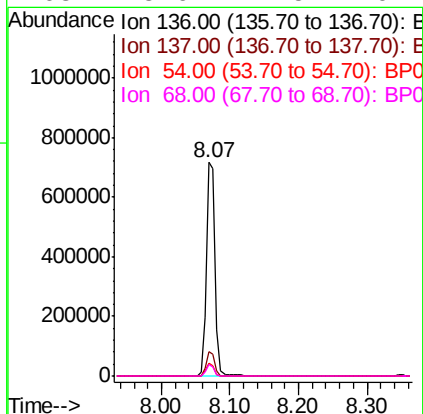
Ion Ratio Lower Upper

136 100

137 11.1 8.6 13.0

54 5.9 4.5 6.7

68 5.6 4.5 6.7





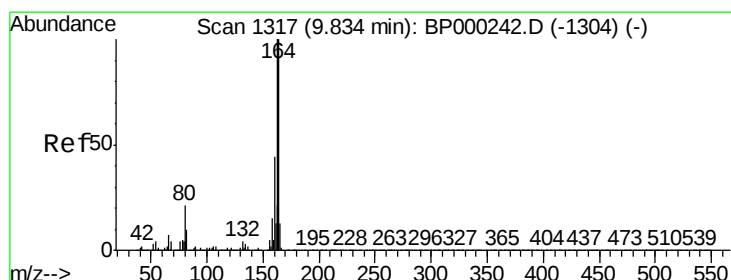
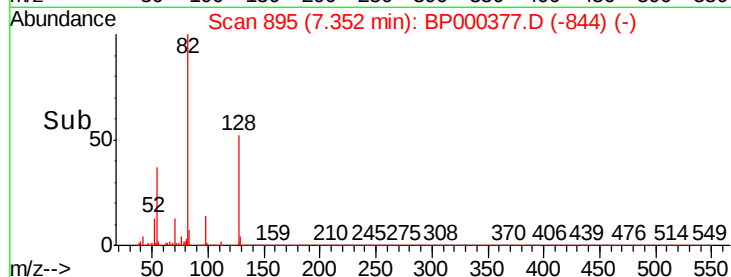
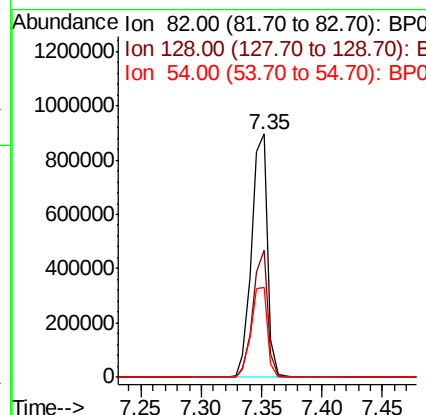
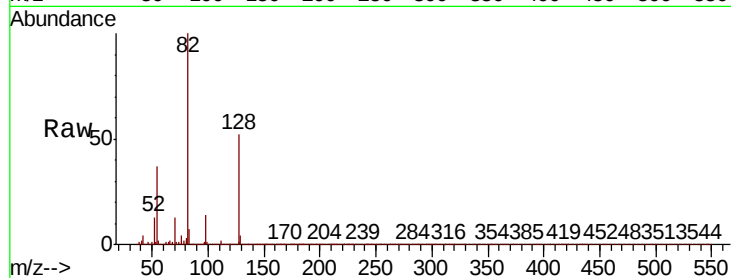
#23  
 Nitrobenzene-d5  
 Concen: 82.631 ng  
 RT: 7.35 min Scan# 895  
 Delta R.T. -0.00 min  
 Lab File: BP000377.D  
 Acq: 23 Sep 2019 21:54

Instrument :  
 BNA\_P  
 ClientSampleId :  
 SAND-STOCKPILE-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 52.1  | 40.7  | 61.1  |
| 54      | 37.0  | 30.1  | 45.1  |

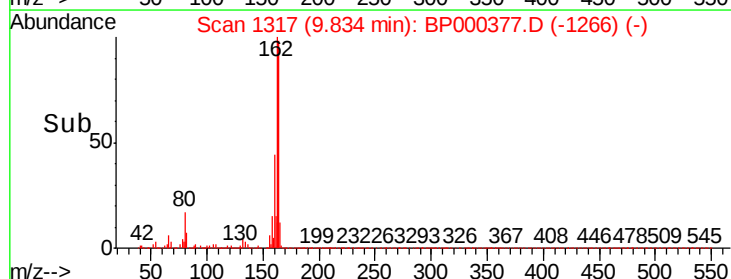
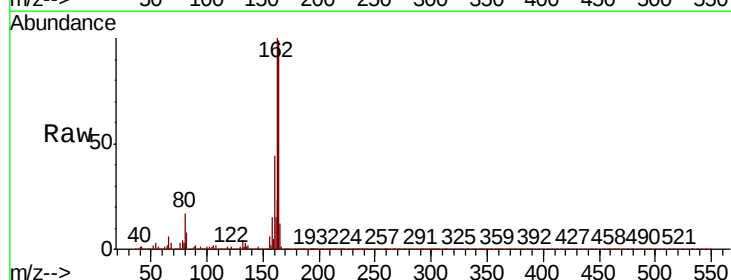
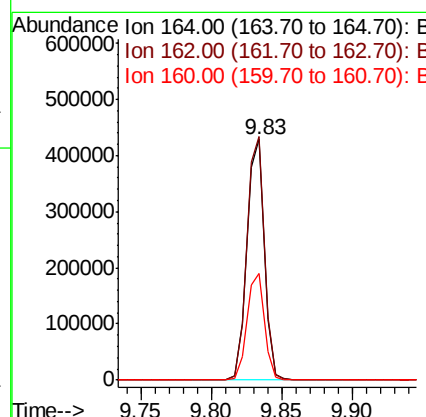
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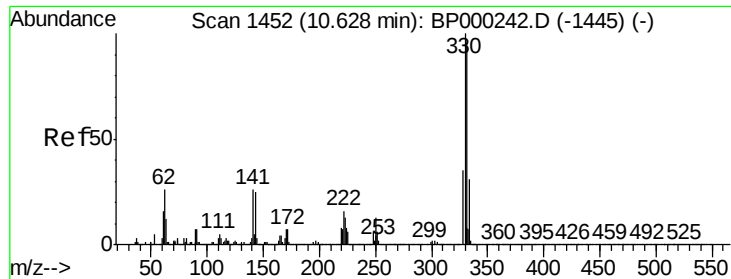
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#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 9.83 min Scan# 1317  
 Delta R.T. -0.00 min  
 Lab File: BP000377.D  
 Acq: 23 Sep 2019 21:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 101.0 | 79.9  | 119.9 |
| 160     | 44.3  | 35.6  | 53.4  |





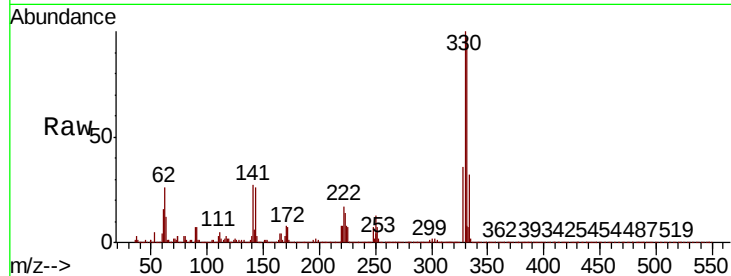
#42  
2,4,6-Tribromophenol  
Concen: 150.728 ng  
RT: 10.63 min Scan# 1452  
Delta R.T. -0.00 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

Instrument :  
BNA\_P  
ClientSampleId :  
SAND-STOCKPILE-1

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 548382 |       |       |
| 332     | 96.8  | 76.6   | 115.0 |       |
| 141     | 30.5  | 26.5   | 39.7  |       |

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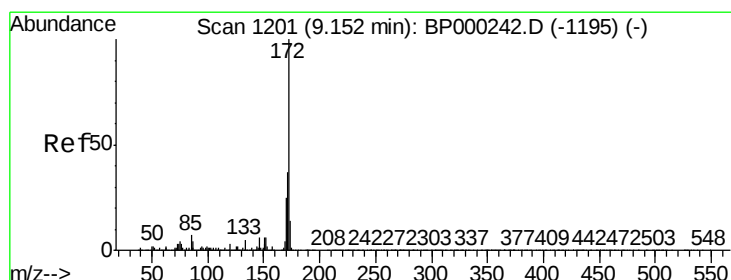
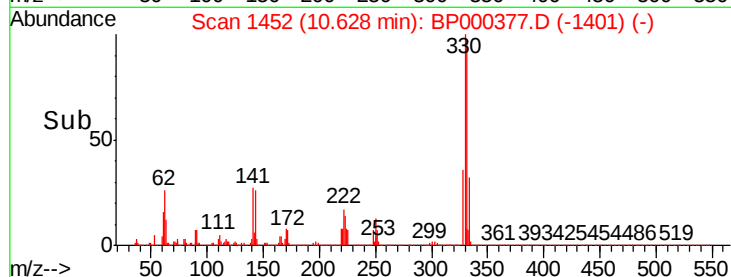
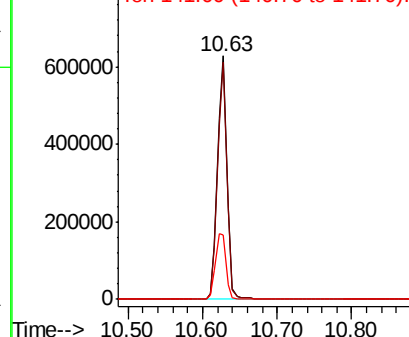


Abundance

Ion 329.80 (329.50 to 330.50): E

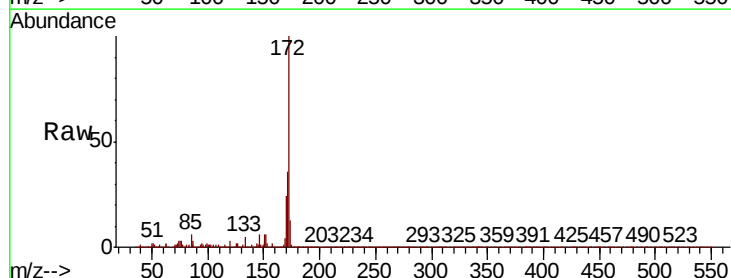
Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



#45  
2-Fluorobiphenyl  
Concen: 89.047 ng  
RT: 9.15 min Scan# 1201  
Delta R.T. -0.00 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 172     | 100   | 1814798 |       |       |
| 171     | 36.4  | 29.8    | 44.6  |       |
| 170     | 24.3  | 19.8    | 29.6  |       |

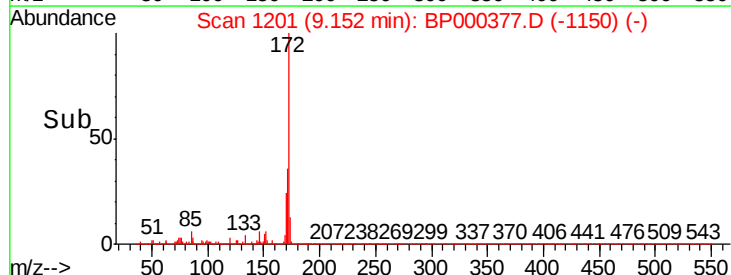
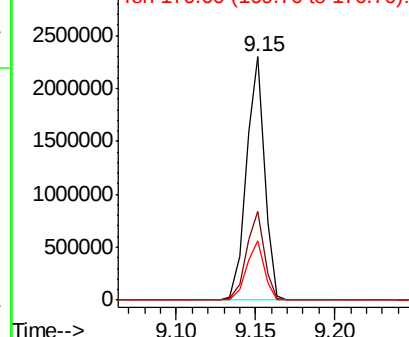


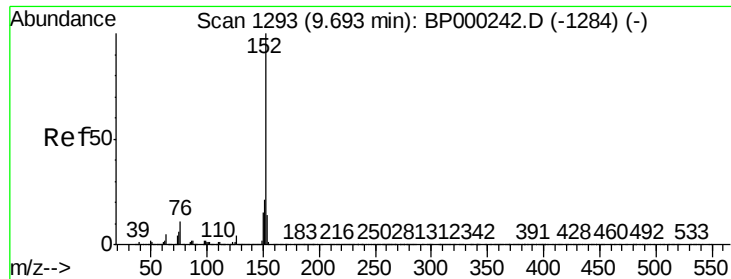
Abundance

Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E





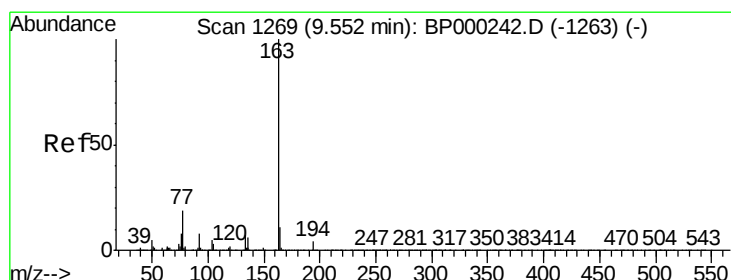
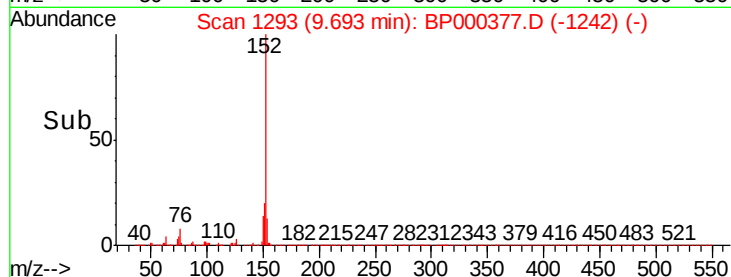
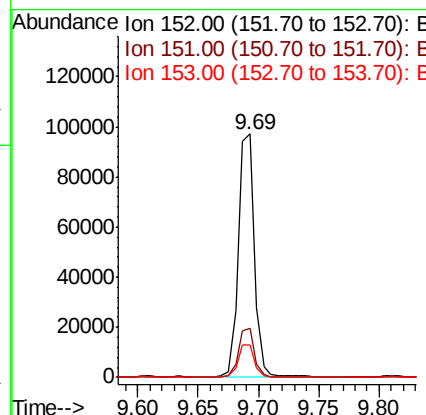
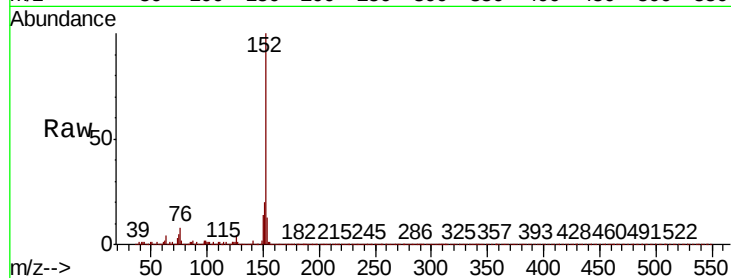
#49  
Acenaphthylene  
Concen: 2.811 ng  
RT: 9.69 min Scan# 1293  
Delta R.T. -0.00 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

Instrument :  
BNA\_P  
ClientSampleId :  
SAND-STOCKPILE-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 20.0  | 16.4  | 24.6  |
| 153     | 13.2  | 11.0  | 16.4  |

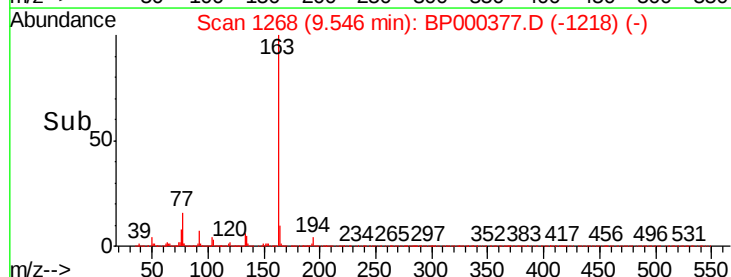
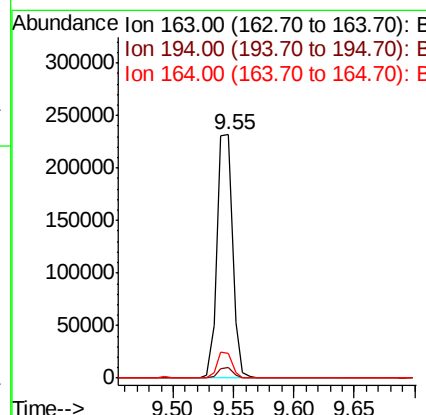
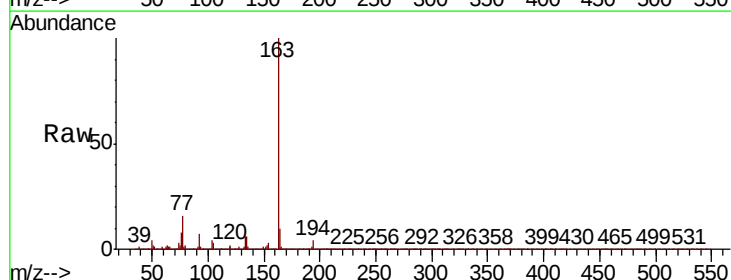
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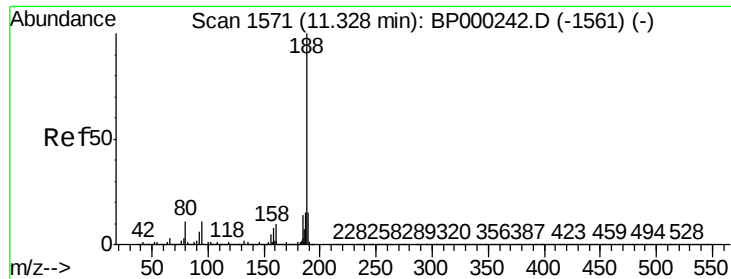
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#50  
Dimethylphthalate  
Concen: 8.172 ng  
RT: 9.55 min Scan# 1268  
Delta R.T. -0.01 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.4   | 3.4   | 5.0   |
| 164     | 10.1  | 8.5   | 12.7  |





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.33 min Scan# 1571

Delta R.T. -0.00 min

Lab File: BP000377.D

Acq: 23 Sep 2019 21:54

Instrument :

BNA\_P

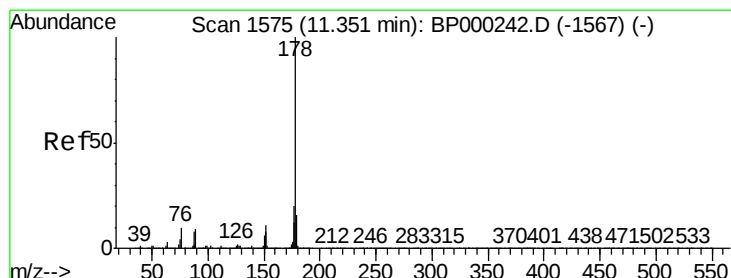
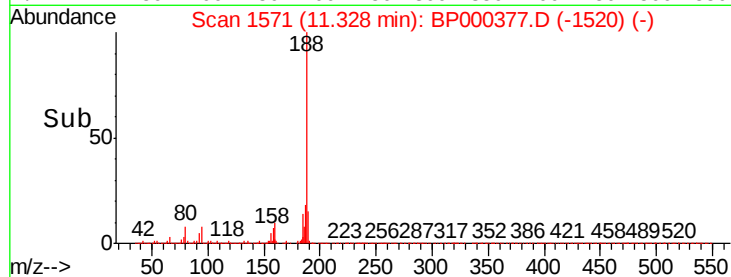
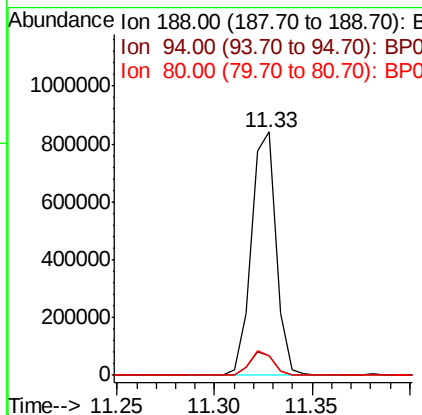
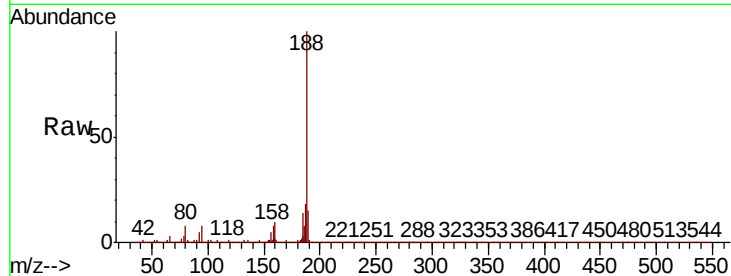
ClientSampleId :

SAND-STOCKPILE-1

|           |     |       |        |
|-----------|-----|-------|--------|
| Tot Ion:  | 188 | Resp: | 738550 |
| Ion Ratio |     | Lower | Upper  |
| 188       | 100 |       |        |
| 94        | 8.1 | 8.5   | 12.7#  |
| 80        | 8.2 | 8.6   | 13.0#  |

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#71

Phenanthrene

Concen: 3.453 ng

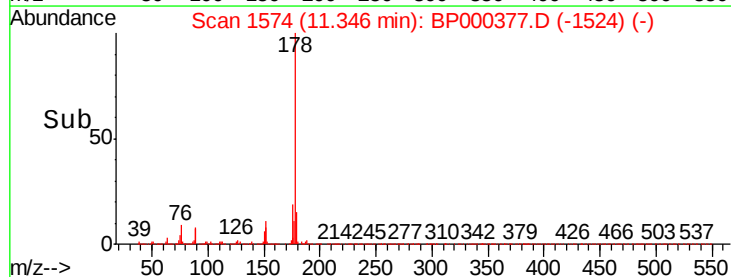
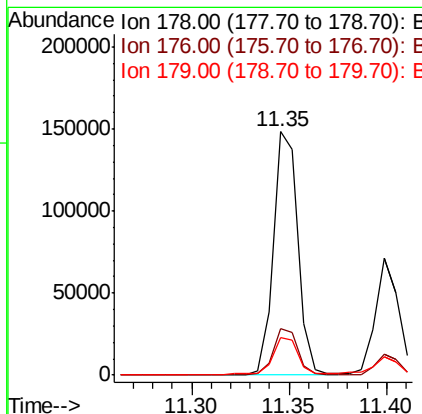
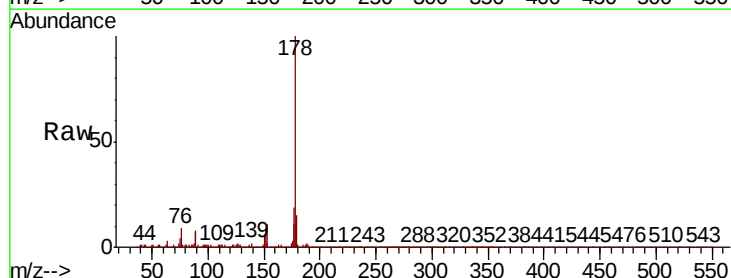
RT: 11.35 min Scan# 1574

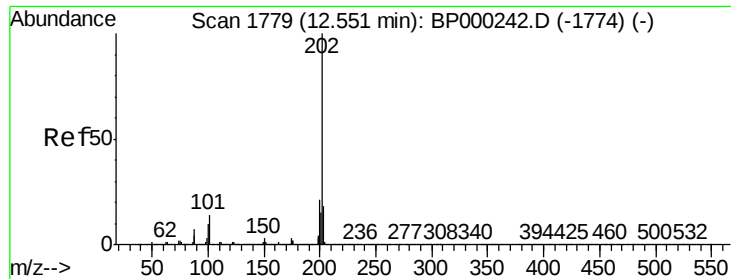
Delta R.T. -0.01 min

Lab File: BP000377.D

Acq: 23 Sep 2019 21:54

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 178  | Resp: | 127788 |
| Ion Ratio |      | Lower | Upper  |
| 178       | 100  |       |        |
| 176       | 18.9 | 15.8  | 23.8   |
| 179       | 15.3 | 12.7  | 19.1   |





#75

Fluoranthene

Concen: 5.517 ng

RT: 12.55 min Scan# 1778

Delta R.T. -0.01 min

Lab File: BP000377.D

Acq: 23 Sep 2019 21:54

Instrument :

BNA\_P

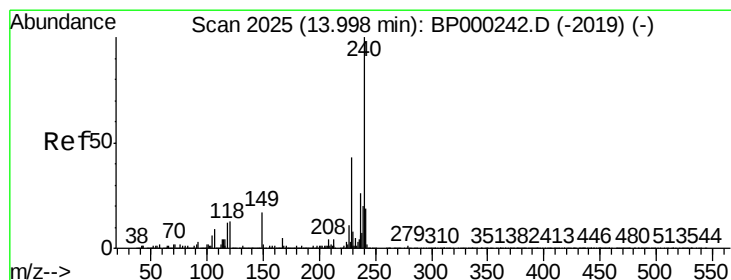
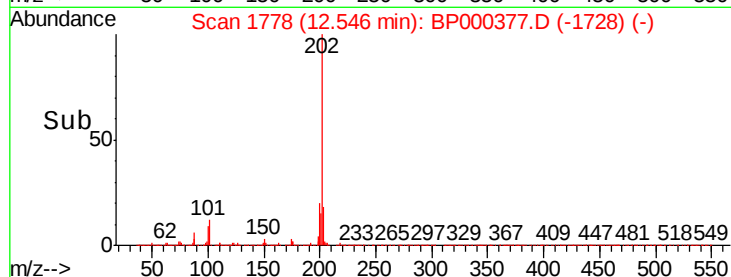
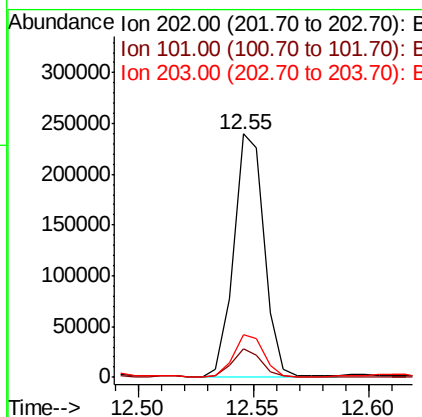
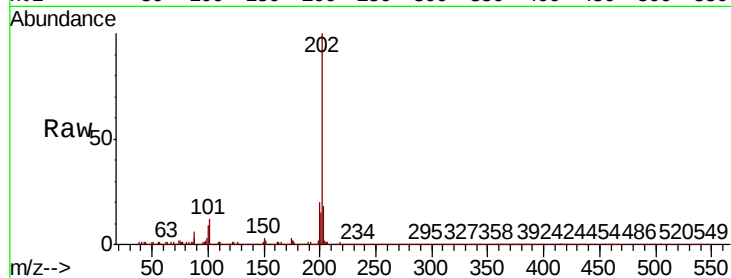
ClientSampleId :

SAND-STOCKPILE-1

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 219265 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 12.0  | 0.0   | 33.9   |
| 203       | 17.7  | 0.0   | 38.0   |

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#76

Chrysene-d12

Concen: 20.000 ng

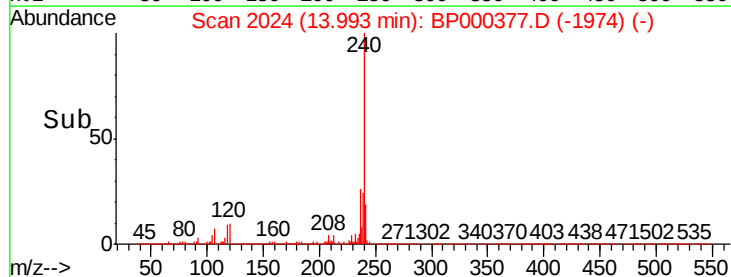
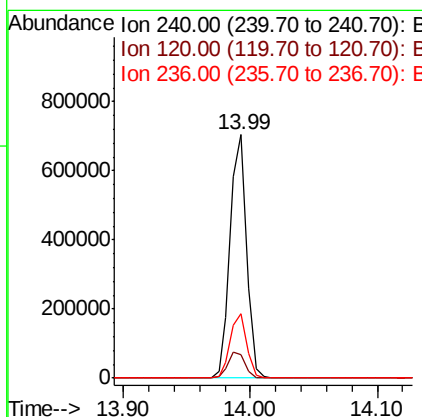
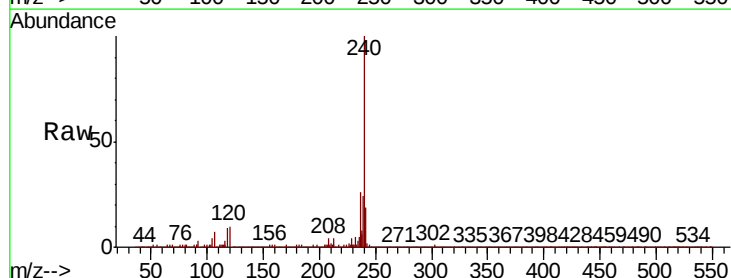
RT: 13.99 min Scan# 2024

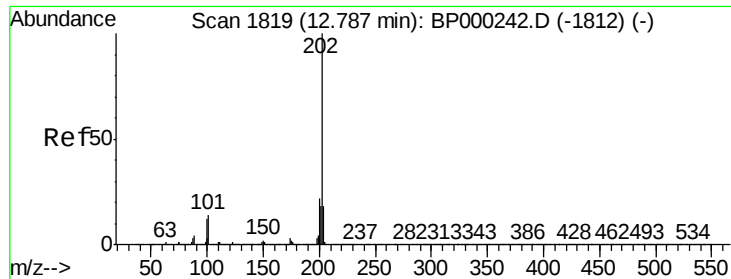
Delta R.T. -0.01 min

Lab File: BP000377.D

Acq: 23 Sep 2019 21:54

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 628450 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 9.9   | 10.4  | 15.6#  |
| 236       | 26.3  | 21.0  | 31.6   |





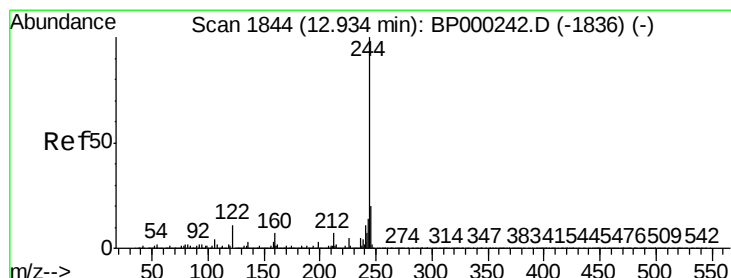
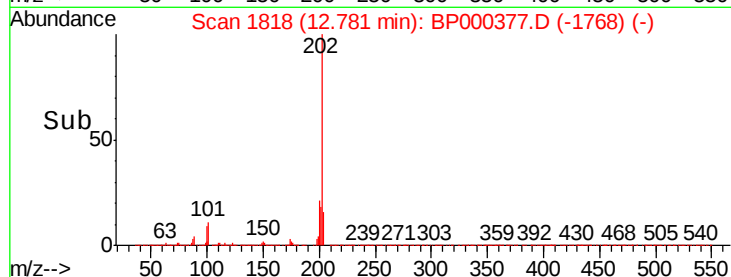
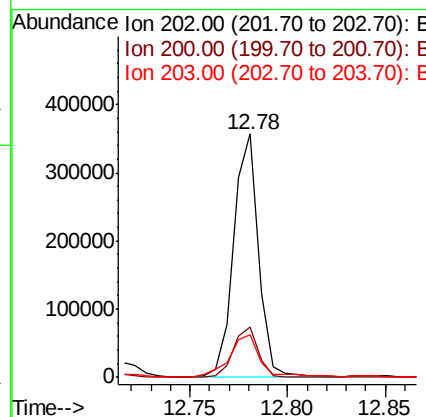
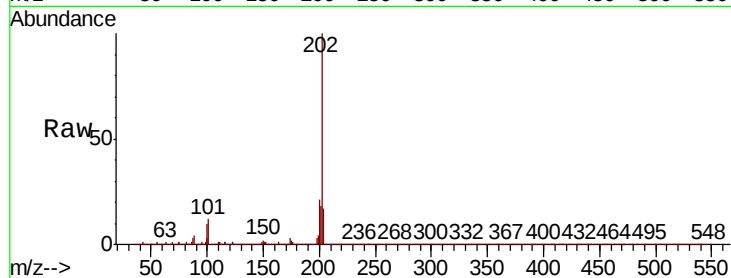
#78  
Pvrene  
Concen: 6.678 ng  
RT: 12.78 min Scan# 1818  
Delta R.T. -0.01 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

Instrument :  
BNA\_P  
ClientSampleId :  
SAND-STOCKPILE-1

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 313980 |       |       |
| 200     | 20.9  |        | 17.5  | 26.3  |
| 203     | 17.3  |        | 14.3  | 21.5  |

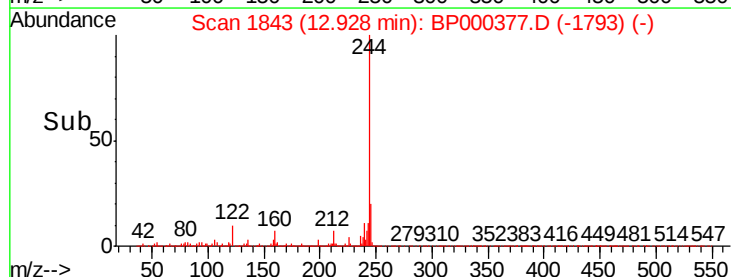
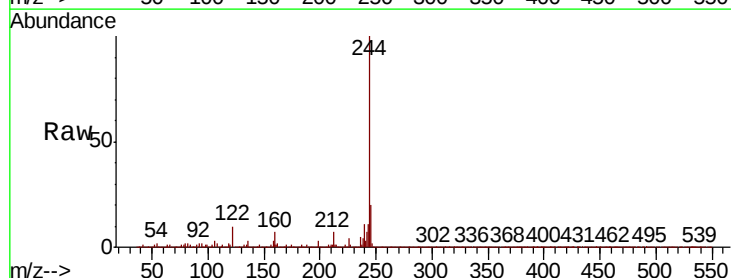
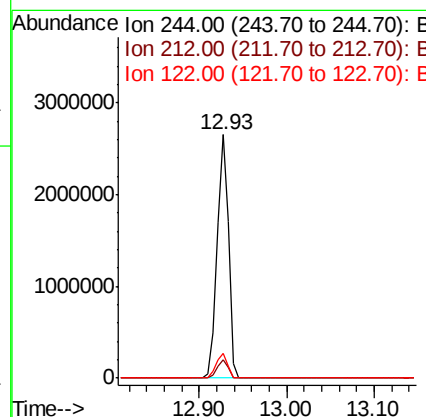
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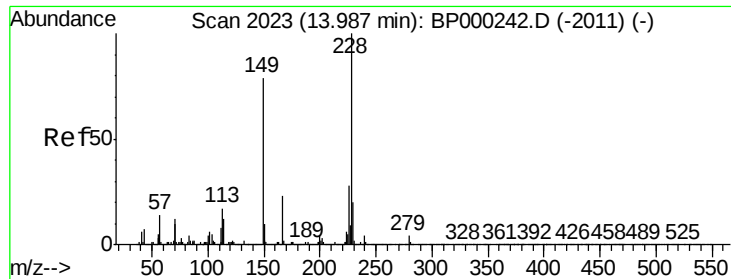
mohammad  
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#79  
Terphenyl-d14  
Concen: 80.225 ng  
RT: 12.93 min Scan# 1843  
Delta R.T. -0.01 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 244     | 100   | 2403296 |       |       |
| 212     | 7.4   |         | 5.9   | 8.9   |
| 122     | 10.2  |         | 9.0   | 13.4  |





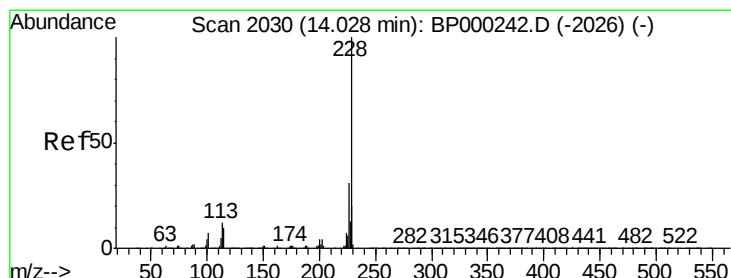
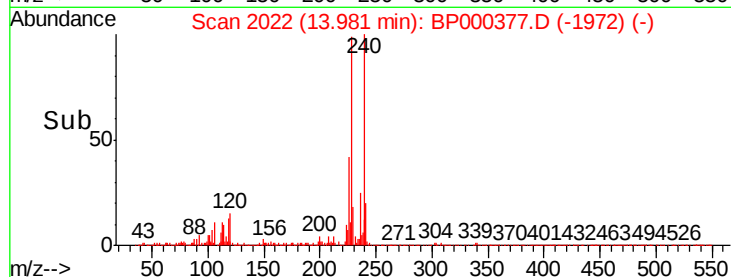
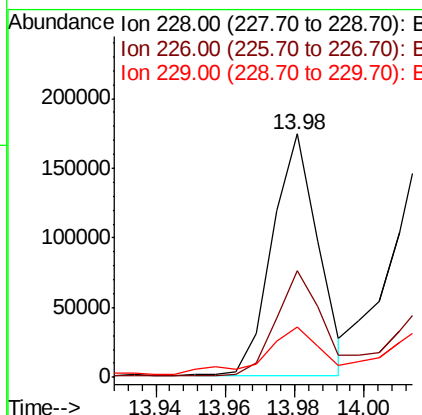
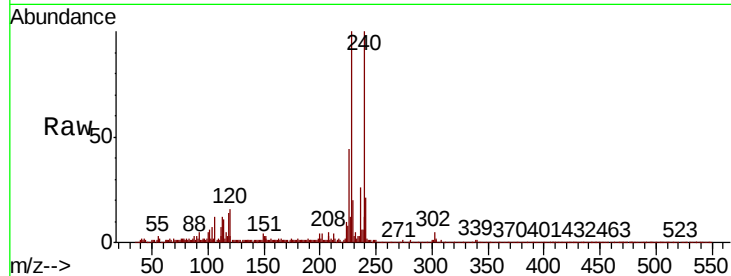
#81  
Benzo(a)anthracene  
Concen: 3.983 ng m  
RT: 13.98 min Scan# 2022  
Delta R.T. -0.01 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

Instrument :  
BNA\_P  
ClientSampleId :  
SAND-STOCKPILE-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 43.7  | 22.2  | 33.4# |
| 229     | 20.5  | 16.0  | 24.0  |

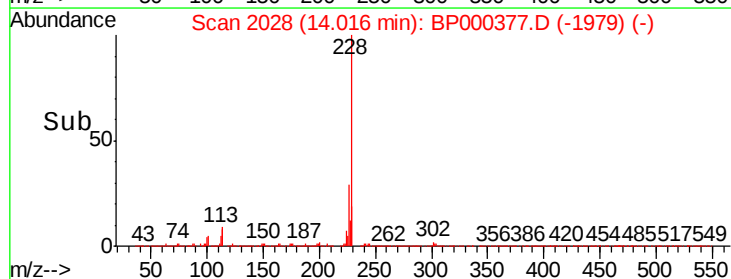
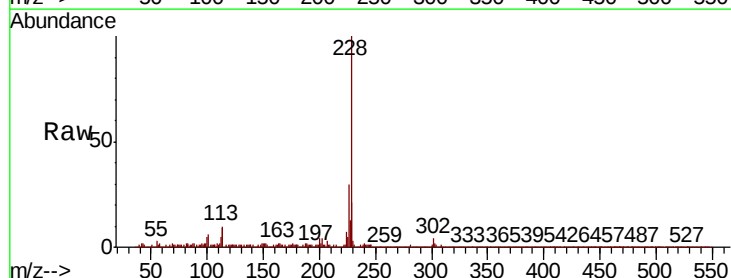
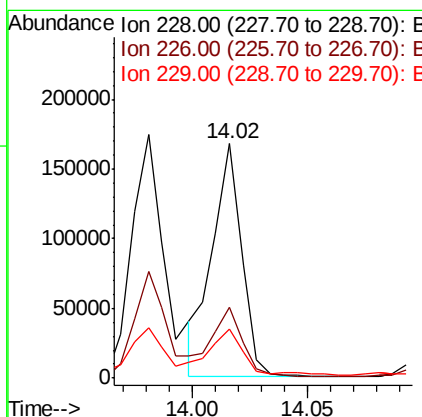
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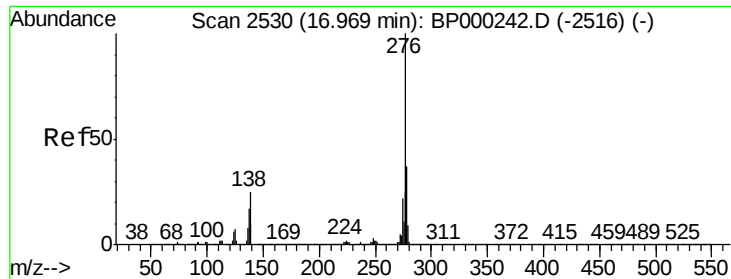
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#83  
Chrysene  
Concen: 3.811 ng  
RT: 14.02 min Scan# 2028  
Delta R.T. -0.01 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.1  | 24.9  | 37.3  |
| 229     | 21.2  | 16.2  | 24.2  |





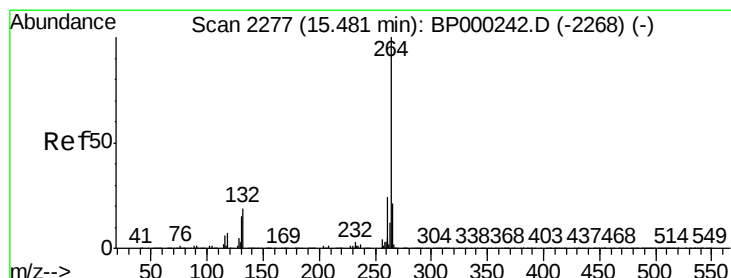
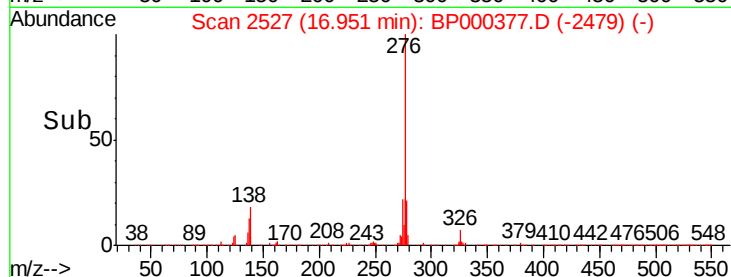
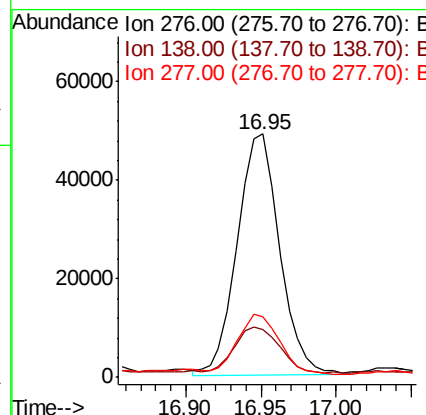
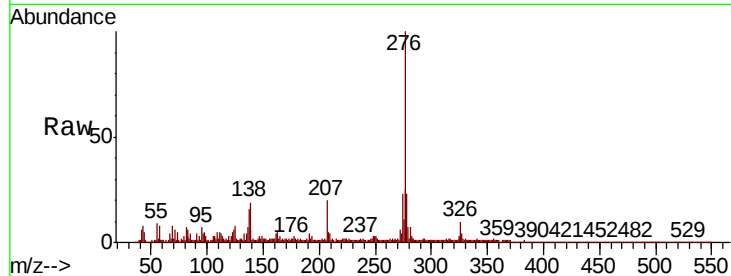
#86  
Indeno(1,2,3-cd)pyrene  
Concen: 2.018 ng/ml  
RT: 16.95 min Scan# 2527  
Delta R.T. -0.02 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

Instrument :  
BNA\_P  
ClientSampleId :  
SAND-STOCKPILE-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 4.9   | 22.6  | 33.8# |
| 277     | 5.6   | 20.4  | 30.6# |

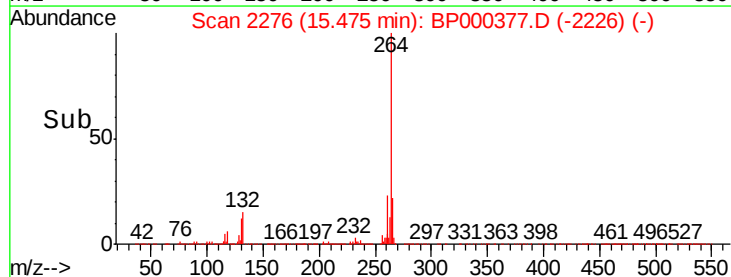
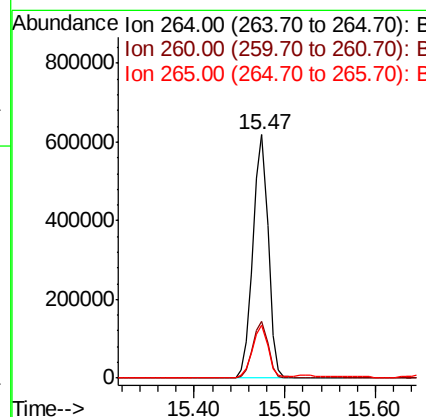
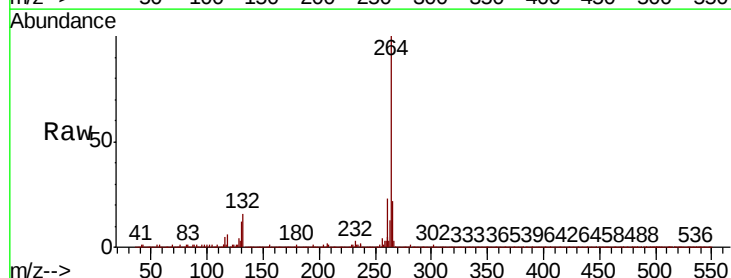
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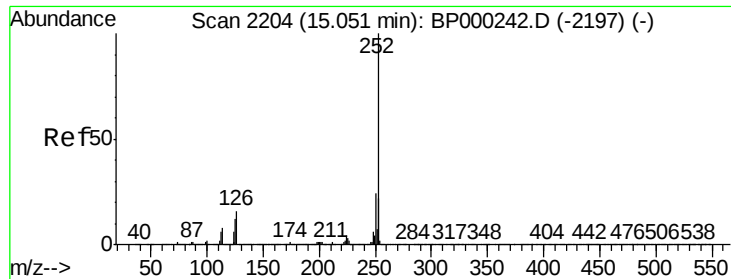
mohammad  
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#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.47 min Scan# 2276  
Delta R.T. -0.01 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.5  | 18.9  | 28.3  |
| 265     | 21.8  | 17.2  | 25.8  |





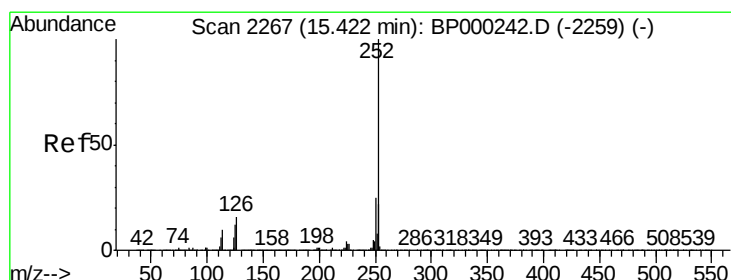
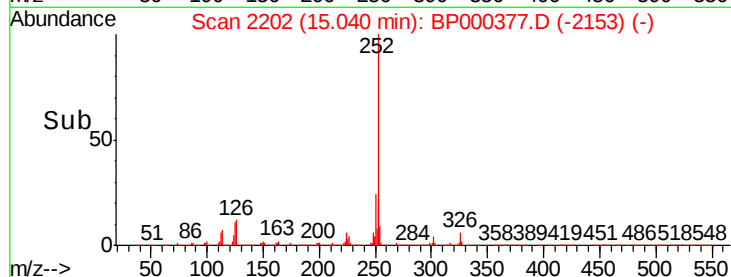
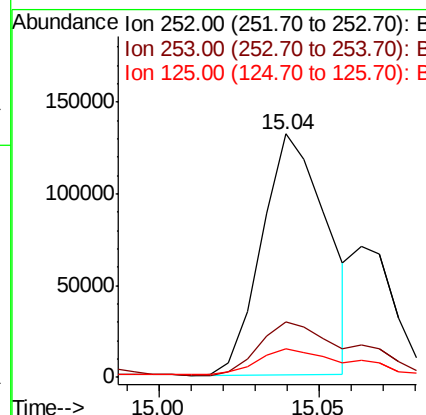
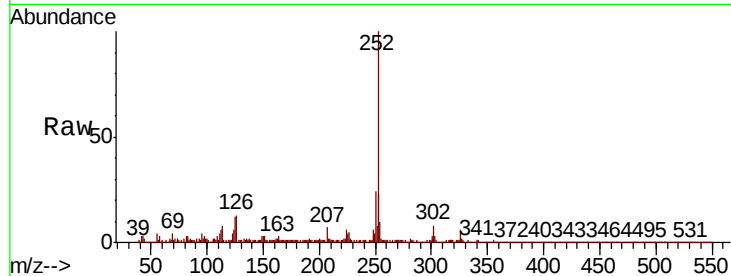
#88  
Benzo(b)fluoranthene  
Concen: 4.324 ng m  
RT: 15.04 min Scan# 2202  
Delta R.T. -0.01 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

Instrument :  
BNA\_P  
ClientSampleId :  
SAND-STOCKPILE-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.9  | 17.8  | 26.6  |
| 125     | 12.0  | 9.5   | 14.3  |

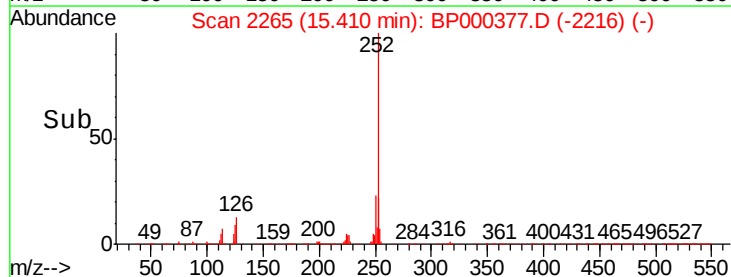
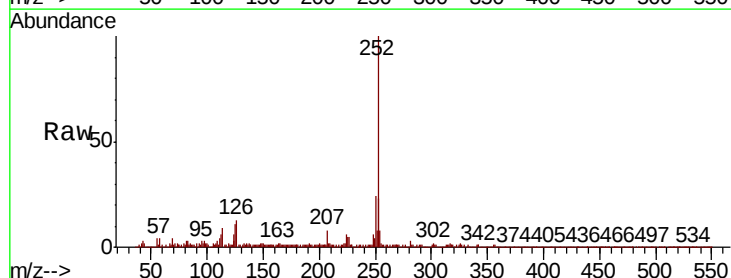
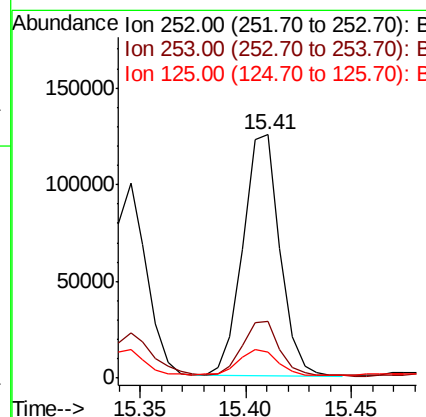
Manual Integrations  
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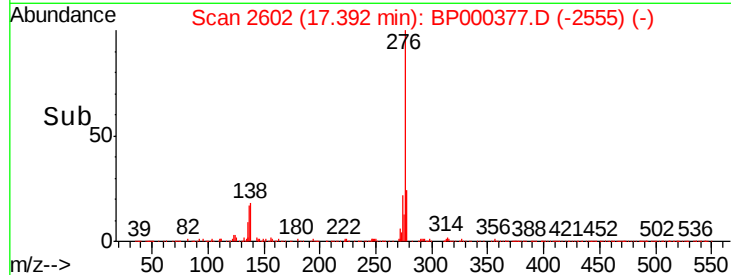
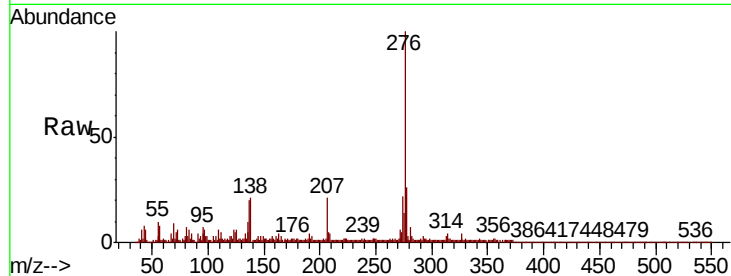
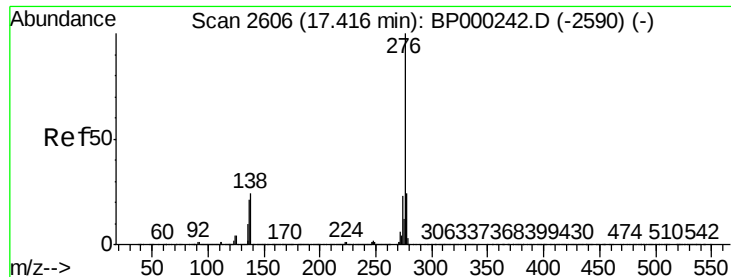
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#90  
Benzo(a)pyrene  
Concen: 3.863 ng  
RT: 15.41 min Scan# 2265  
Delta R.T. -0.01 min  
Lab File: BP000377.D  
Acq: 23 Sep 2019 21:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.1  | 17.7  | 26.5  |
| 125     | 10.5  | 10.0  | 15.0  |





#92  
 Benzo(a,h,i)perylene  
 Concen: 2.585 ng  
 RT: 17.39 min Scan# 2602  
 Delta R.T. -0.02 min  
 Lab File: BP000377.D  
 Acq: 23 Sep 2019 21:54

Instrument :  
 BNA\_P  
 ClientSampleId :  
 SAND-STOCKPILE-1

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 276   | Resp: | 97210 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 277       | 25.8  | 19.1  | 28.7  |
| 138       | 20.8  | 19.5  | 29.3  |

Manual Integrations  
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