

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051619\  
 Data File : BF114310.D  
 Acq On : 16 May 2019 15:48  
 Operator : JU/SJ  
 Sample : K2837-02MS  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-COMPMS

Quant Time: May 17 08:01:46 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri May 10 15:56:46 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.85  | 152  | 251674   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.13  | 136  | 975482   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.89  | 164  | 456479   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.37 | 188  | 822277   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 14.02 | 240  | 454988   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.52 | 264  | 564855   | 20.00 | ng    | 0.01     |

## System Monitoring Compounds

|                          |       |     |         |        |    |      |
|--------------------------|-------|-----|---------|--------|----|------|
| 5) 2-Fluorophenol        | 5.50  | 112 | 1553729 | 99.35  | ng | 0.02 |
| 7) Phenol-d6             | 6.50  | 99  | 1888445 | 102.10 | ng | 0.01 |
| 23) Nitrobenzene-d5      | 7.42  | 82  | 1409136 | 81.07  | ng | 0.00 |
| 42) 2,4,6-Tribromophenol | 10.68 | 330 | 493853  | 104.65 | ng | 0.00 |
| 45) 2-Fluorobiphenyl     | 9.21  | 172 | 2323133 | 76.98  | ng | 0.00 |
| 79) Terphenyl-d14        | 12.96 | 244 | 1867677 | 84.62  | ng | 0.00 |

## Target Compounds

|                                |      |     |         |        |    | Qvalue |
|--------------------------------|------|-----|---------|--------|----|--------|
| 2) 1,4-Dioxane                 | 2.83 | 88  | 271259  | 31.556 | ng | # 82   |
| 3) Pyridine                    | 3.54 | 79  | 443549  | 18.728 | ng | 99     |
| 4) n-Nitrosodimethylamine      | 3.46 | 42  | 373466  | 32.700 | ng | 96     |
| 6) Aniline                     | 6.52 | 93  | 114664  | 4.291  | ng | # 1    |
| 8) 2-Chlorophenol              | 6.65 | 128 | 661956  | 39.649 | ng | 92     |
| 9) Benzaldehyde                | 6.40 | 77  | 59573   | 4.601  | ng | 97     |
| 10) Phenol                     | 6.52 | 94  | 691860  | 31.796 | ng | 90     |
| 11) bis(2-Chloroethyl)ether    | 6.59 | 93  | 679533  | 41.136 | ng | 99     |
| 12) 1,3-Dichlorobenzene        | 6.79 | 146 | 560095  | 29.886 | ng | 97     |
| 13) 1,4-Dichlorobenzene        | 6.87 | 146 | 572612  | 30.321 | ng | 97     |
| 14) 1,2-Dichlorobenzene        | 7.02 | 146 | 541359  | 31.377 | ng | 99     |
| 15) Benzyl Alcohol             | 7.00 | 79  | 553401  | 38.360 | ng | 99     |
| 16) 2,2'-oxybis(1-Chloropropan | 7.13 | 45  | 1204593 | 37.608 | ng | 76     |
| 17) 2-Methylphenol             | 7.12 | 107 | 519960  | 37.913 | ng | # 90   |
| 18) Hexachloroethane           | 7.36 | 117 | 204611  | 28.865 | ng | 97     |
| 19) n-Nitroso-di-n-propylamine | 7.27 | 70  | 481480  | 41.067 | ng | 96     |
| 20) 3+4-Methylphenols          | 7.27 | 107 | 685707  | 43.274 | ng | # 58   |
| 22) Acetophenone               | 7.26 | 105 | 926392  | 42.868 | ng | # 89   |
| 24) Nitrobenzene               | 7.43 | 77  | 731757  | 41.334 | ng | 97     |
| 25) Isophorone                 | 7.67 | 82  | 1340567 | 41.585 | ng | 99     |
| 26) 2-Nitrophenol              | 7.75 | 139 | 374652  | 43.619 | ng | 99     |
| 27) 2,4-Dimethylphenol         | 7.79 | 122 | 596695  | 44.232 | ng | 99     |
| 28) bis(2-Chloroethoxy)methane | 7.87 | 93  | 870154  | 41.601 | ng | 97     |
| 29) 2,4-Dichlorophenol         | 8.00 | 162 | 556810  | 41.451 | ng | 98     |
| 30) 1,2,4-Trichlorobenzene     | 8.07 | 180 | 539063  | 35.291 | ng | 98     |
| 31) Naphthalene                | 8.15 | 128 | 1791578 | 39.318 | ng | 98     |
| 32) Benzoic acid               | 7.93 | 122 | 325456  | 35.907 | ng | 99     |
| 33) 4-Chloroaniline            | 8.21 | 127 | 69038   | 3.325  | ng | 96     |
| 34) Hexachlorobutadiene        | 8.27 | 225 | 275586  | 31.708 | ng | 99     |
| 35) Caprolactam                | 8.58 | 113 | 101411  | 23.153 | ng | 97     |
| 36) 4-Chloro-3-methylphenol    | 8.70 | 107 | 579550  | 42.862 | ng | 97     |
| 37) 2-Methylnaphthalene        | 8.85 | 142 | 1267148 | 43.102 | ng | 98     |
| 38) 1-Methylnaphthalene        | 8.95 | 142 | 1186359 | 42.851 | ng | 100    |
| 40) 1,2,4,5-Tetrachlorobenzene | 9.02 | 216 | 558208  | 40.369 | ng | 99     |

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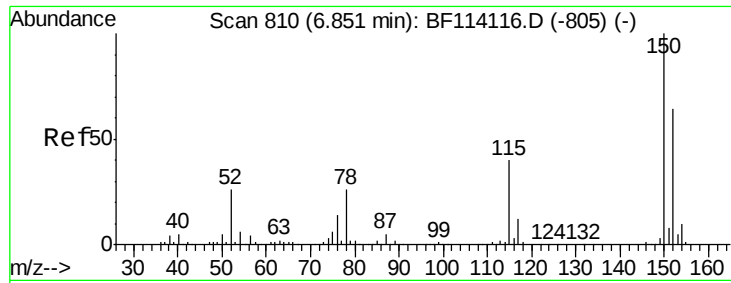
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-COMPMS

Quant Time: May 17 08:01:46 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri May 10 15:56:46 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 41) Hexachlorocyclopentadiene  | 9.00  | 237  | 348473   | 55.493 | ng    | 98       |
| 43) 2,4,6-Trichlorophenol      | 9.13  | 196  | 378938   | 39.842 | ng    | 99       |
| 44) 2,4,5-Trichlorophenol      | 9.18  | 196  | 402513   | 41.266 | ng    | 98       |
| 46) 1,1'-Biphenyl              | 9.31  | 154  | 1512582  | 41.017 | ng    | 99       |
| 47) 2-Chloronaphthalene        | 9.33  | 162  | 1172574  | 39.509 | ng    | 99       |
| 48) 2-Nitroaniline             | 9.43  | 65   | 393079   | 37.346 | ng    | 99       |
| 49) Acenaphthylene             | 9.75  | 152  | 1847995  | 40.940 | ng    | 99       |
| 50) Dimethylphthalate          | 9.60  | 163  | 1361236  | 40.622 | ng    | 99       |
| 51) 2,6-Dinitrotoluene         | 9.67  | 165  | 304862   | 41.018 | ng    | 96       |
| 52) Acenaphthene               | 9.92  | 154  | 1084054  | 39.136 | ng    | 99       |
| 53) 3-Nitroaniline             | 9.85  | 138  | 43909    | 4.759  | ng    | 98       |
| 54) 2,4-Dinitrophenol          | 9.96  | 184  | 258111   | 69.986 | ng    | 96       |
| 55) Dibenzofuran               | 10.09 | 168  | 1583432  | 38.984 | ng    | 98       |
| 56) 4-Nitrophenol              | 10.03 | 139  | 325273   | 49.852 | ng    | 97       |
| 57) 2,4-Dinitrotoluene         | 10.09 | 165  | 382542   | 37.920 | ng    | 94       |
| 58) Fluorene                   | 10.44 | 166  | 1250962  | 39.874 | ng    | 98       |
| 59) 2,3,4,6-Tetrachlorophenol  | 10.22 | 232  | 329760   | 39.182 | ng    | 99       |
| 60) Diethylphthalate           | 10.30 | 149  | 1307073  | 38.389 | ng    | 99       |
| 61) 4-Chlorophenyl-phenylether | 10.43 | 204  | 604076   | 39.203 | ng    | 97       |
| 62) 4-Nitroaniline             | 10.46 | 138  | 265915   | 27.428 | ng    | 93       |
| 63) Azobenzene                 | 10.59 | 77   | 1301323  | 39.486 | ng    | 100      |
| 65) 4,6-Dinitro-2-methylphenol | 10.50 | 198  | 161691   | 40.923 | ng    | 88       |
| 66) n-Nitrosodiphenylamine     | 10.55 | 169  | 1087288  | 43.568 | ng    | 99       |
| 67) 4-Bromophenyl-phenylether  | 10.92 | 248  | 384781   | 42.500 | ng    | 96       |
| 68) Hexachlorobenzene          | 10.99 | 284  | 405858   | 40.522 | ng    | 96       |
| 69) Atrazine                   | 11.07 | 200  | 254144   | 32.724 | ng    | 99       |
| 70) Pentachlorophenol          | 11.19 | 266  | 333986   | 70.344 | ng    | 99       |
| 71) Phenanthrene               | 11.40 | 178  | 1670537  | 41.758 | ng    | 99       |
| 72) Anthracene                 | 11.45 | 178  | 1736521  | 43.217 | ng    | 100      |
| 73) Carbazole                  | 11.60 | 167  | 1524645  | 39.791 | ng    | 98       |
| 74) Di-n-butylphthalate        | 11.93 | 149  | 1867839  | 42.313 | ng    | 99       |
| 75) Fluoranthene               | 12.59 | 202  | 1614767  | 37.483 | ng    | 97       |
| 78) Pyrene                     | 12.82 | 202  | 1608947  | 43.958 | ng    | 99       |
| 80) Butylbenzylphthalate       | 13.42 | 149  | 664279   | 43.118 | ng    | 94       |
| 81) Benzo(a)anthracene         | 14.01 | 228  | 1226524  | 41.678 | ng    | 99       |
| 82) 3,3'-Dichlorobenzidine     | 13.97 | 252  | 161816   | 14.174 | ng    | 98       |
| 83) Chrysene                   | 14.05 | 228  | 1216006  | 42.152 | ng    | 99       |
| 84) Bis(2-ethylhexyl)phthalate | 13.99 | 149  | 859199   | 42.642 | ng    | 100      |
| 85) Di-n-octyl phthalate       | 14.62 | 149  | 1397456  | 42.784 | ng    | 99       |
| 86) Indeno(1,2,3-cd)pyrene     | 17.02 | 276  | 1708893  | 67.027 | ng    | 98       |
| 88) Benzo(b)fluoranthene       | 15.09 | 252  | 1390302  | 38.419 | ng    | 99       |
| 89) Benzo(k)fluoranthene       | 15.12 | 252  | 1258420  | 37.856 | ng    | 99       |
| 90) Benzo(a)pyrene             | 15.46 | 252  | 1346228  | 42.270 | ng    | 98       |
| 91) Dibenzo(a,h)anthracene     | 17.03 | 278  | 1405520  | 53.110 | ng    | 100      |
| 92) Benzo(g,h,i)perylene       | 17.47 | 276  | 1534988  | 57.877 | ng    | 99       |

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



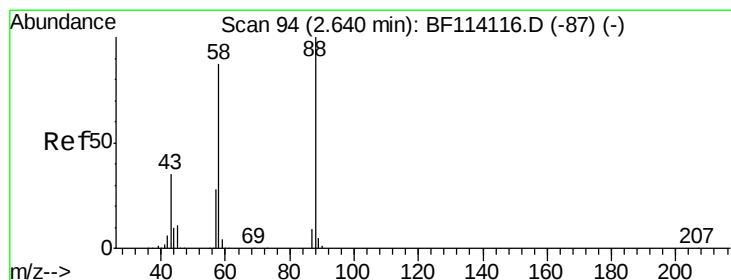
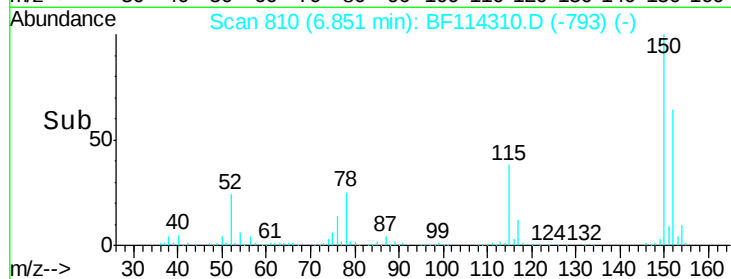
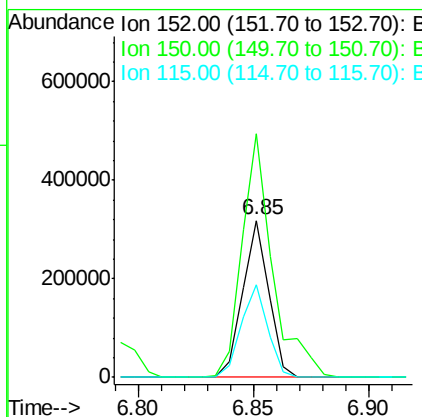
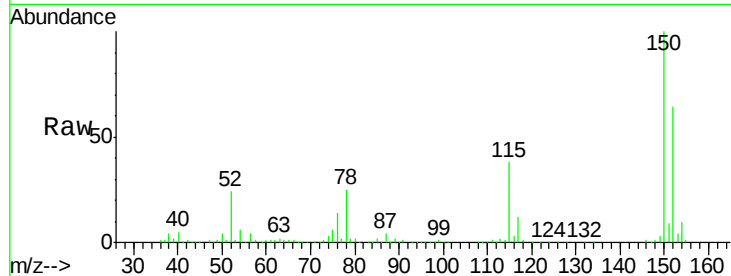


#1

1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.85 min Scan# 810  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Instrument :  
BNA\_F  
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SOIL-COMPMS

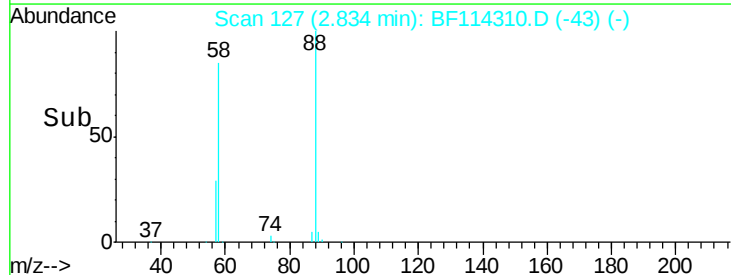
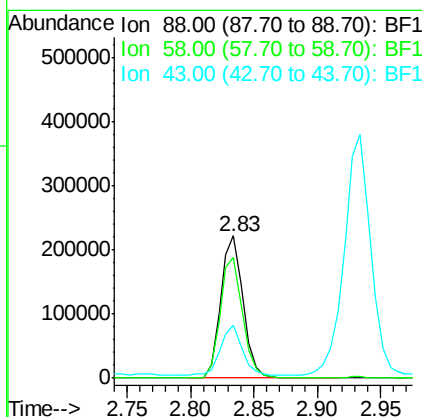
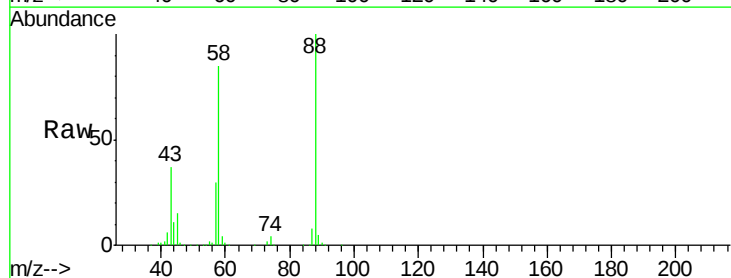
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Ion Ratio Lower Upper  
152 100  
150 155.5 124.3 186.5  
115 59.3 49.1 73.7

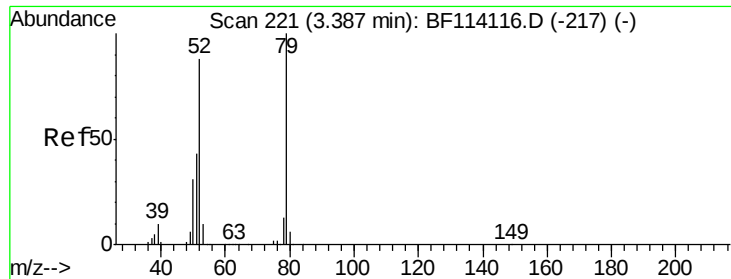


#2

1,4-Dioxane  
Concen: 31.556 ng  
RT: 2.83 min Scan# 127  
Delta R.T. 0.19 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Tgt Ion: 88 Resp: 271259  
Ion Ratio Lower Upper  
88 100  
58 85.2 68.7 103.1  
43 0.0 28.2 42.2#





#3

Pvridine

Concen: 18.728 ng

RT: 3.54 min Scan# 247

Delta R.T. 0.15 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

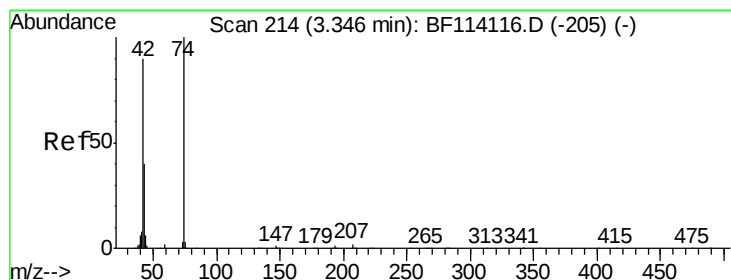
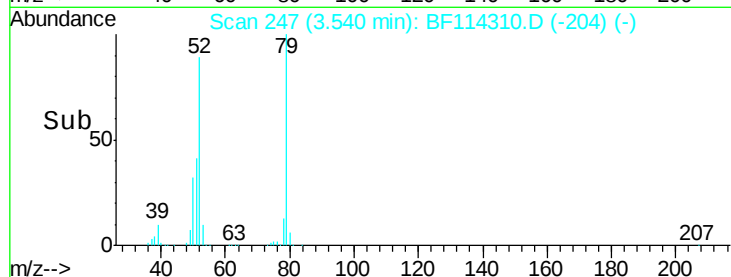
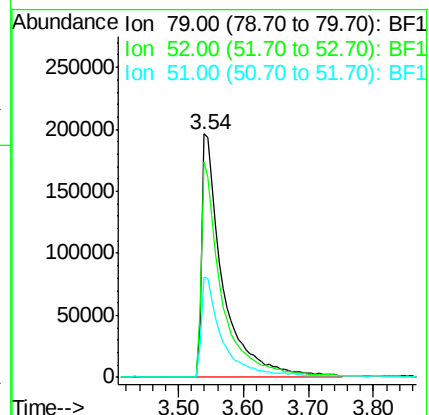
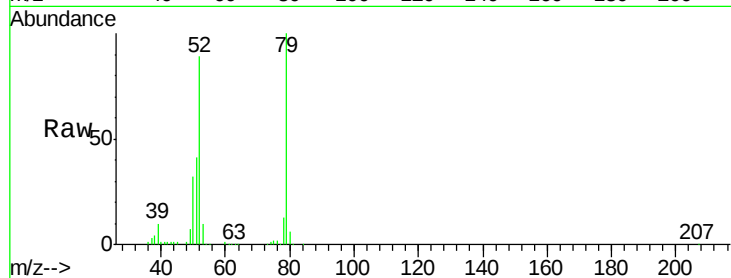
Tot Ion: 79 Resp: 443549

Ion Ratio Lower Upper

79 100

52 88.6 70.6 105.8

51 41.0 34.2 51.2



#4

n-Nitrosodimethylamine

Concen: 32.700 ng

RT: 3.46 min Scan# 233

Delta R.T. 0.11 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

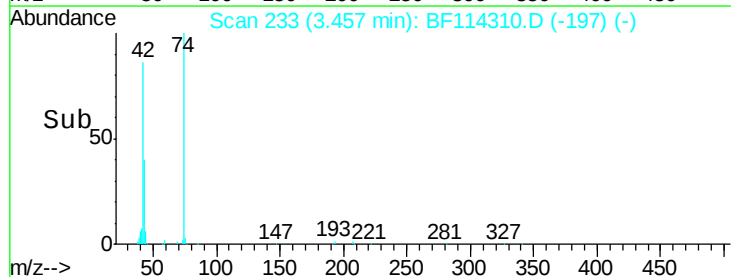
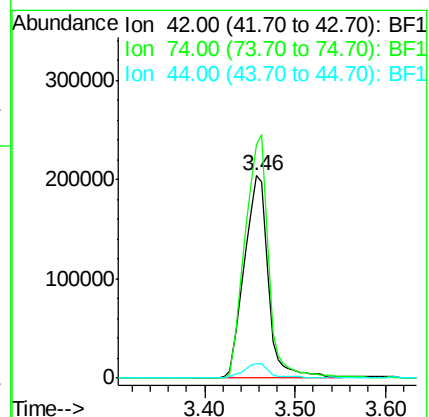
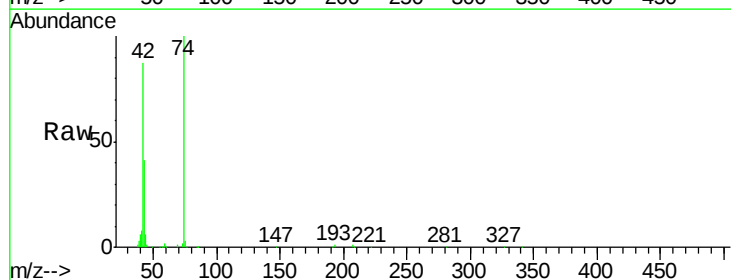
Tgt Ion: 42 Resp: 373466

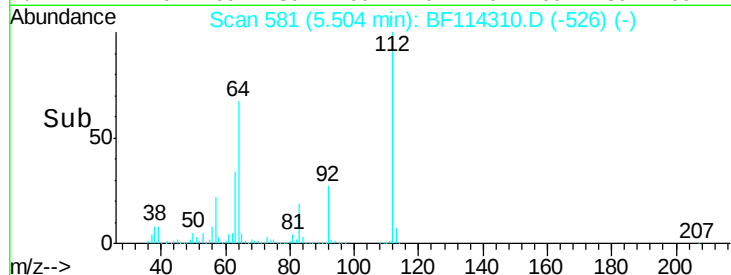
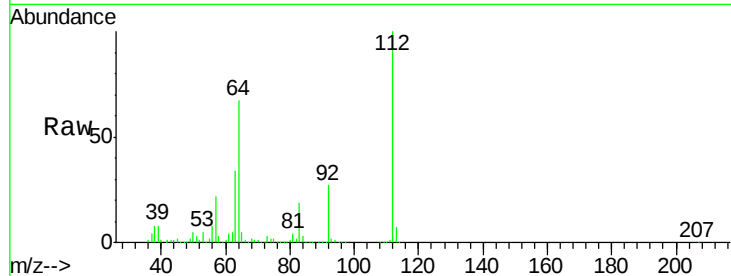
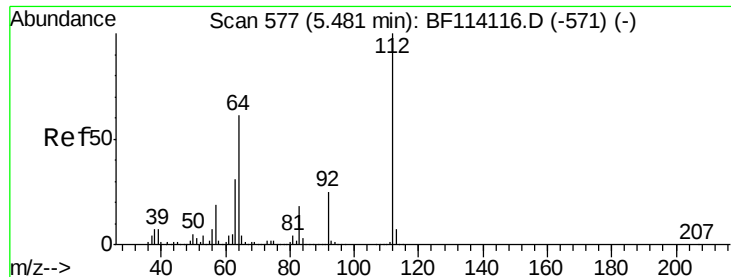
Ion Ratio Lower Upper

42 100

74 115.5 88.6 132.8

44 7.5 5.5 8.3





#5

2-Fluorophenol

Concen: 99.349 ng

RT: 5.50 min Scan# 581

Delta R.T. 0.02 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

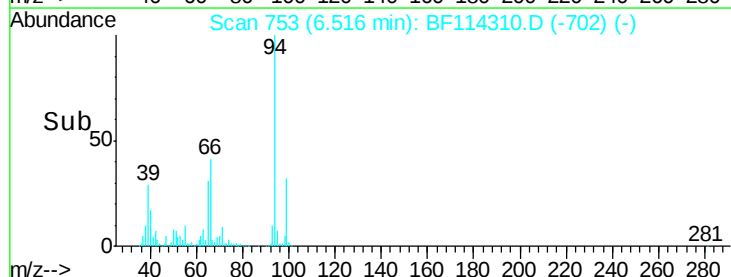
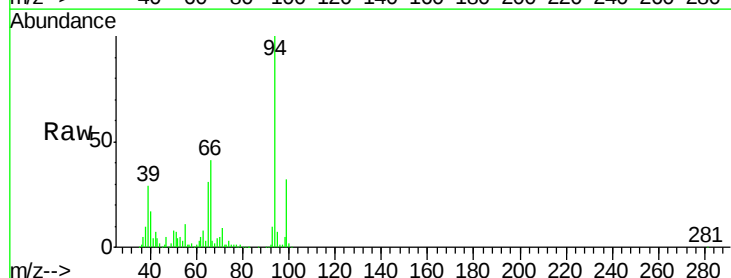
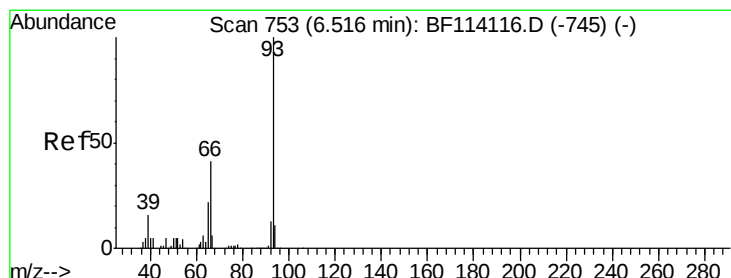
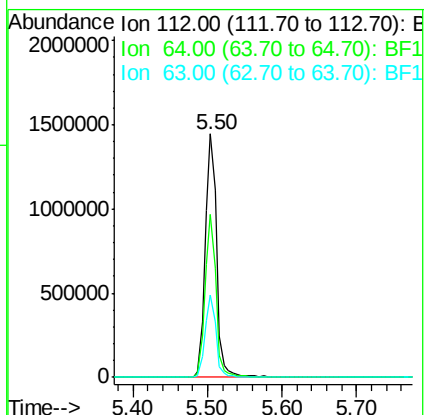
Tot Ion:112 Resp: 1553729

Ion Ratio Lower Upper

112 100

64 66.7 49.0 73.6

63 34.0 24.6 37.0



#6

Aniline

Concen: 4.291 ng

RT: 6.52 min Scan# 753

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

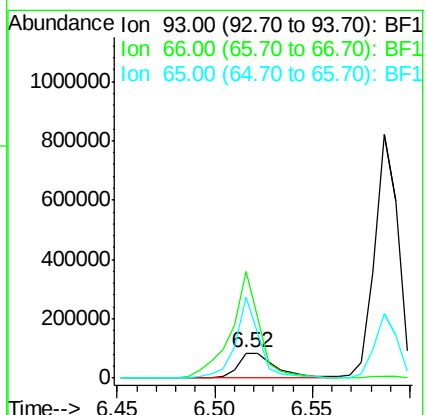
Tgt Ion: 93 Resp: 114664

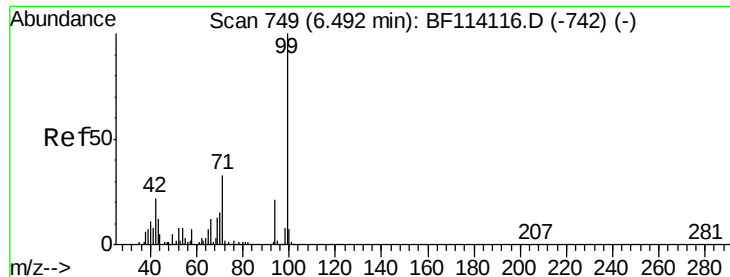
Ion Ratio Lower Upper

93 100

66 427.4 33.2 49.8#

65 324.7 17.6 26.4#





#7

Phenol-d6

Concen: 102.095 ng

RT: 6.50 min Scan# 751

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

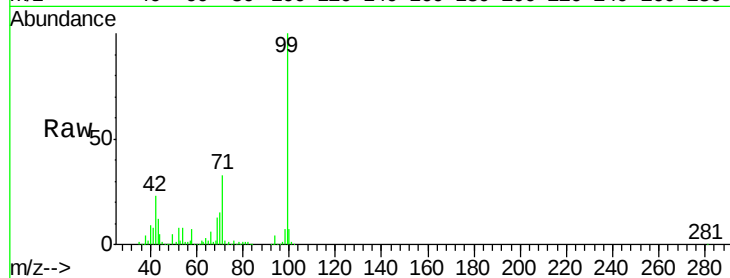
Tot Ion: 99 Resp: 1888445

Ion Ratio Lower Upper

99 100

42 22.6 17.9 26.9

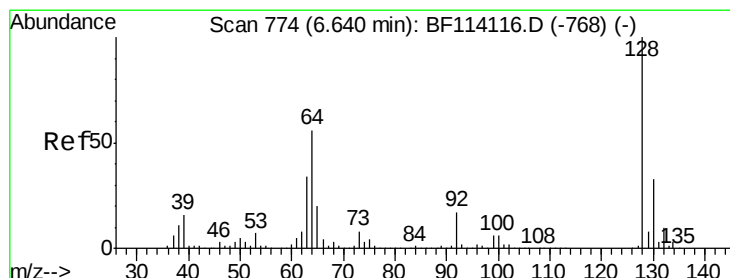
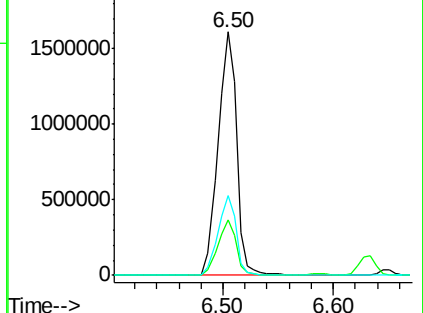
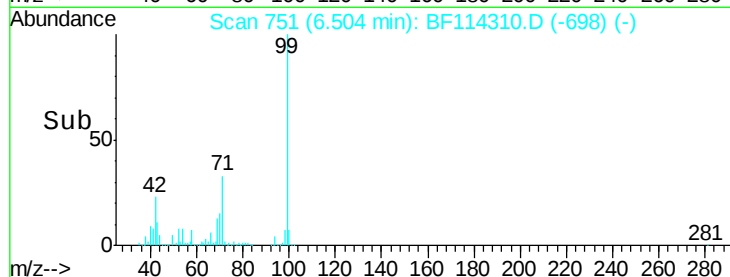
71 32.6 26.2 39.2



Abundance Ion 99.00 (98.70 to 99.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 71.00 (70.70 to 71.70): BF1



#8

2-Chlorophenol

Concen: 39.649 ng

RT: 6.65 min Scan# 776

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

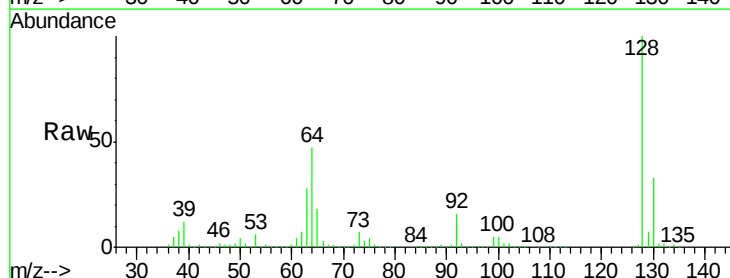
Tgt Ion: 128 Resp: 661956

Ion Ratio Lower Upper

128 100

130 33.5 12.6 52.6

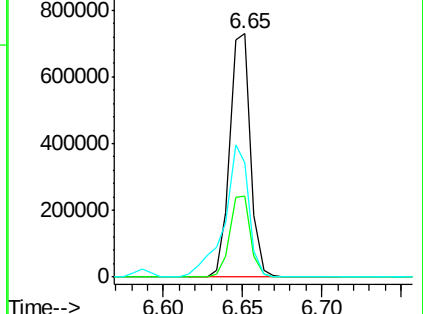
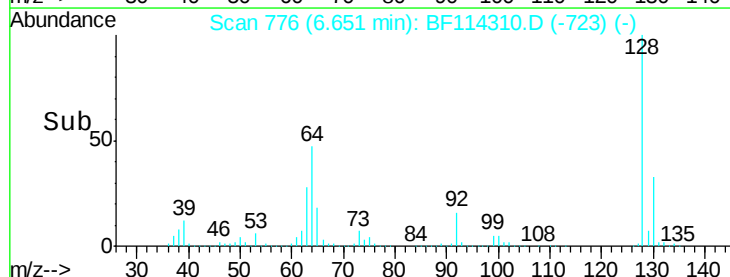
64 47.2 35.9 75.9

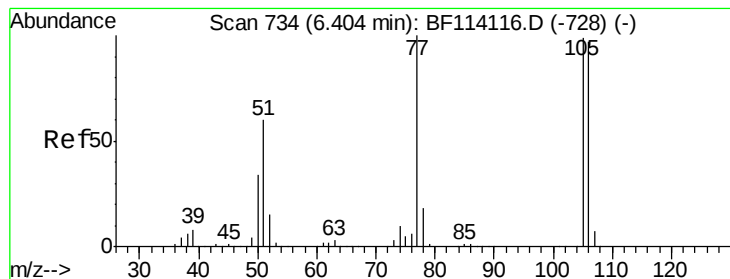


Abundance Ion 128.00 (127.70 to 128.70): E

Ion 130.00 (129.70 to 130.70): E

Ion 64.00 (63.70 to 64.70): BF1





#9

Benzaldehyde

Concen: 4.601 ng

RT: 6.40 min Scan# 734

Delta R.T. 0.00 min

Lab File: BF114310.D

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Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

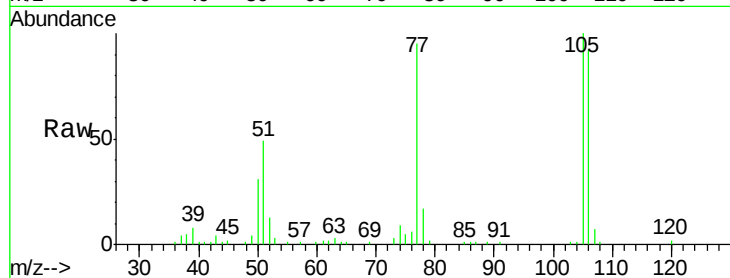
Tot Ion: 77 Resp: 59573

Ion Ratio Lower Upper

77 100

105 105.3 79.3 119.3

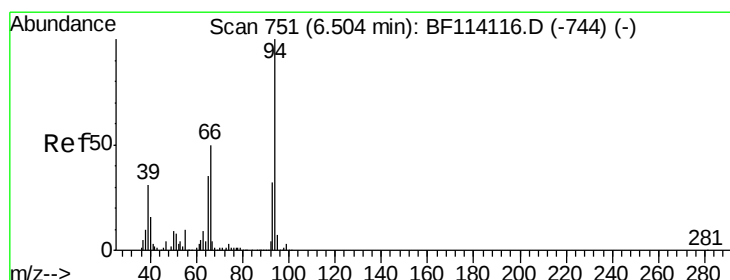
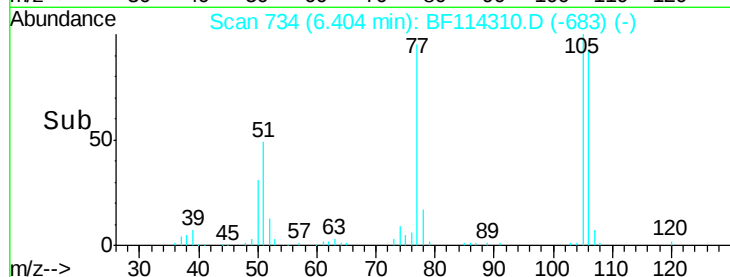
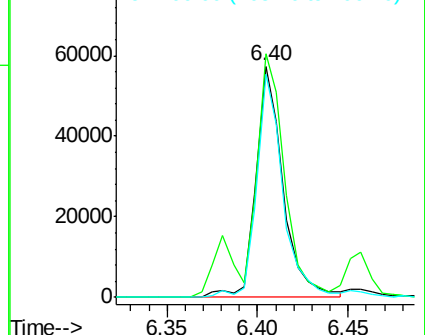
106 96.3 77.0 117.0



Abundance Ion 77.00 (76.70 to 77.70): BF1

Ion 105.00 (104.70 to 105.70): BF1

Ion 106.00 (105.70 to 106.70): BF1



#10

Phenol

Concen: 31.796 ng

RT: 6.52 min Scan# 753

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

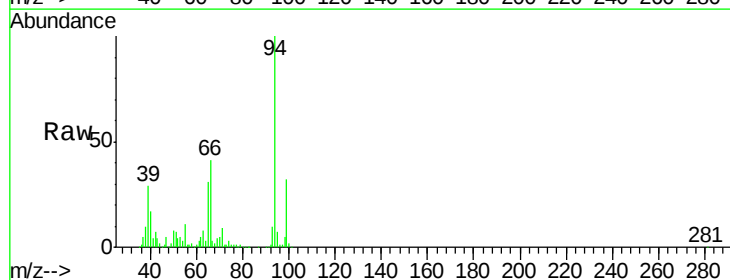
Tgt Ion: 94 Resp: 691860

Ion Ratio Lower Upper

94 100

65 31.0 14.7 54.7

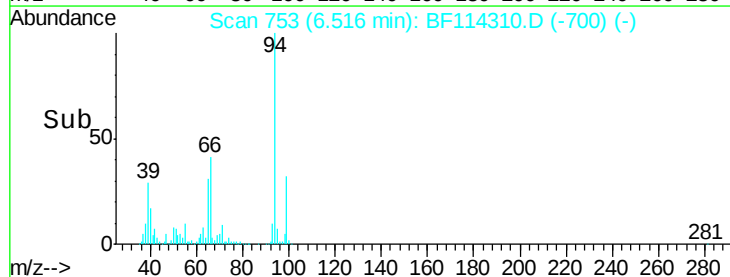
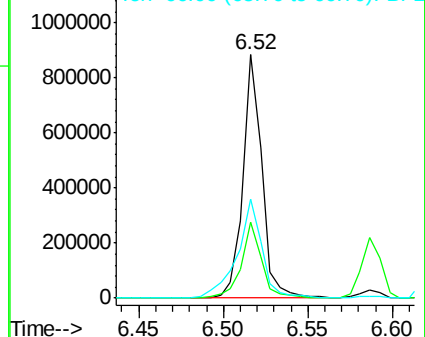
66 40.8 29.6 69.6

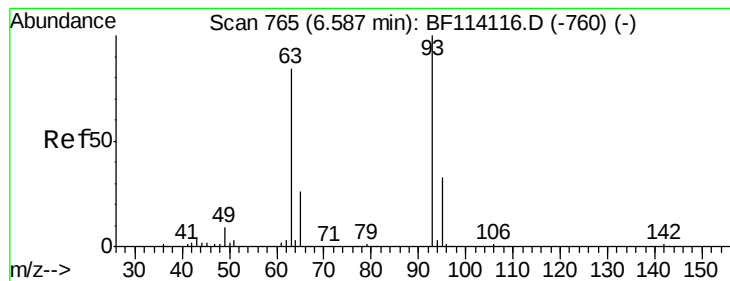


Abundance Ion 94.00 (93.70 to 94.70): BF1

Ion 65.00 (64.70 to 65.70): BF1

Ion 66.00 (65.70 to 66.70): BF1





#11

bis(2-Chloroethyl)ether

Concen: 41.136 ng

RT: 6.59 min Scan# 765

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

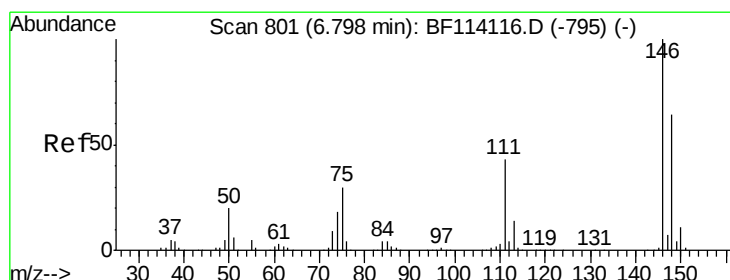
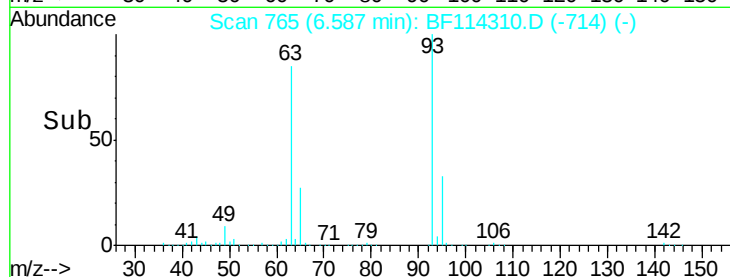
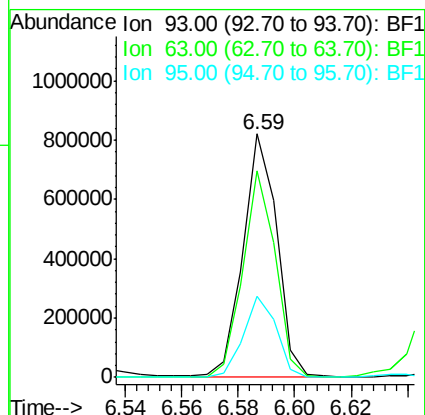
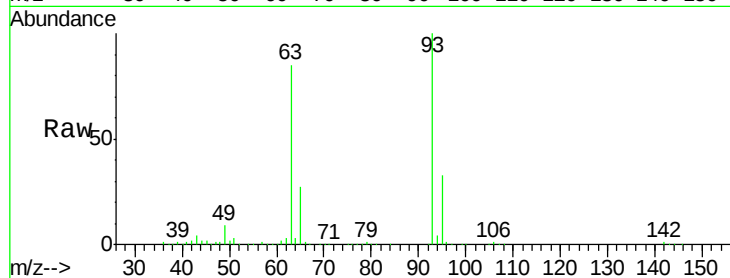
Tot Ion: 93 Resp: 679533

Ion Ratio Lower Upper

93 100

63 84.9 63.6 103.6

95 33.1 13.1 53.1



#12

1,3-Dichlorobenzene

Concen: 29.886 ng

RT: 6.79 min Scan# 800

Delta R.T. -0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

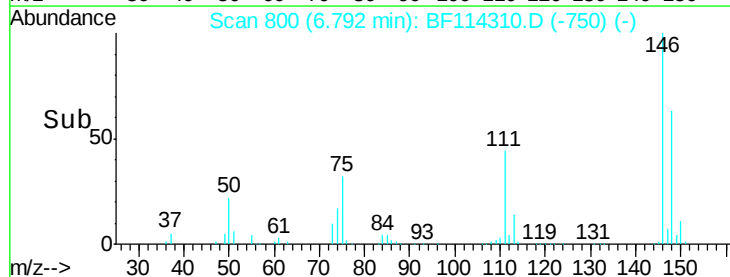
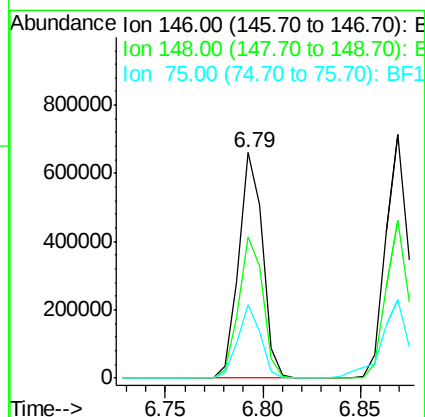
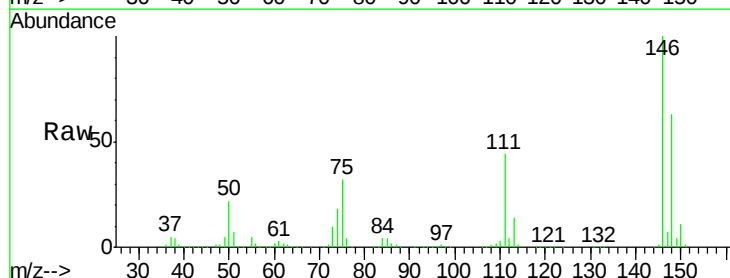
Tgt Ion: 146 Resp: 560095

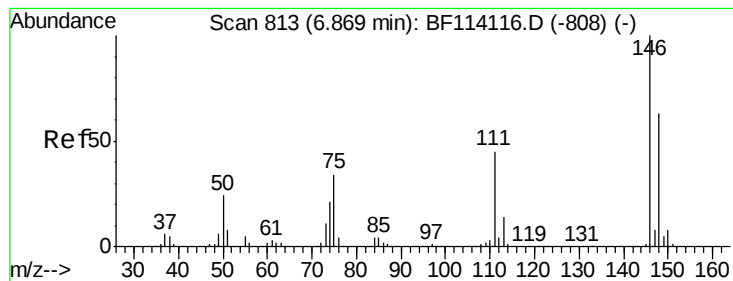
Ion Ratio Lower Upper

146 100

148 62.8 51.6 77.4

75 32.4 24.2 36.2





#13

1,4-Dichlorobenzene

Concen: 30.321 ng

RT: 6.87 min Scan# 813

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

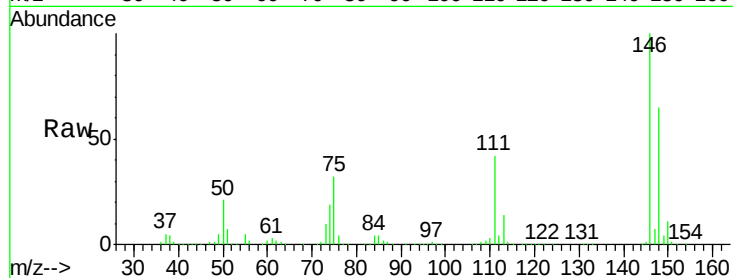
Tot Ion:146 Resp: 572612

Ion Ratio Lower Upper

146 100

148 64.6 50.2 75.2

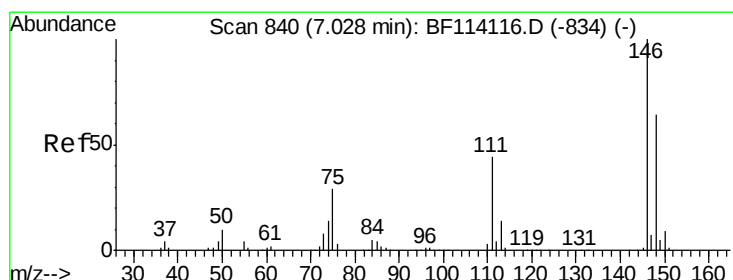
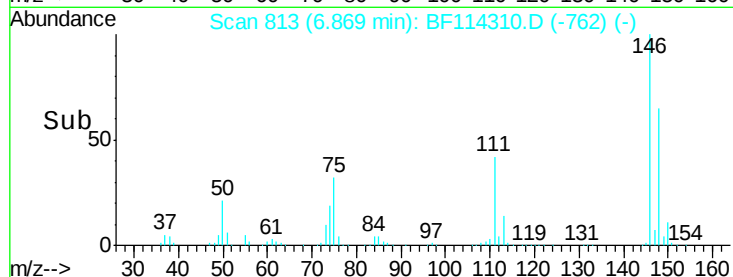
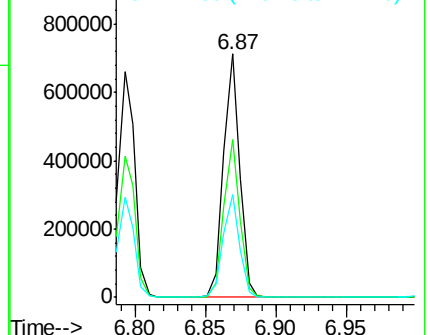
111 42.3 35.8 53.6



Abundance Ion 146.00 (145.70 to 146.70): E

Ion 148.00 (147.70 to 148.70): E

Ion 111.00 (110.70 to 111.70): E



#14

1,2-Dichlorobenzene

Concen: 31.377 ng

RT: 7.02 min Scan# 839

Delta R.T. -0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

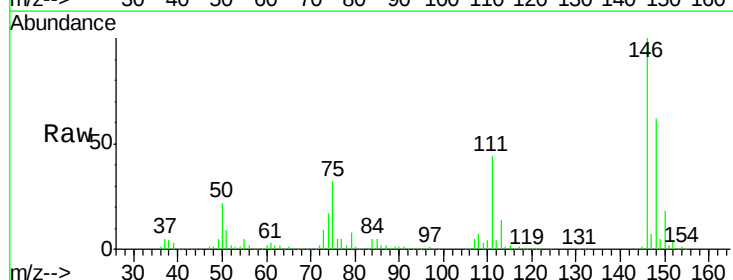
Tgt Ion:146 Resp: 541359

Ion Ratio Lower Upper

146 100

148 62.5 51.1 76.7

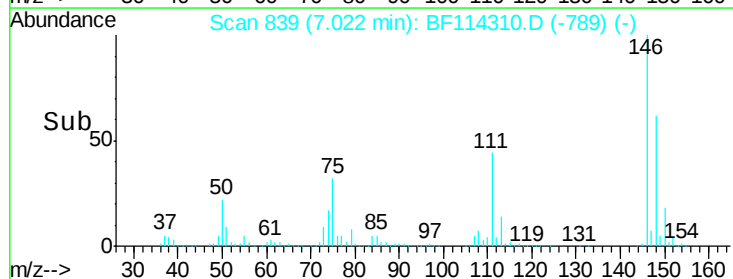
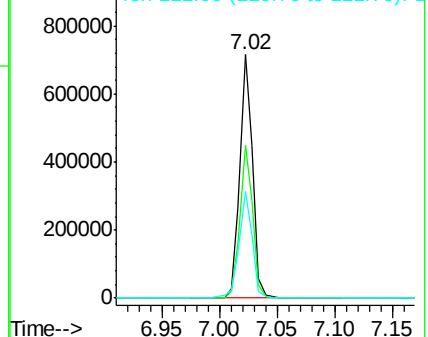
111 43.8 35.3 52.9

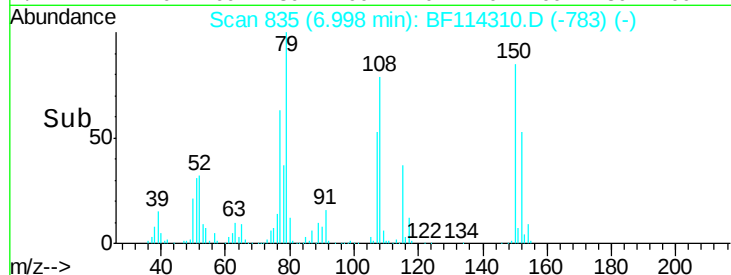
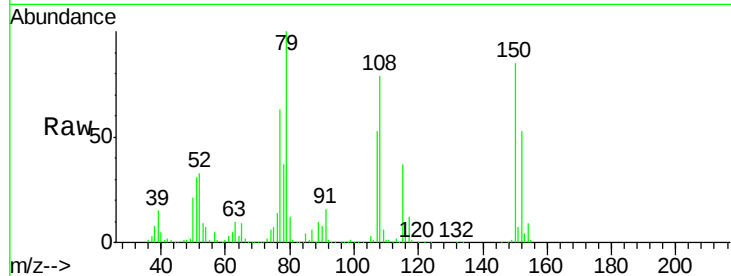
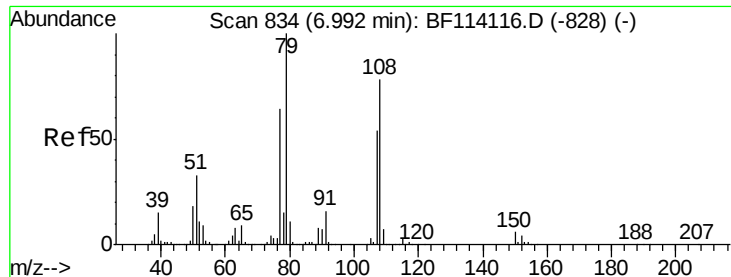


Abundance Ion 146.00 (145.70 to 146.70): E

Ion 148.00 (147.70 to 148.70): E

Ion 111.00 (110.70 to 111.70): E

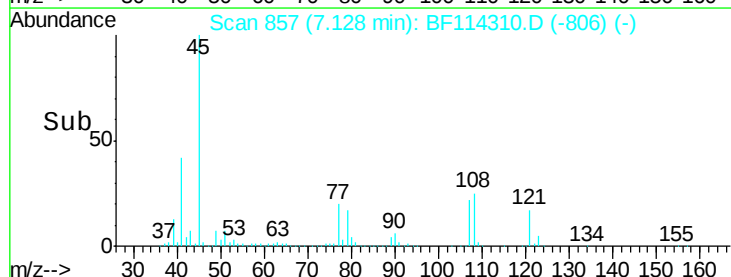
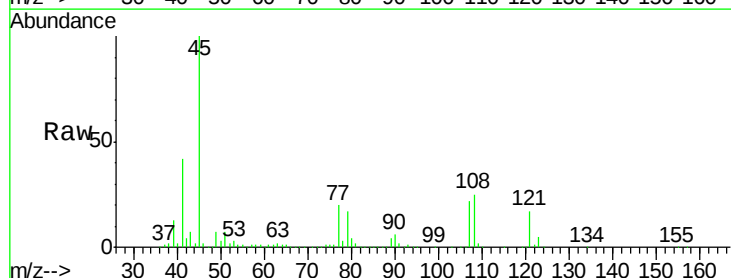
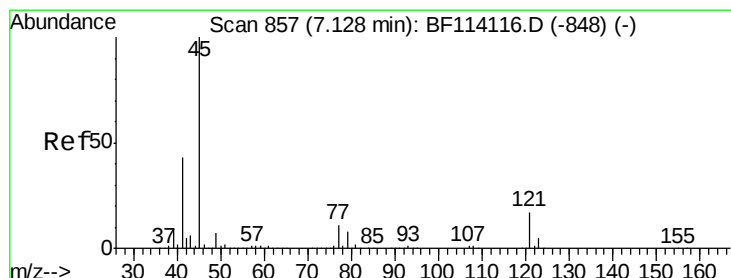
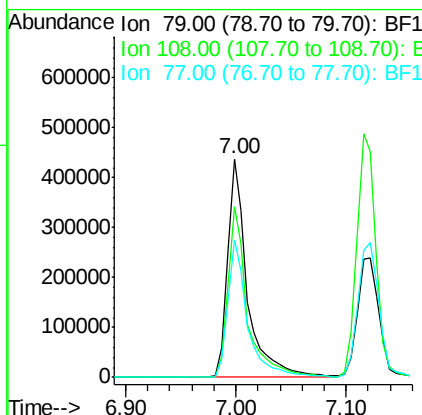




#15  
Benzyl Alcohol  
Concen: 38.360 ng  
RT: 7.00 min Scan# 835  
Delta R.T. 0.01 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

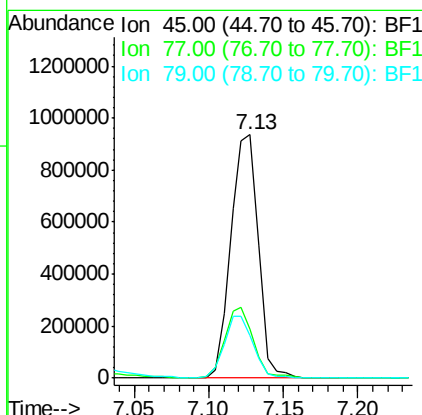
Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-COMPMS

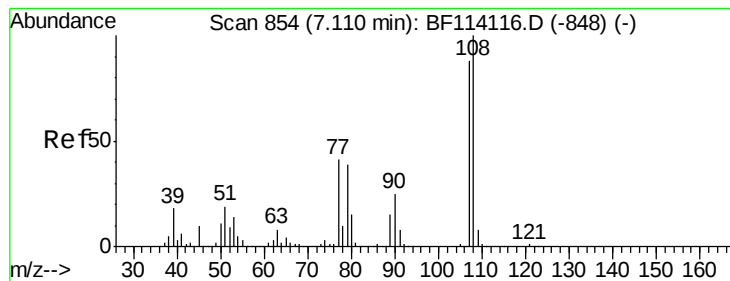
Tot Ion: 79 Resp: 553401  
Ion Ratio Lower Upper  
79 100  
108 78.5 62.1 93.1  
77 63.0 51.0 76.6



#16  
2,2'-oxybis(1-Chloropropane)  
Concen: 37.608 ng  
RT: 7.13 min Scan# 857  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Tgt Ion: 45 Resp: 1204593  
Ion Ratio Lower Upper  
45 100  
77 20.1 0.0 31.1  
79 17.3 0.0 28.4





#17

2-Methylphenol

Concen: 37.913 ng

RT: 7.12 min Scan# 855

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

Tot Ion:107 Resp: 519960

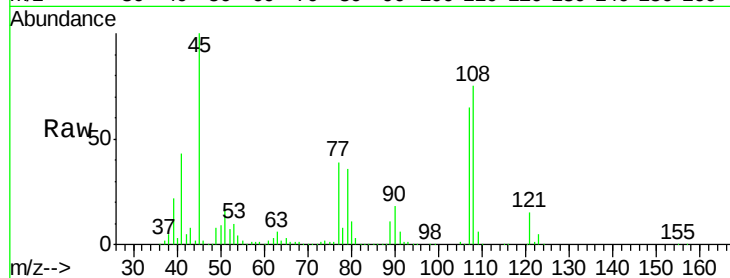
Ion Ratio Lower Upper

107 100

108 115.2 90.5 135.7

77 60.3 37.0 55.4#

79 56.2 35.8 53.8#

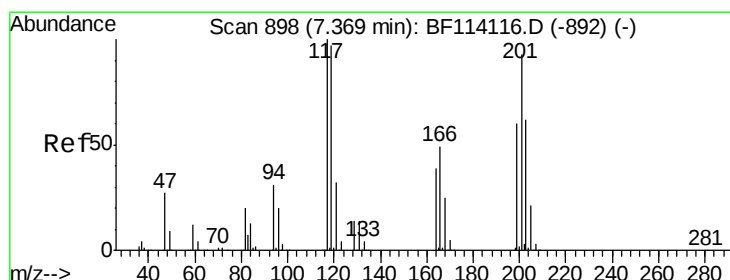
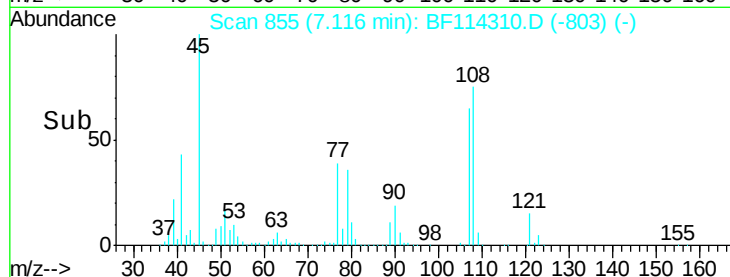
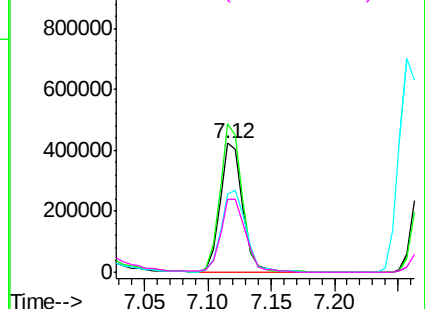


Abundance Ion 107.00 (106.70 to 107.70): E

Ion 108.00 (107.70 to 108.70): E

Ion 77.00 (76.70 to 77.70): BF1

Ion 79.00 (78.70 to 79.70): BF1



#18

Hexachloroethane

Concen: 28.865 ng

RT: 7.36 min Scan# 897

Delta R.T. -0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

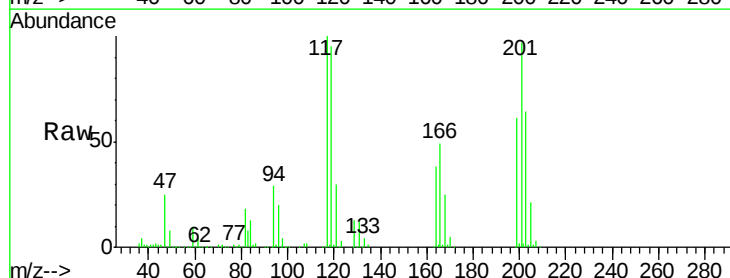
Tgt Ion:117 Resp: 204611

Ion Ratio Lower Upper

117 100

119 95.2 77.4 116.2

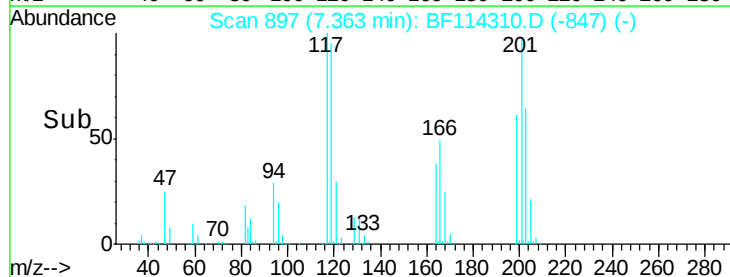
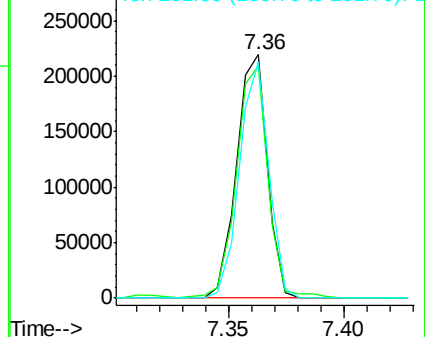
201 97.1 74.5 111.7

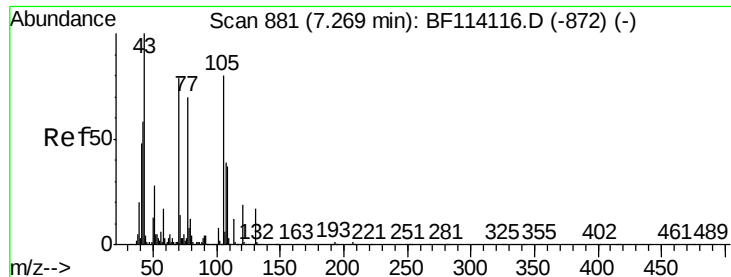


Abundance Ion 117.00 (116.70 to 117.70): E

Ion 119.00 (118.70 to 119.70): E

Ion 201.00 (200.70 to 201.70): E

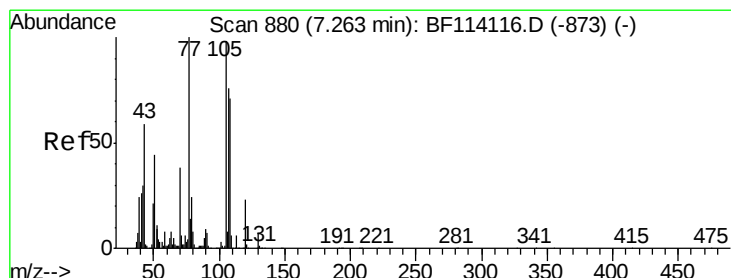
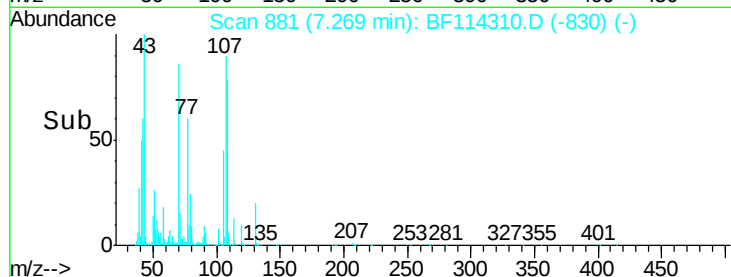
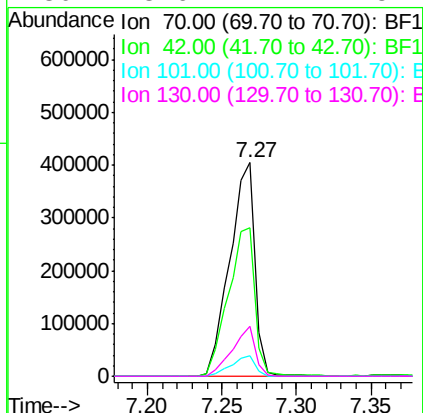
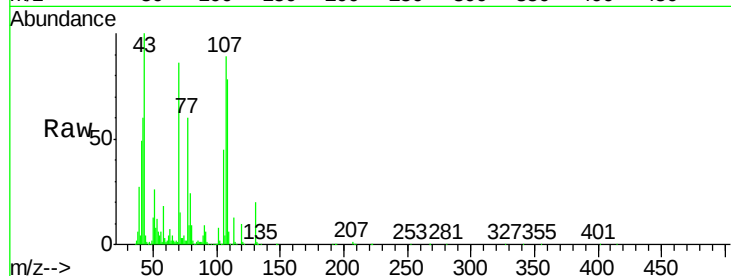




#19  
n-Nitroso-di-n-propylamine  
Concen: 41.067 ng  
RT: 7.27 min Scan# 881  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

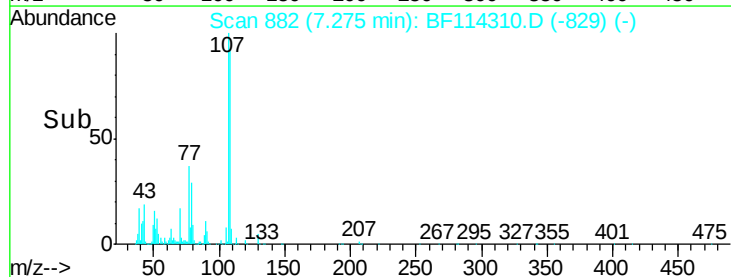
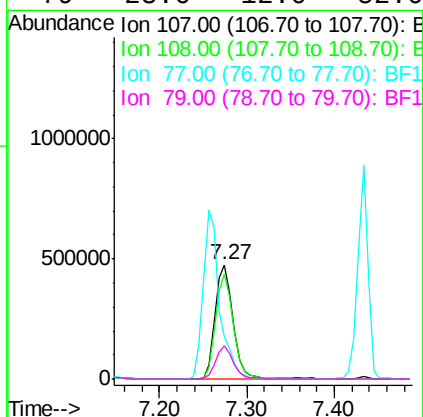
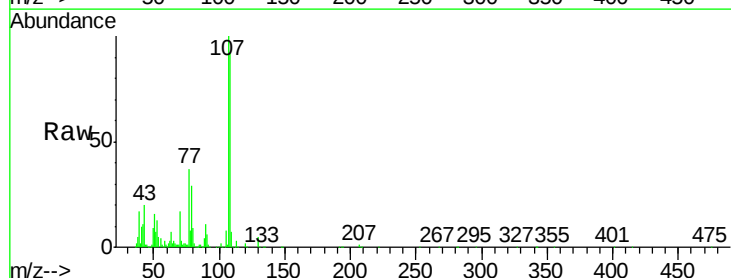
Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-COMPMS

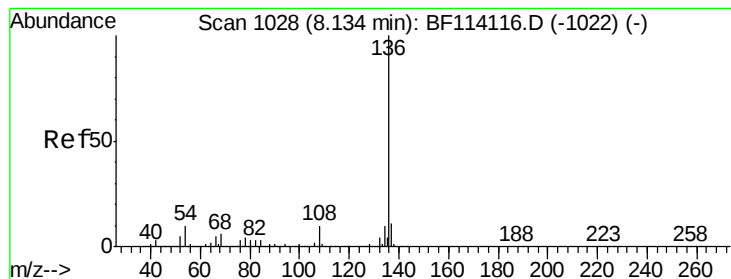
Tot Ion: 70 Resp: 481480  
Ion Ratio Lower Upper  
70 100  
42 69.5 58.6 87.8  
101 9.4 7.8 11.8  
130 23.6 17.1 25.7



#20  
3+4-Methylphenols  
Concen: 43.274 ng  
RT: 7.27 min Scan# 882  
Delta R.T. 0.01 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Tgt Ion:107 Resp: 685707  
Ion Ratio Lower Upper  
107 100  
108 91.9 73.8 113.8  
77 37.4 111.5 151.5#  
79 28.6 12.0 52.0





#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.13 min Scan# 1028

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

Tot Ion:136 Resp: 975482

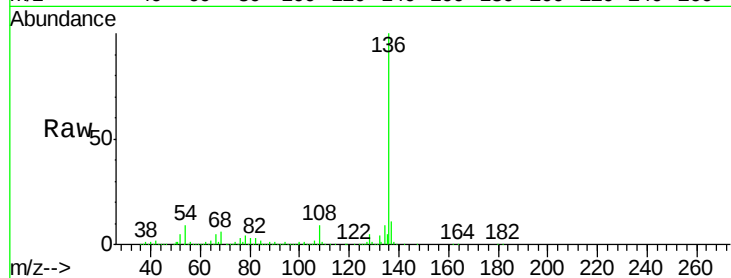
Ion Ratio Lower Upper

136 100

137 10.7 8.8 13.2

54 9.0 7.8 11.8

68 6.2 5.1 7.7

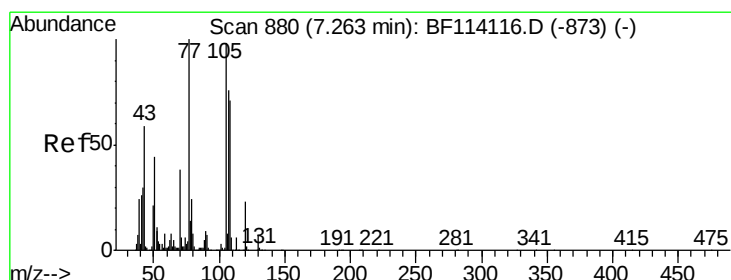
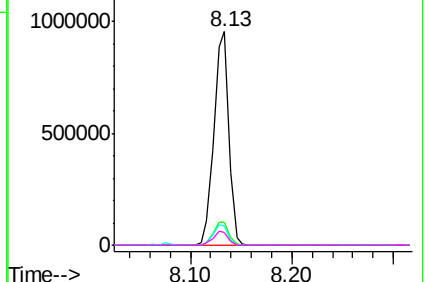
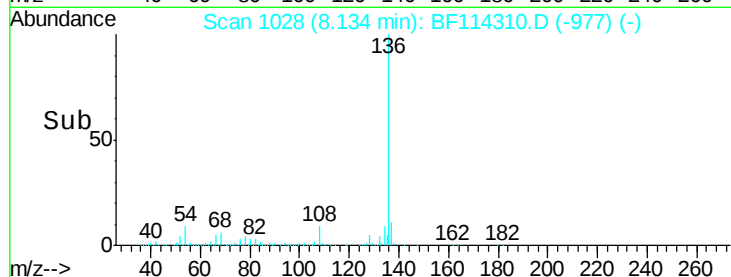


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF1

Ion 68.00 (67.70 to 68.70): BF1



#22

Acetophenone

Concen: 42.868 ng

RT: 7.26 min Scan# 879

Delta R.T. -0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Tgt Ion:105 Resp: 926392

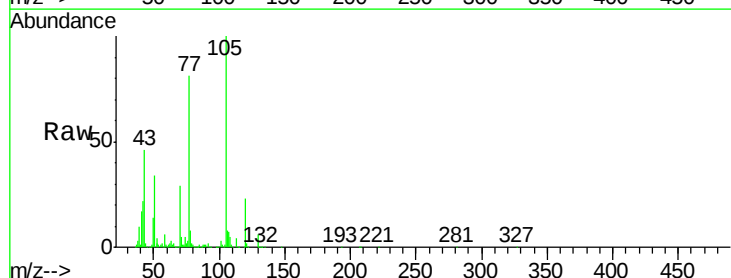
Ion Ratio Lower Upper

105 100

71 4.8 5.3 7.9#

51 34.1 36.2 54.4#

120 22.6 18.6 28.0

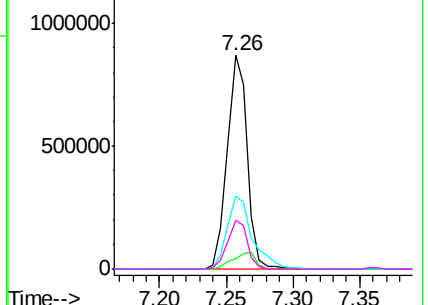
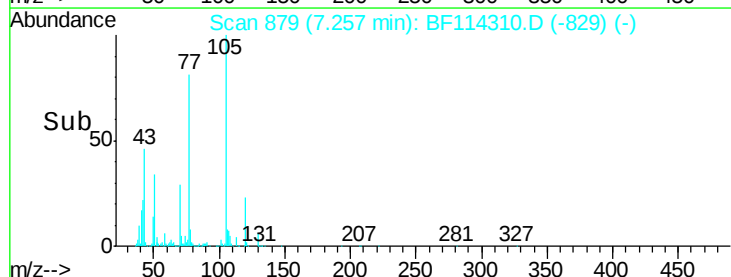


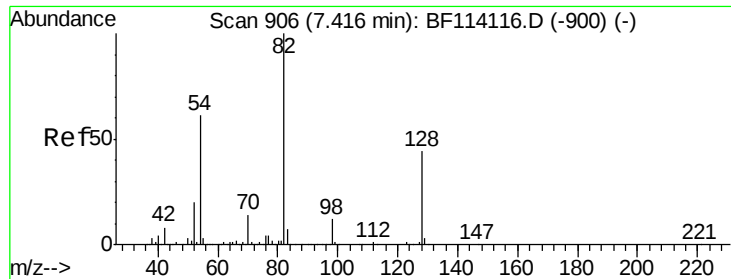
Abundance Ion 105.00 (104.70 to 105.70): E

Ion 71.00 (70.70 to 71.70): BF1

Ion 51.00 (50.70 to 51.70): BF1

Ion 120.00 (119.70 to 120.70): E

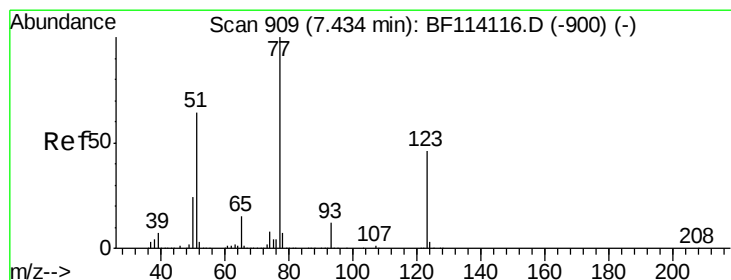
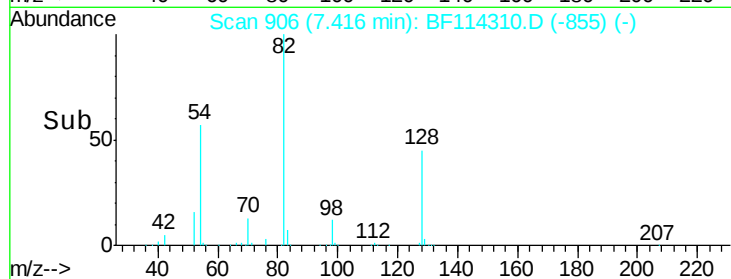
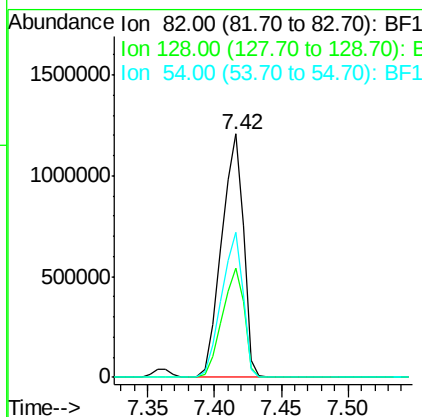
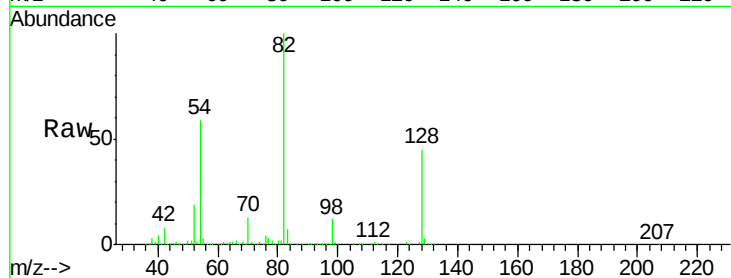




#23  
Nitrobenzene-d5  
Concen: 81.068 ng  
RT: 7.42 min Scan# 906  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

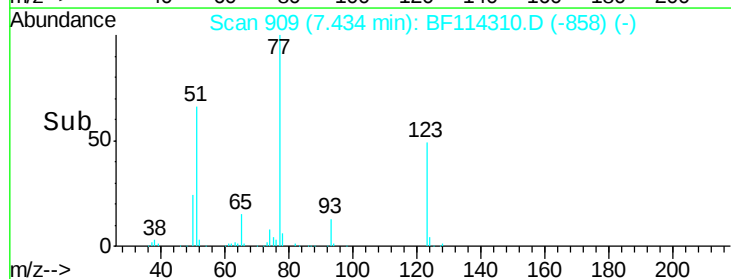
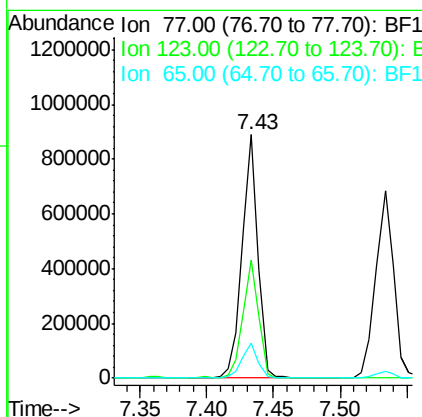
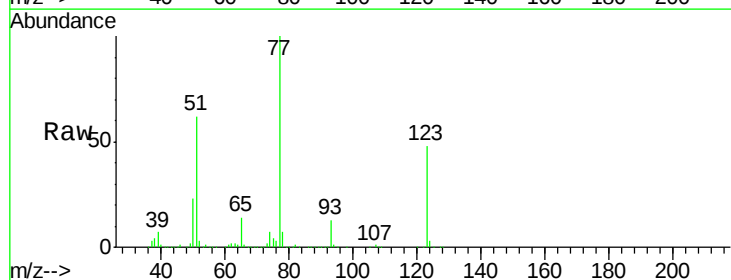
Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-COMPMS

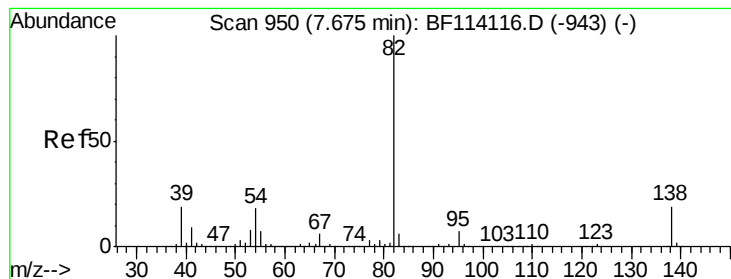
Tot Ion: 82 Resp: 1409136  
Ion Ratio Lower Upper  
82 100  
128 44.9 35.5 53.3  
54 59.4 48.5 72.7



#24  
Nitrobenzene  
Concen: 41.334 ng  
RT: 7.43 min Scan# 909  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Tgt Ion: 77 Resp: 731757  
Ion Ratio Lower Upper  
77 100  
123 48.4 36.9 55.3  
65 14.3 11.8 17.6





#25

Isophorone

Concen: 41.585 ng

RT: 7.67 min Scan# 950

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

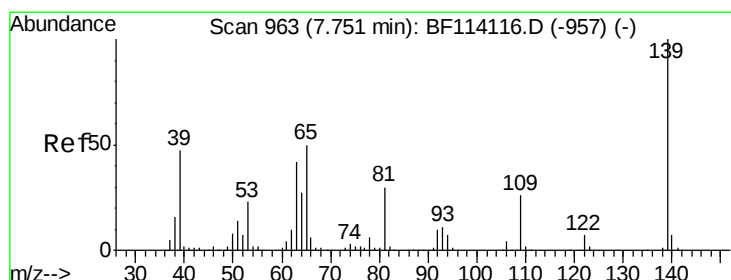
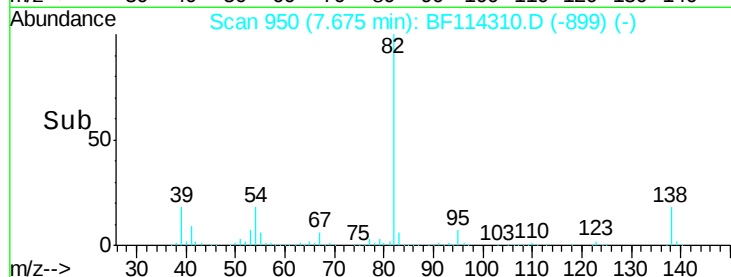
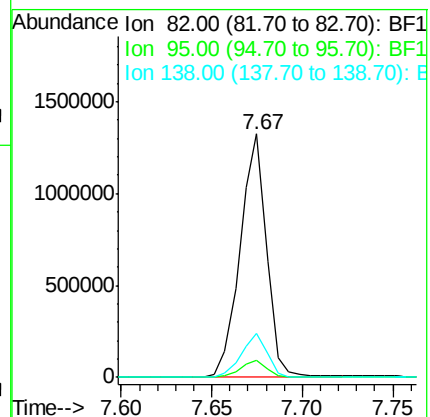
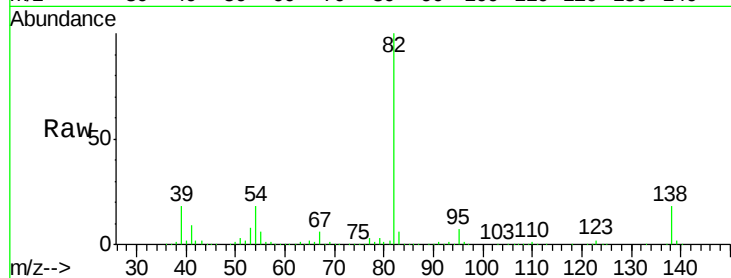
Tot Ion: 82 Resp: 1340567

Ion Ratio Lower Upper

82 100

95 7.1 5.6 8.4

138 18.2 14.8 22.2



#26

2-Nitrophenol

Concen: 43.619 ng

RT: 7.75 min Scan# 963

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

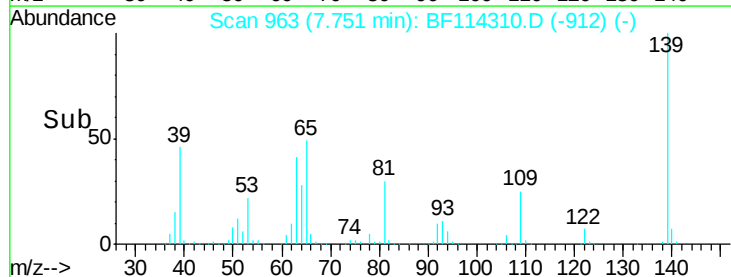
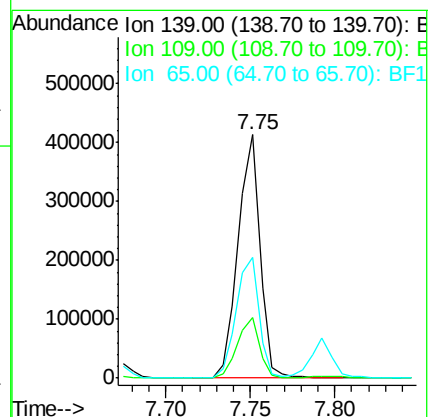
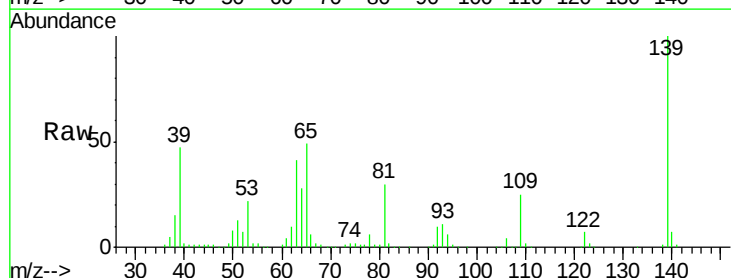
Tgt Ion: 139 Resp: 374652

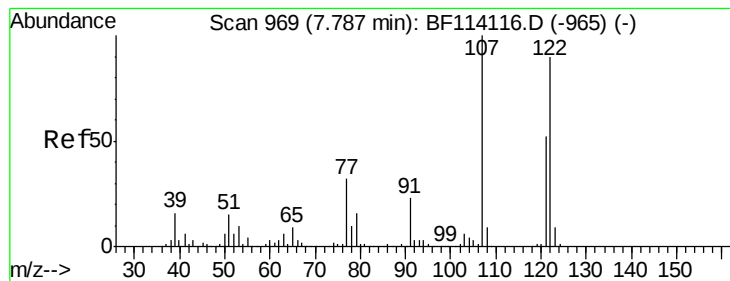
Ion Ratio Lower Upper

139 100

109 25.0 20.7 31.1

65 49.4 40.2 60.2





#27

2,4-Dimethylphenol

Concen: 44.232 ng

RT: 7.79 min Scan# 970

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

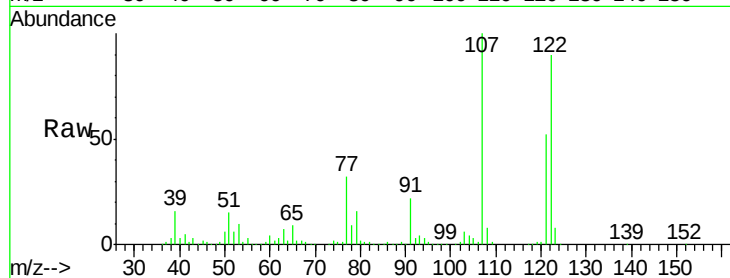
Tot Ion:122 Resp: 596695

Ion Ratio Lower Upper

122 100

107 111.6 88.4 132.6

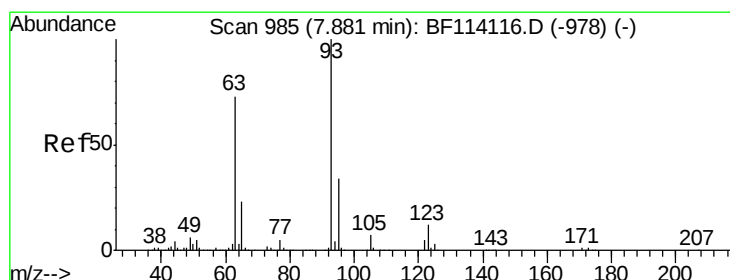
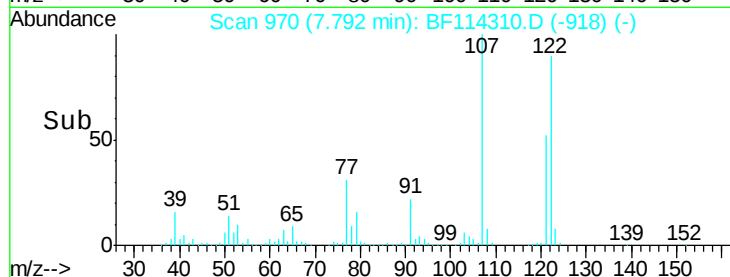
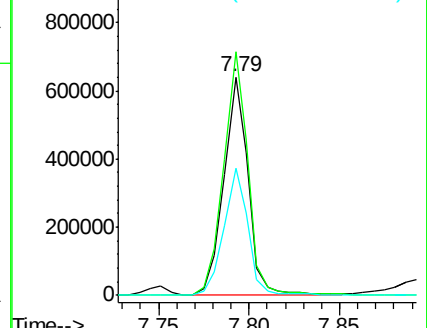
121 58.2 45.9 68.9



Abundance Ion 122.00 (121.70 to 122.70): E

Ion 107.00 (106.70 to 107.70): E

Ion 121.00 (120.70 to 121.70): E



#28

bis(2-Chloroethoxy)methane

Concen: 41.601 ng

RT: 7.87 min Scan# 984

Delta R.T. -0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

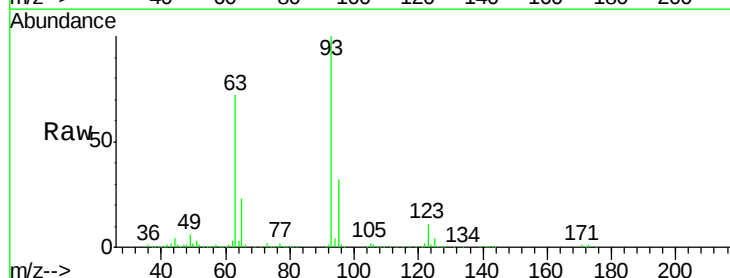
Tgt Ion: 93 Resp: 870154

Ion Ratio Lower Upper

93 100

95 31.9 26.8 40.2

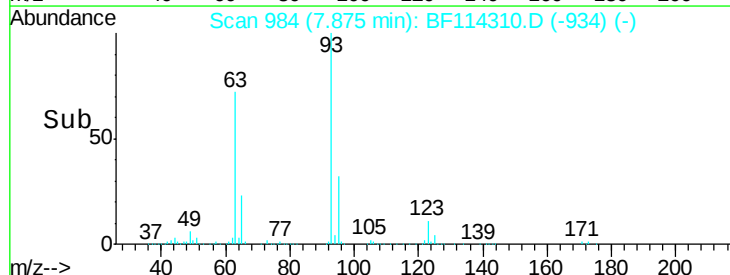
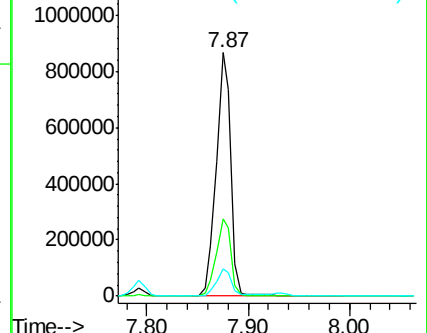
123 11.1 9.5 14.3

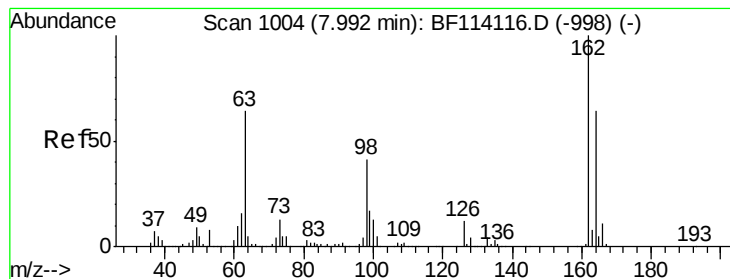


Abundance Ion 93.00 (92.70 to 93.70): BF1

Ion 95.00 (94.70 to 95.70): BF1

Ion 123.00 (122.70 to 123.70): E





#29

2,4-Dichlorophenol

Concen: 41.451 ng

RT: 8.00 min Scan# 1005

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

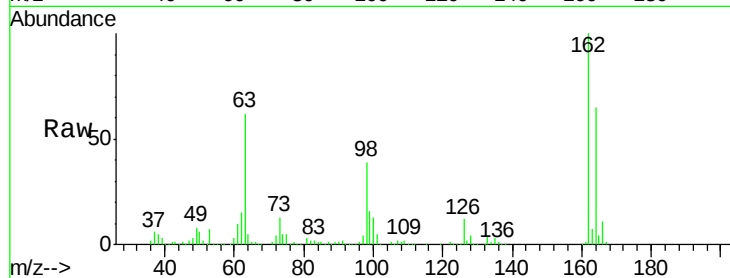
Tot Ion:162 Resp: 556810

Ion Ratio Lower Upper

162 100

164 65.0 43.6 83.6

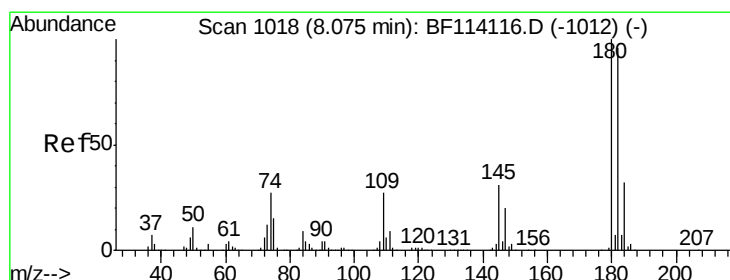
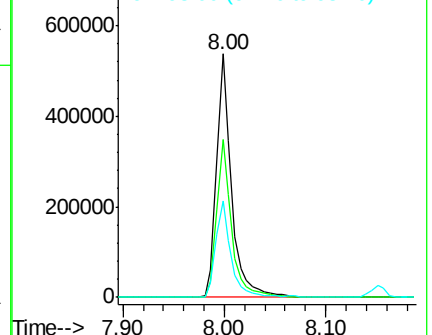
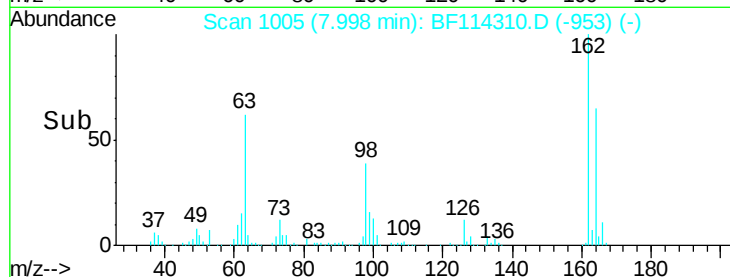
98 39.5 20.6 60.6



Abundance Ion 162.00 (161.70 to 162.70): E

Ion 164.00 (163.70 to 164.70): E

Ion 98.00 (97.70 to 98.70): BF1



#30

1,2,4-Trichlorobenzene

Concen: 35.291 ng

RT: 8.07 min Scan# 1018

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

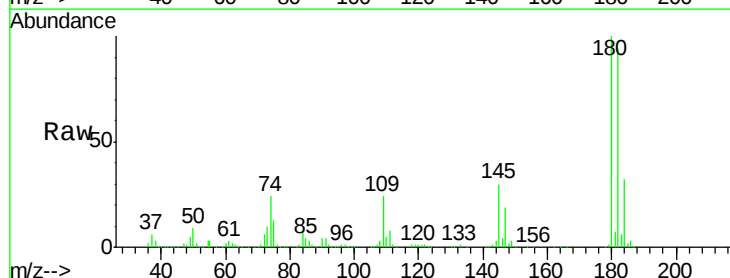
Tgt Ion:180 Resp: 539063

Ion Ratio Lower Upper

180 100

182 93.9 76.6 114.8

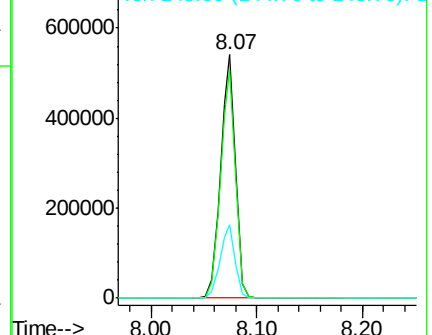
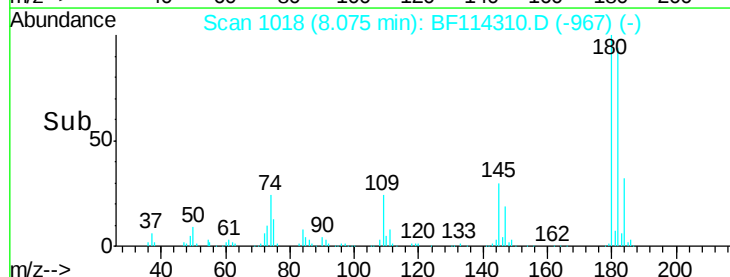
145 30.1 25.1 37.7

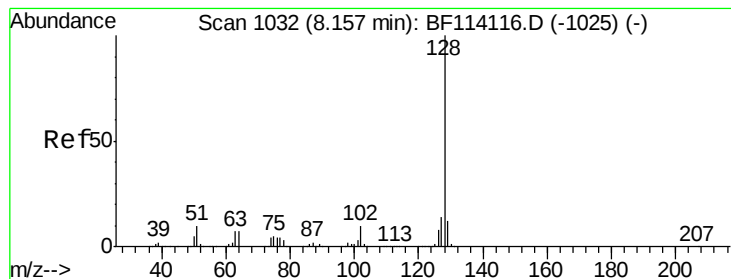


Abundance Ion 180.00 (179.70 to 180.70): E

Ion 182.00 (181.70 to 182.70): E

Ion 145.00 (144.70 to 145.70): E





#31

Naphthalene

Concen: 39.318 ng

RT: 8.15 min Scan# 1031

Delta R.T. -0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

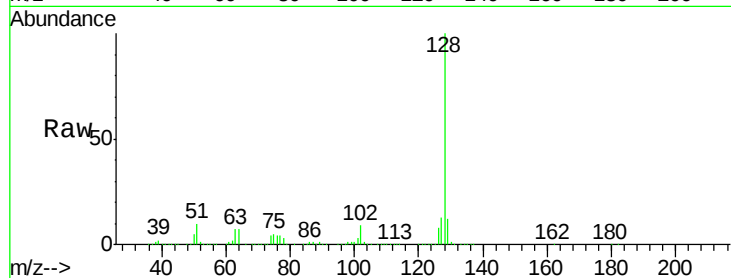
Tot Ion:128 Resp: 1791578

Ion Ratio Lower Upper

128 100

129 11.5 9.6 14.4

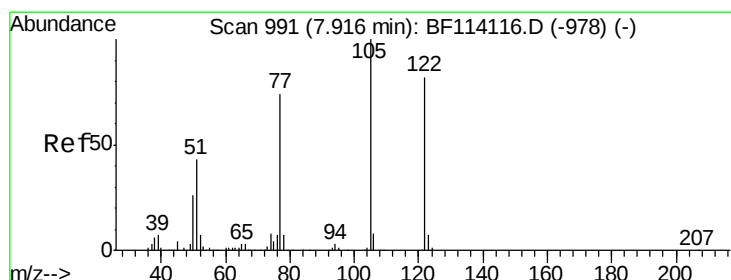
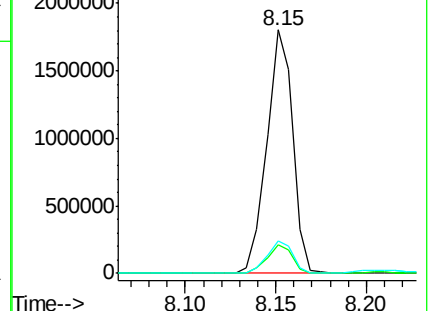
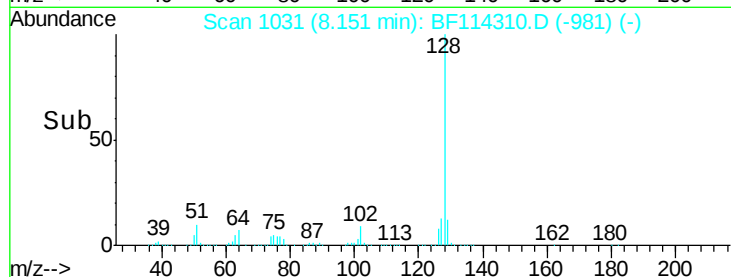
127 13.3 11.3 16.9



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#32

Benzoic acid

Concen: 35.907 ng

RT: 7.93 min Scan# 994

Delta R.T. 0.02 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

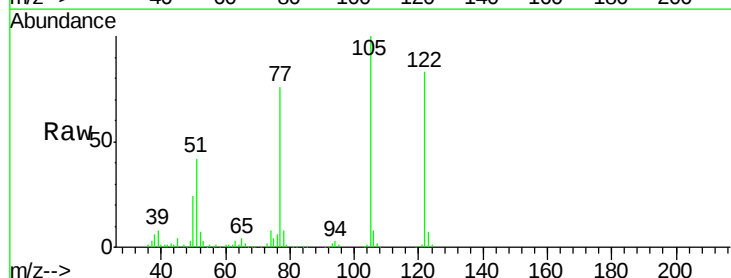
Tgt Ion:122 Resp: 325456

Ion Ratio Lower Upper

122 100

105 120.2 99.9 139.9

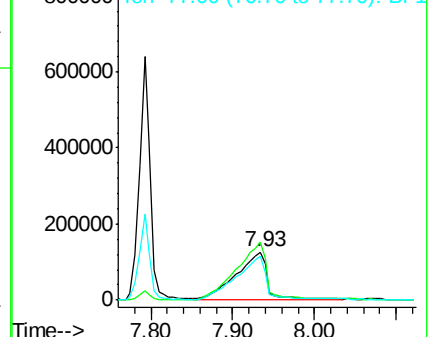
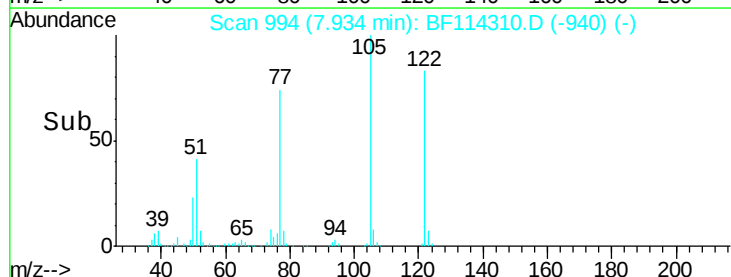
77 91.5 69.4 109.4

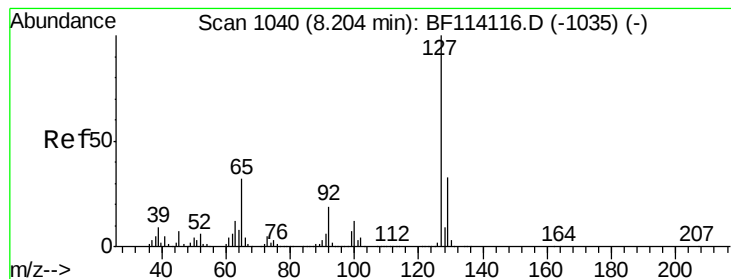


Abundance Ion 122.00 (121.70 to 122.70): E

Ion 105.00 (104.70 to 105.70): E

Ion 77.00 (76.70 to 77.70): BF1





#33

4-Chloroaniline

Concen: 3.325 ng

RT: 8.21 min Scan# 1041

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

Tot Ion:127 Resp: 69038

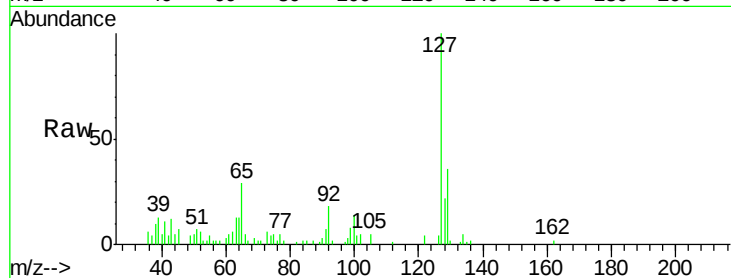
Ion Ratio Lower Upper

127 100

129 35.7 26.7 40.1

65 29.5 25.4 38.0

92 17.9 15.4 23.2

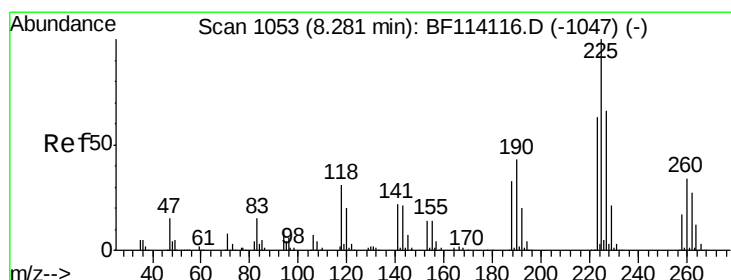
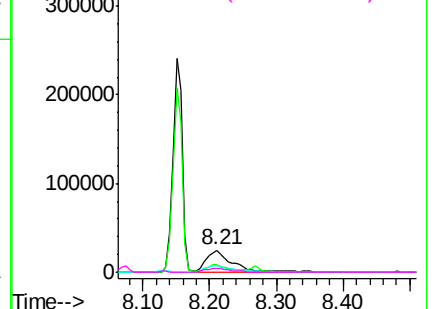
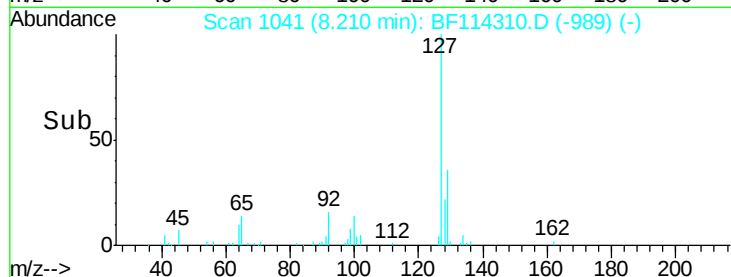


Abundance Ion 127.00 (126.70 to 127.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 65.00 (64.70 to 65.70): BF1

Ion 92.00 (91.70 to 92.70): BF1



#34

Hexachlorobutadiene

Concen: 31.708 ng

RT: 8.27 min Scan# 1051

Delta R.T. -0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

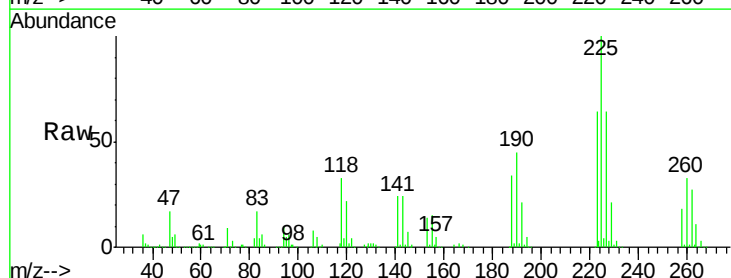
Tgt Ion:225 Resp: 275586

Ion Ratio Lower Upper

225 100

223 63.7 50.2 75.2

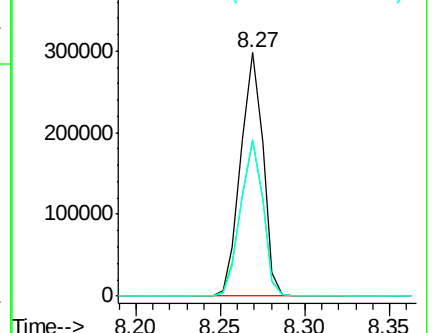
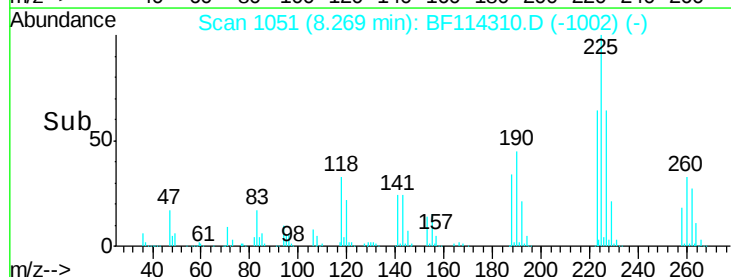
227 64.5 52.6 79.0

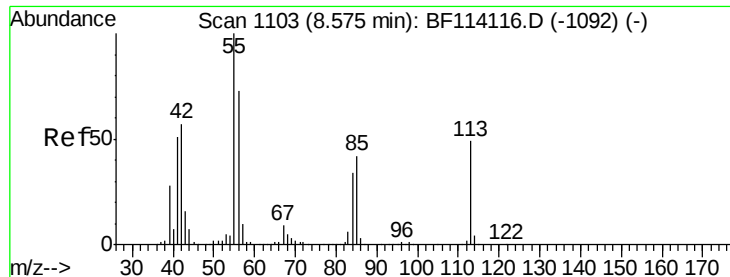


Abundance Ion 225.00 (224.70 to 225.70): E

Ion 223.00 (222.70 to 223.70): E

Ion 227.00 (226.70 to 227.70): E

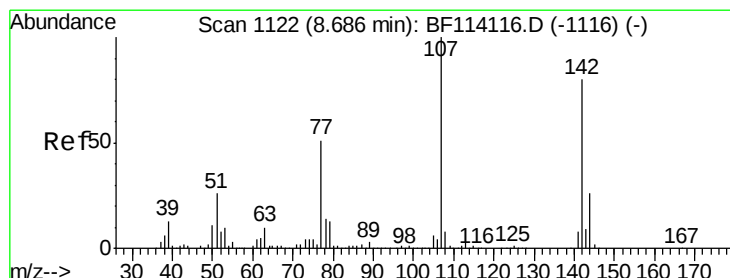
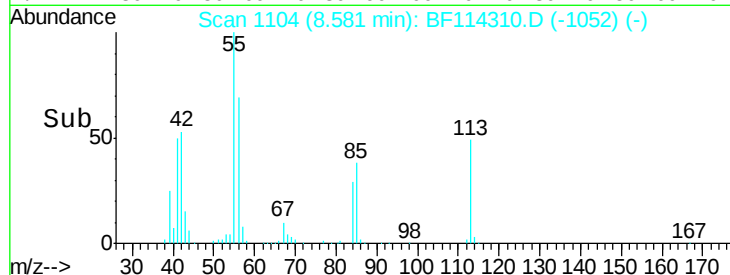
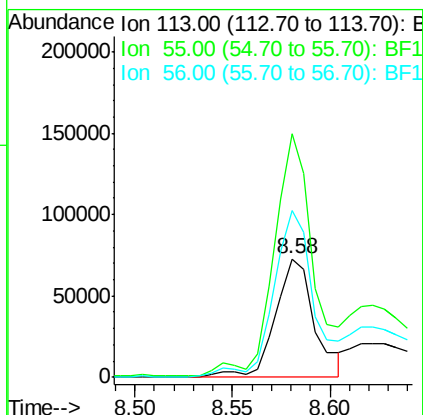
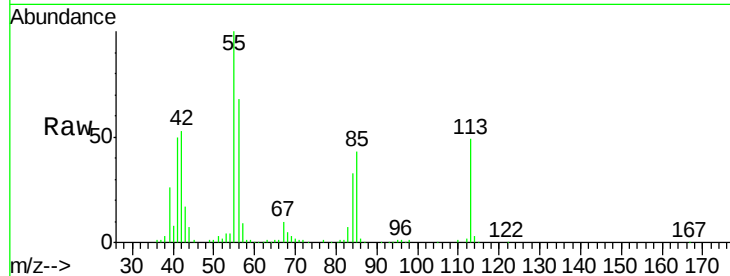




#35  
 Caprolactam  
 Concen: 23.153 ng  
 RT: 8.58 min Scan# 1104  
 Delta R.T. 0.01 min  
 Lab File: BF114310.D  
 Acq: 16 May 2019 15:48

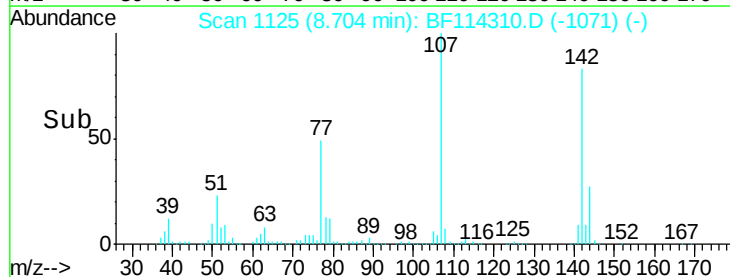
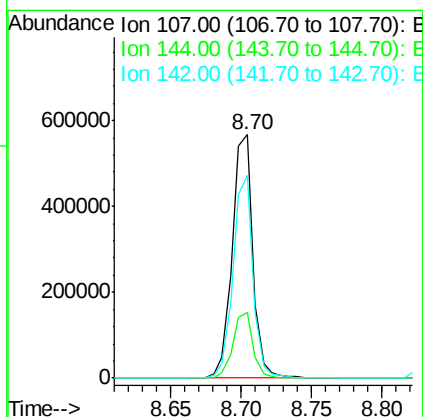
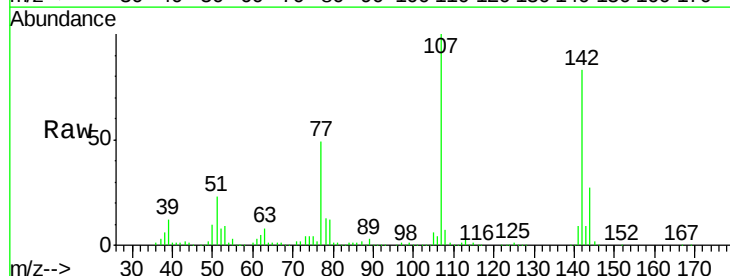
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-COMPMS

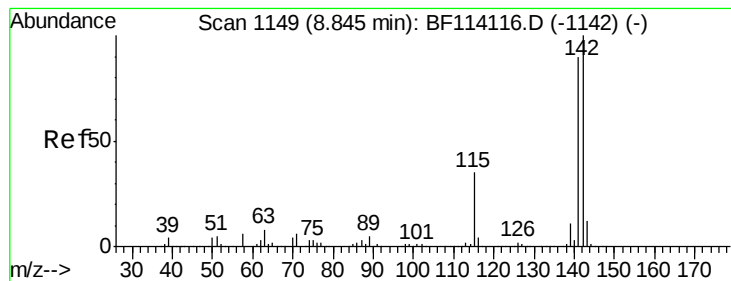
Tot Ion:113 Resp: 101411  
 Ion Ratio Lower Upper  
 113 100  
 55 205.2 183.5 223.5  
 56 140.5 128.8 168.8



#36  
 4-Chloro-3-methylphenol  
 Concen: 42.862 ng  
 RT: 8.70 min Scan# 1125  
 Delta R.T. 0.02 min  
 Lab File: BF114310.D  
 Acq: 16 May 2019 15:48

Tgt Ion:107 Resp: 579550  
 Ion Ratio Lower Upper  
 107 100  
 144 26.8 20.4 30.6  
 142 83.3 64.2 96.4





#37

2-Methylnaphthalene

Concen: 43.102 ng

RT: 8.85 min Scan# 1149

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

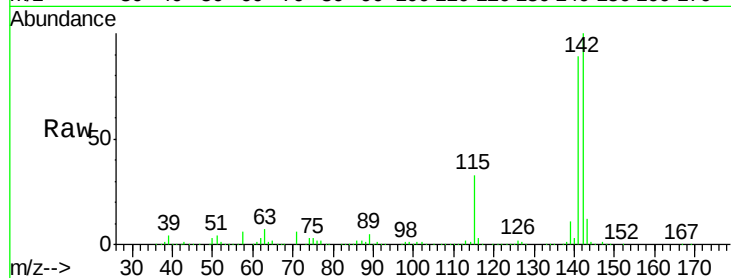
Tot Ion:142 Resp: 1267148

Ion Ratio Lower Upper

142 100

141 89.1 72.1 108.1

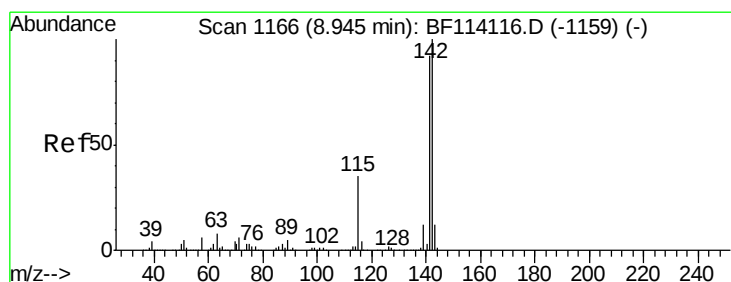
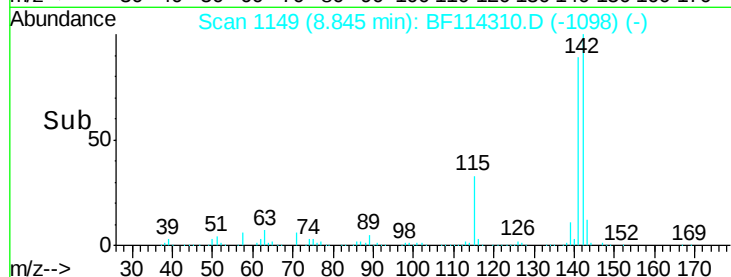
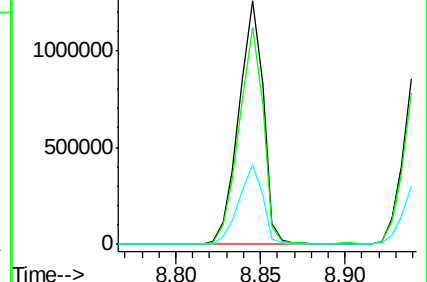
115 32.7 28.0 42.0



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E



#38

1-Methylnaphthalene

Concen: 42.851 ng

RT: 8.95 min Scan# 1166

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

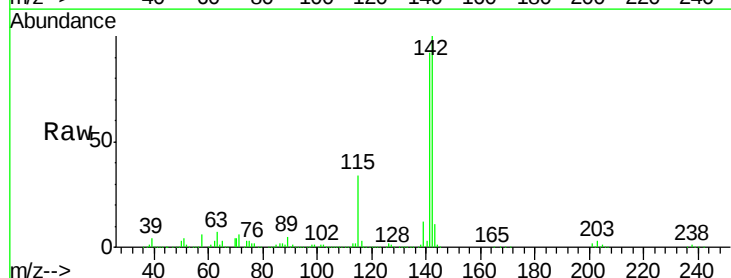
Tgt Ion:142 Resp: 1186359

Ion Ratio Lower Upper

142 100

141 91.8 73.4 110.0

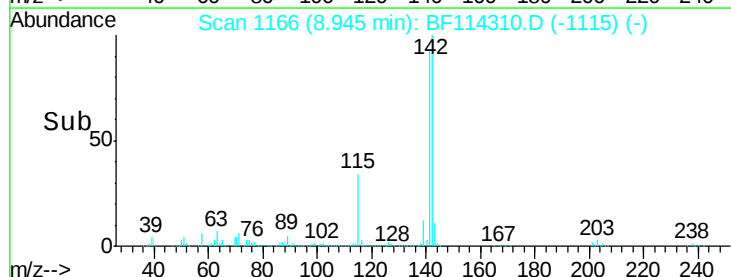
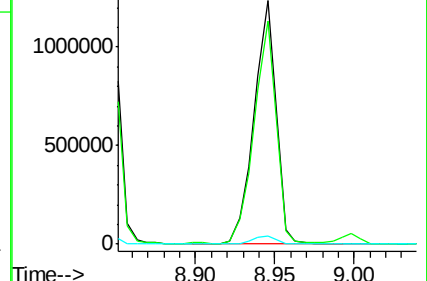
116 3.5 3.1 4.7

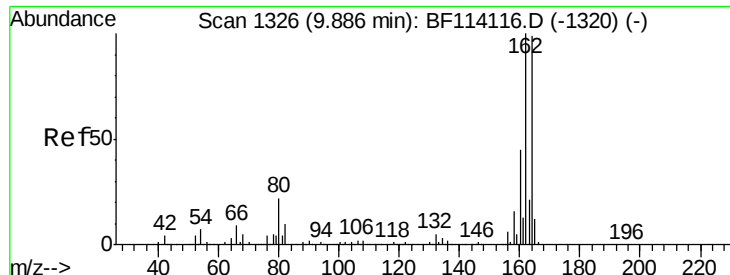


Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 116.00 (115.70 to 116.70): E





#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.89 min Scan# 1326

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

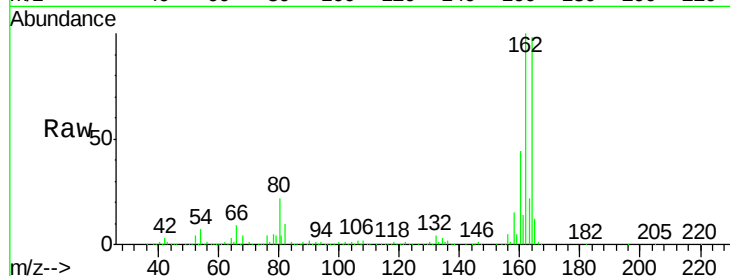
Tot Ion:164 Resp: 456479

Ion Ratio Lower Upper

164 100

162 102.2 80.6 120.8

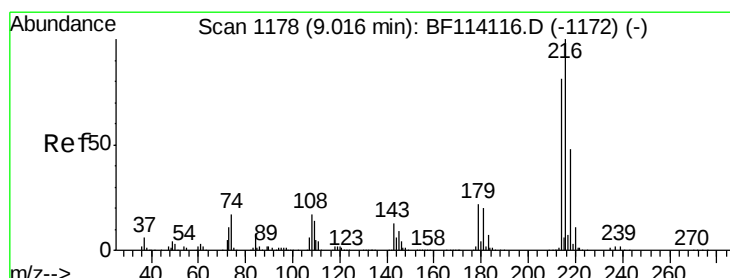
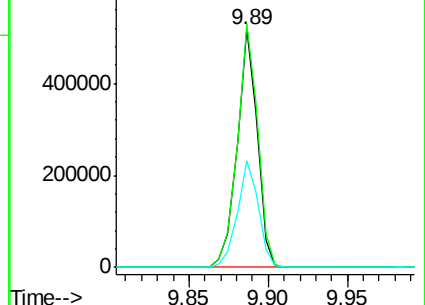
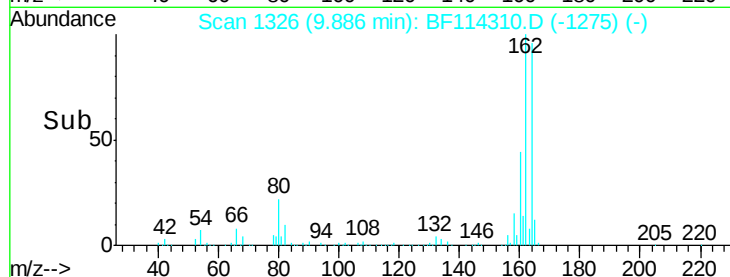
160 45.0 36.5 54.7



Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E



#40

1,2,4,5-Tetrachlorobenzene

Concen: 40.369 ng

RT: 9.02 min Scan# 1178

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Tgt Ion:216 Resp: 558208

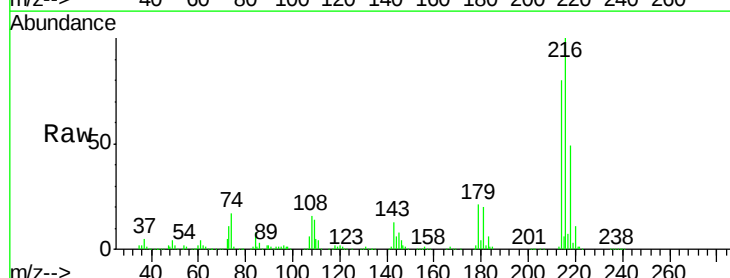
Ion Ratio Lower Upper

216 100

214 80.3 63.9 95.9

179 21.3 17.0 25.6

108 19.5 14.8 22.2

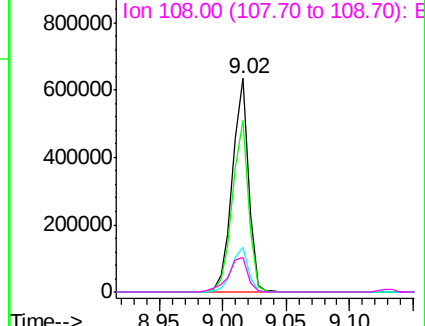
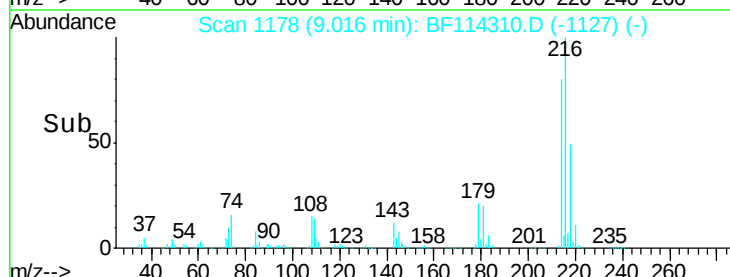


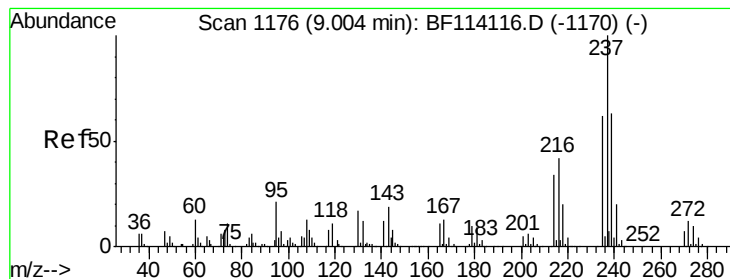
Abundance Ion 216.00 (215.70 to 216.70): E

Ion 214.00 (213.70 to 214.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 108.00 (107.70 to 108.70): E





#41

Hexachlorocyclopentadiene

Concen: 55.493 ng

RT: 9.00 min Scan# 1175

Delta R.T. -0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

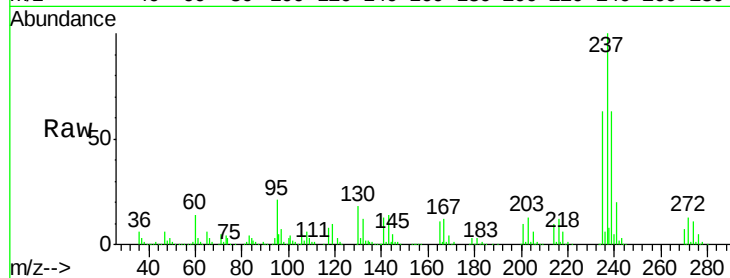
Tot Ion:237 Resp: 348473

Ion Ratio Lower Upper

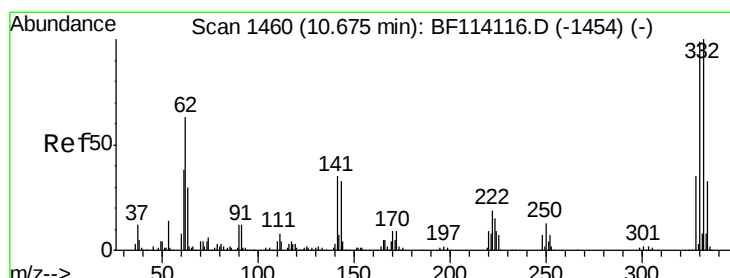
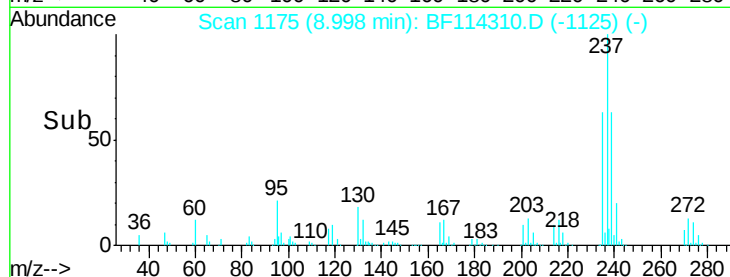
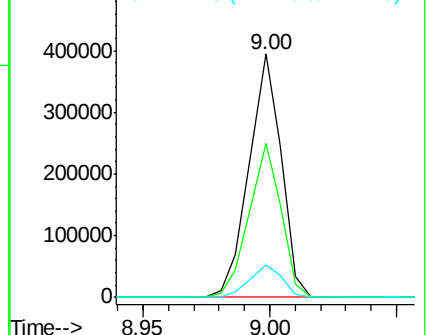
237 100

235 63.1 42.0 82.0

272 13.3 0.0 32.4



Abundance Ion 236.80 (236.50 to 237.50): E  
Ion 234.90 (234.60 to 235.60): E  
Ion 271.75 (271.45 to 272.45): E



#42

2,4,6-Tribromophenol

Concen: 104.647 ng

RT: 10.68 min Scan# 1461

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

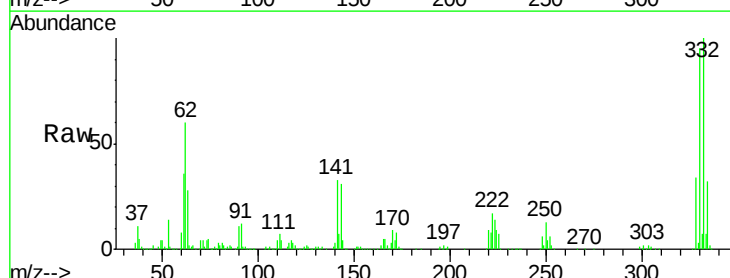
Tgt Ion:330 Resp: 493853

Ion Ratio Lower Upper

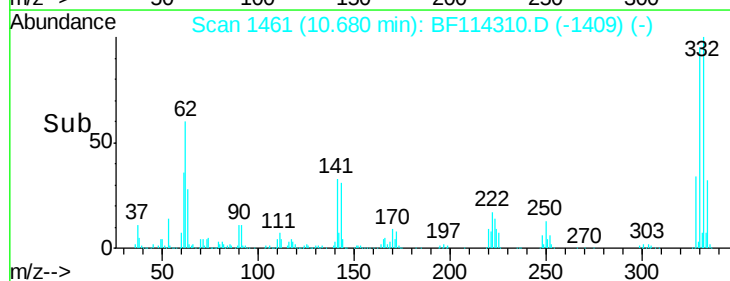
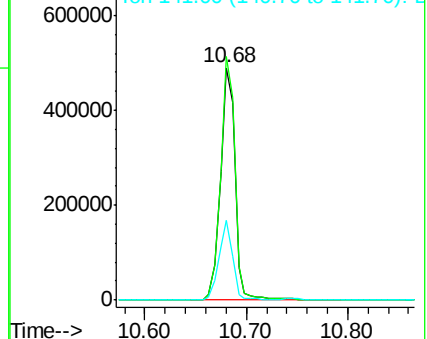
330 100

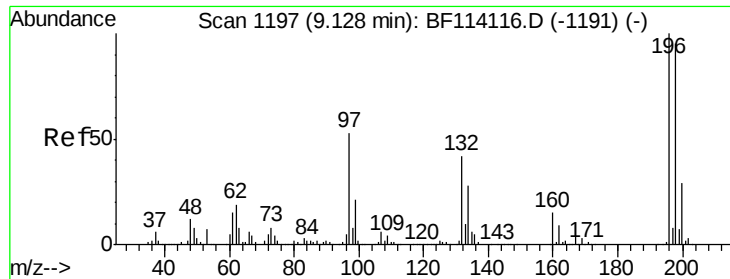
332 102.2 81.4 122.2

141 32.2 26.6 40.0



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

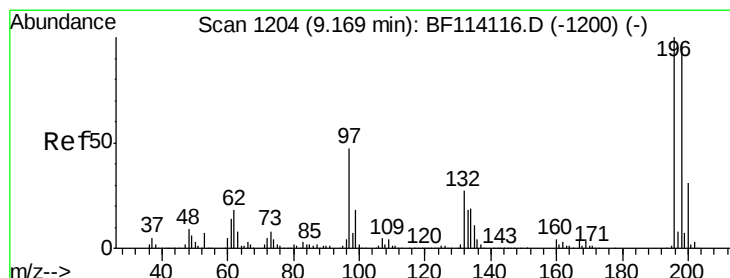
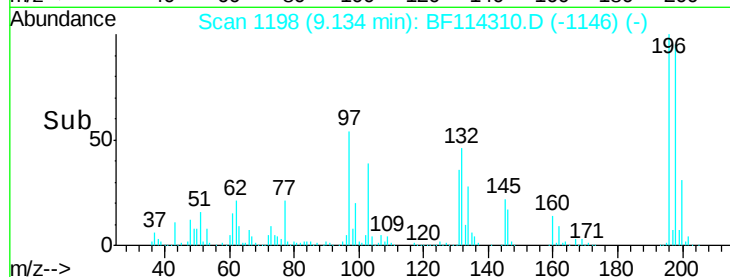
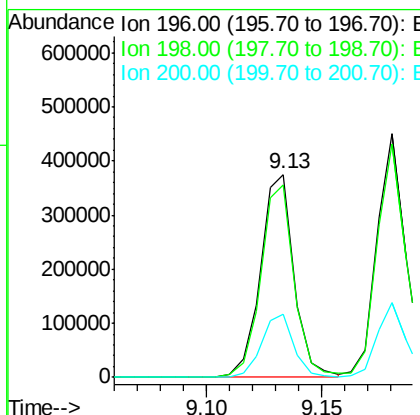
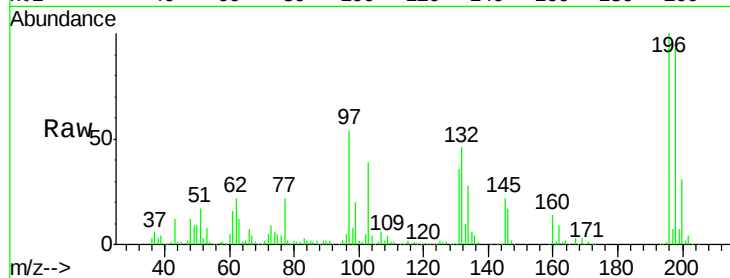




#43  
 2,4,6-Trichlorophenol  
 Concen: 39.842 ng  
 RT: 9.13 min Scan# 1198  
 Delta R.T. 0.01 min  
 Lab File: BF114310.D  
 Acq: 16 May 2019 15:48

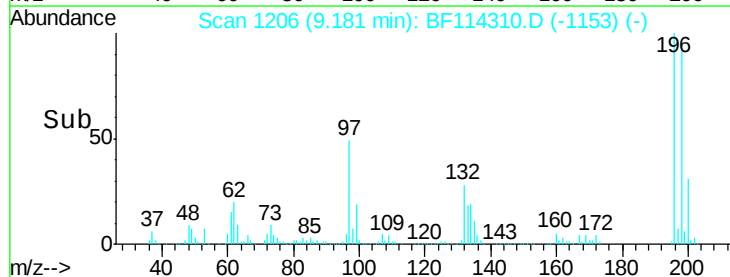
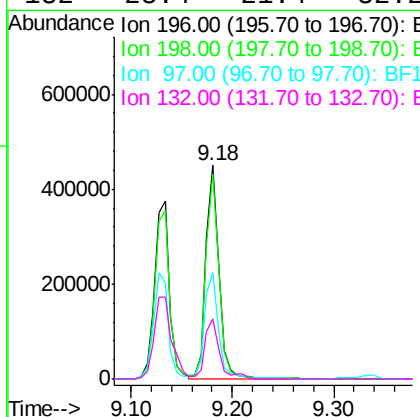
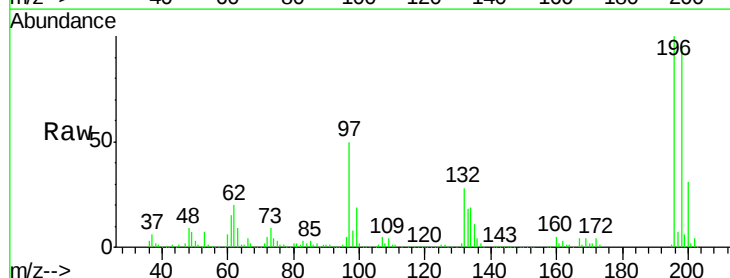
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-COMPMS

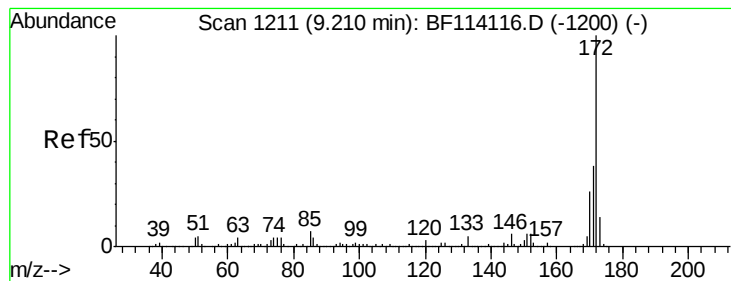
Tot Ion:196 Resp: 378938  
 Ion Ratio Lower Upper  
 196 100  
 198 95.1 75.9 113.9  
 200 31.0 23.5 35.3



#44  
 2,4,5-Trichlorophenol  
 Concen: 41.266 ng  
 RT: 9.18 min Scan# 1206  
 Delta R.T. 0.01 min  
 Lab File: BF114310.D  
 Acq: 16 May 2019 15:48

Tgt Ion:196 Resp: 402513  
 Ion Ratio Lower Upper  
 196 100  
 198 95.7 77.7 116.5  
 97 49.5 38.2 57.2  
 132 28.4 21.4 32.2





#45

2-Fluorobiphenyl

Concen: 76.983 ng

RT: 9.21 min Scan# 1211

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

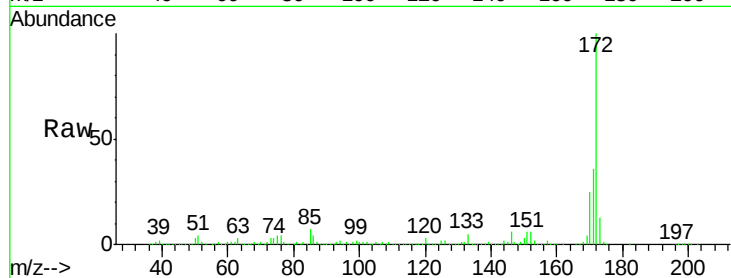
Tot Ion:172 Resp: 2323133

Ion Ratio Lower Upper

172 100

171 36.4 30.7 46.1

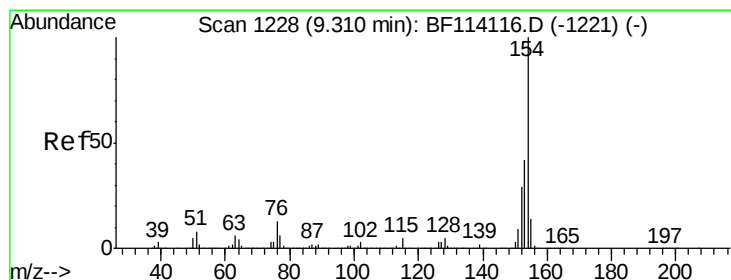
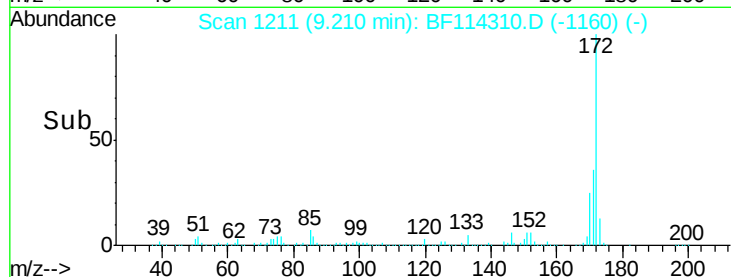
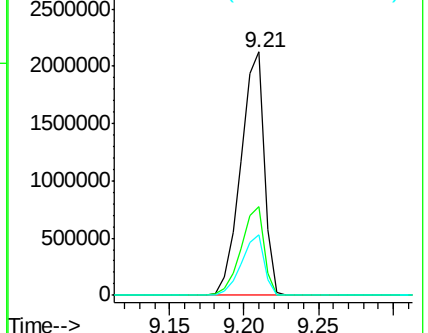
170 24.7 20.5 30.7



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



#46

1,1'-Biphenyl

Concen: 41.017 ng

RT: 9.31 min Scan# 1228

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

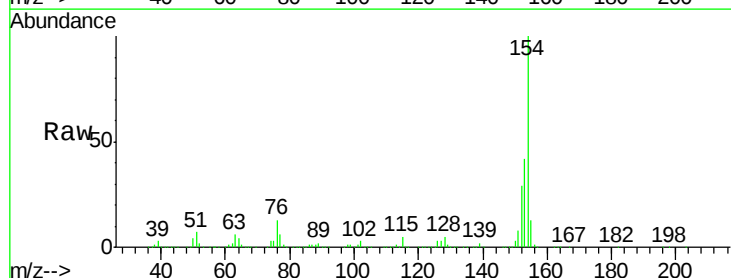
Tgt Ion:154 Resp: 1512582

Ion Ratio Lower Upper

154 100

153 41.5 21.9 61.9

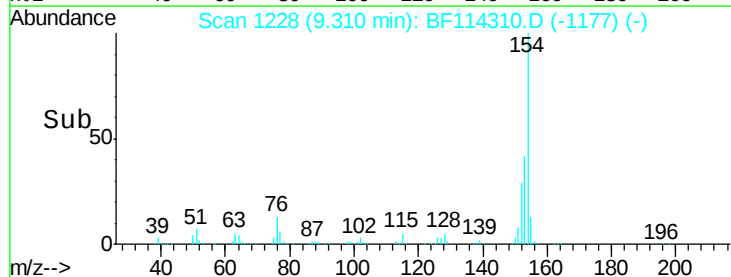
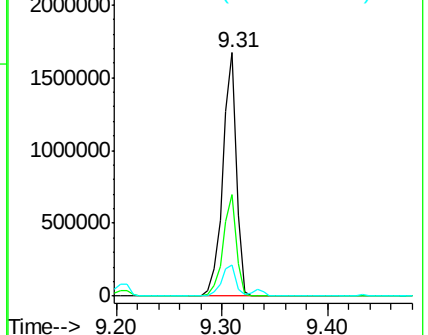
76 13.0 0.0 32.8

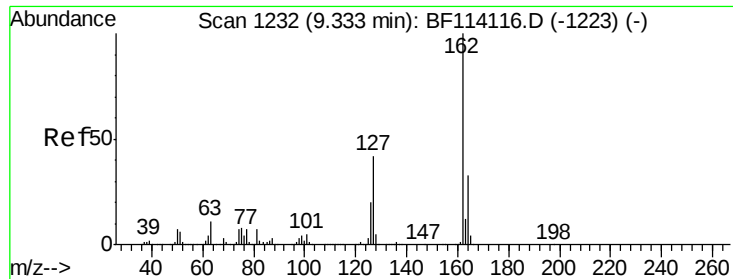


Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 76.00 (75.70 to 76.70): BF1

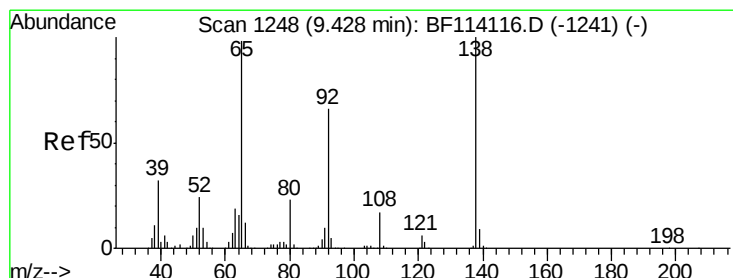
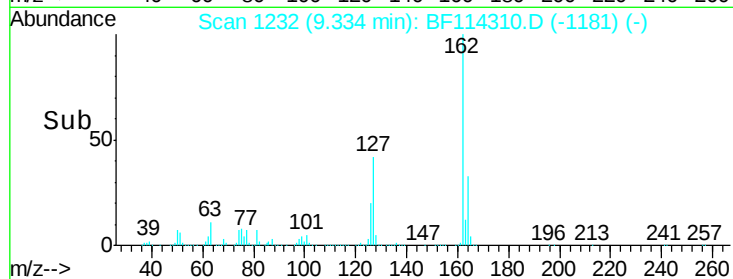
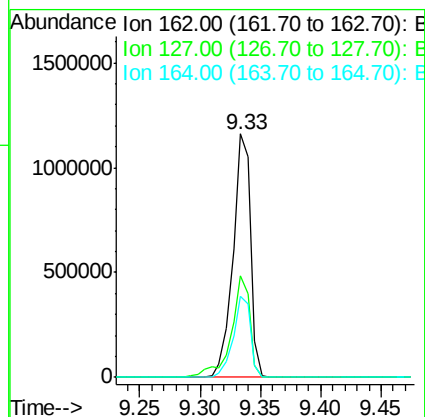
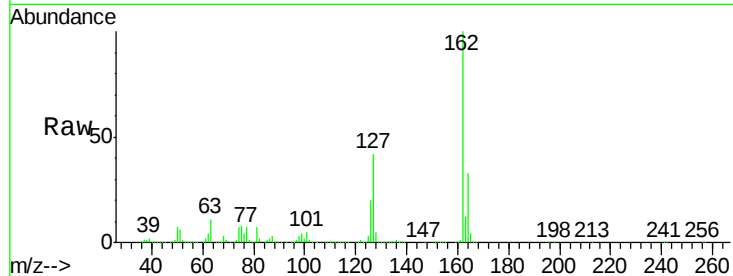




#47  
2-Chloronaphthalene  
Concen: 39.509 ng  
RT: 9.33 min Scan# 1232  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

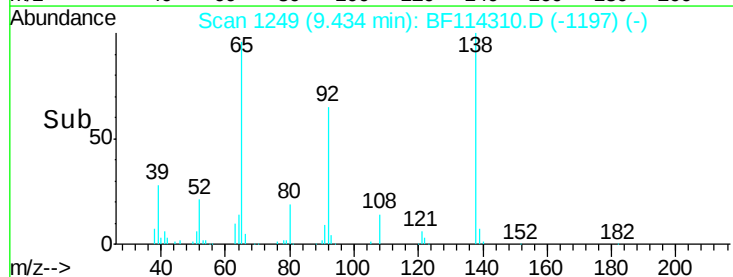
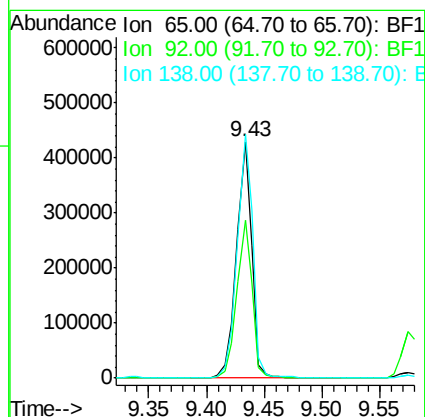
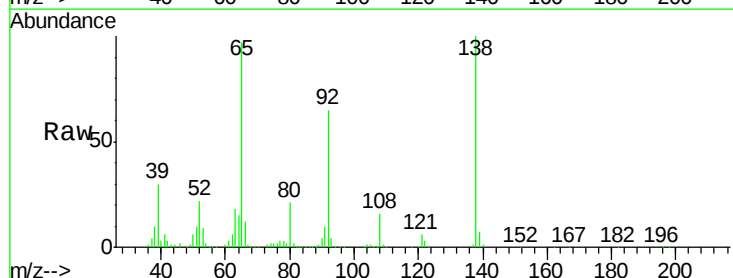
Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-COMPMS

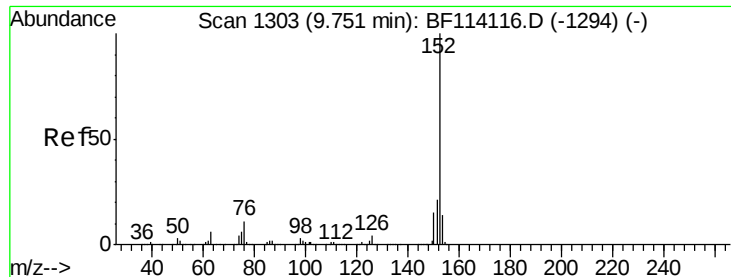
Tot Ion:162 Resp: 1172574  
Ion Ratio Lower Upper  
162 100  
127 41.9 34.0 51.0  
164 33.4 26.7 40.1



#48  
2-Nitroaniline  
Concen: 37.346 ng  
RT: 9.43 min Scan# 1249  
Delta R.T. 0.01 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Tgt Ion: 65 Resp: 393079  
Ion Ratio Lower Upper  
65 100  
92 67.0 53.9 80.9  
138 103.2 81.4 122.0





#49

Acenaphthylene

Concen: 40.940 ng

RT: 9.75 min Scan# 1303

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

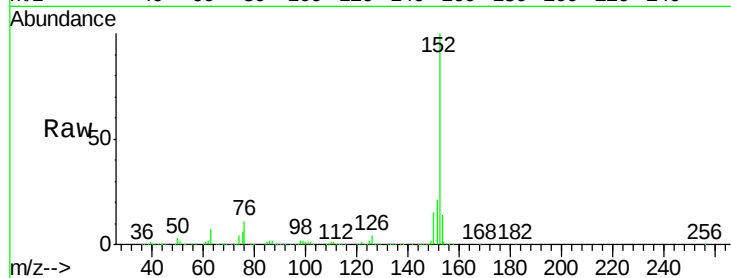
Tot Ion:152 Resp: 1847995

Ion Ratio Lower Upper

152 100

151 20.7 16.8 25.2

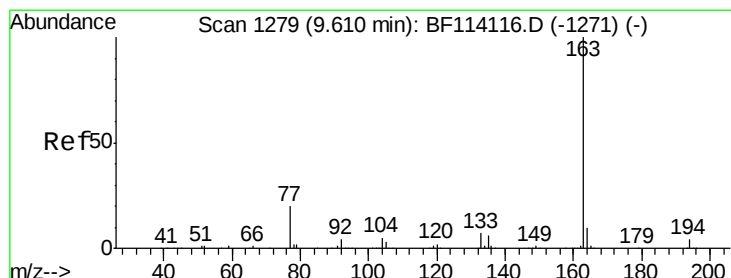
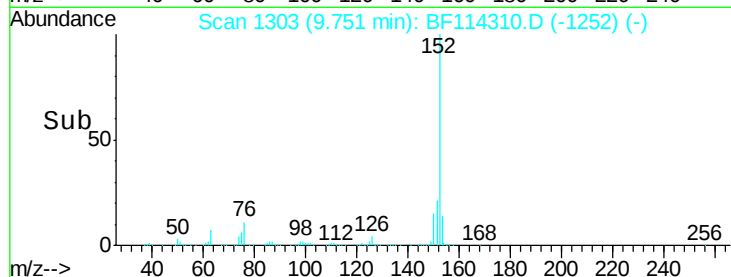
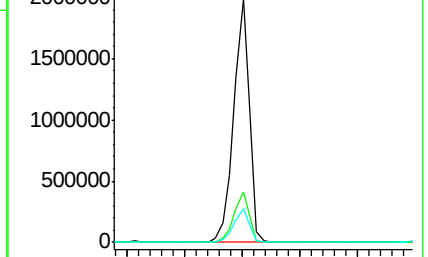
153 13.7 11.4 17.2



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E



#50

Dimethylphthalate

Concen: 40.622 ng

RT: 9.60 min Scan# 1278

Delta R.T. -0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

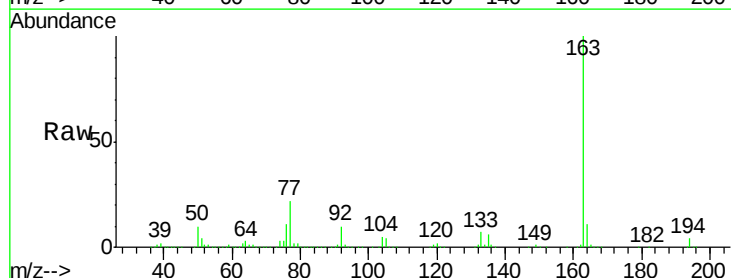
Tgt Ion:163 Resp: 1361236

Ion Ratio Lower Upper

163 100

194 3.9 3.4 5.0

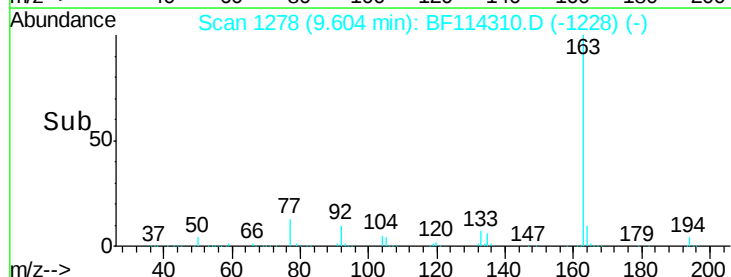
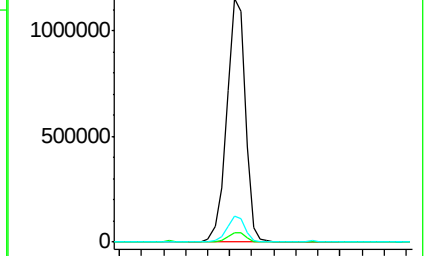
164 10.7 8.2 12.2

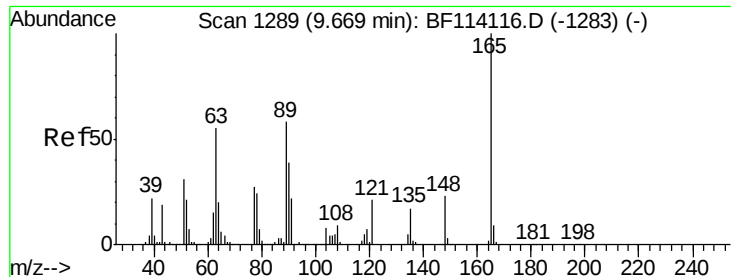


Abundance Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E

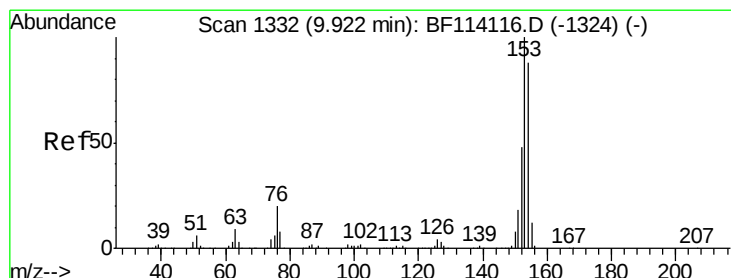
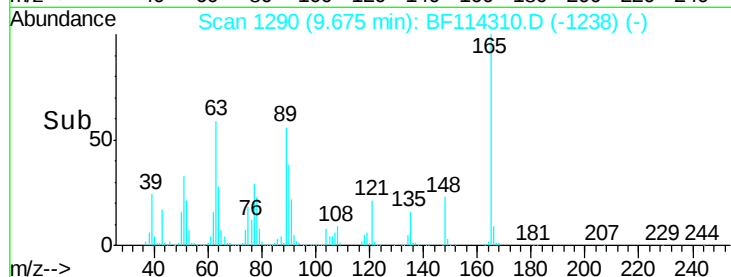
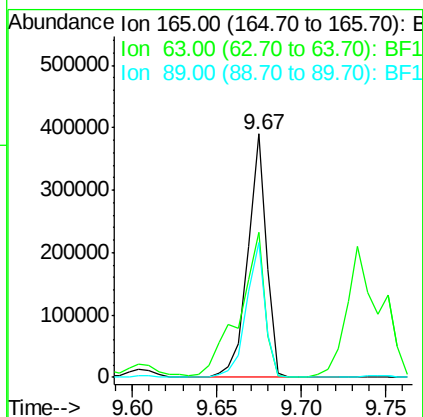
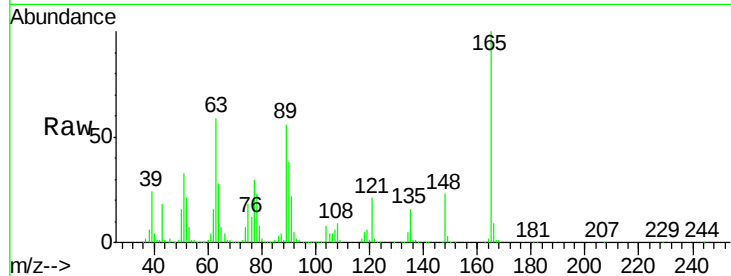




#51  
 2,6-Dinitrotoluene  
 Concen: 41.018 ng  
 RT: 9.67 min Scan# 1290  
 Delta R.T. 0.01 min  
 Lab File: BF114310.D  
 Acq: 16 May 2019 15:48

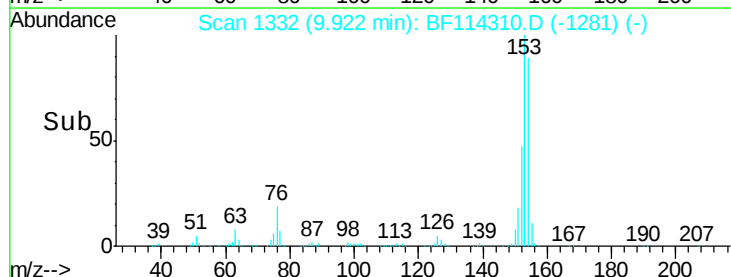
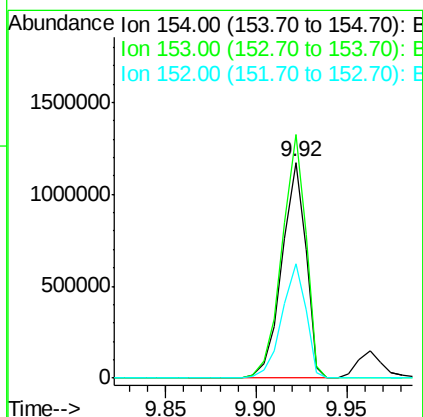
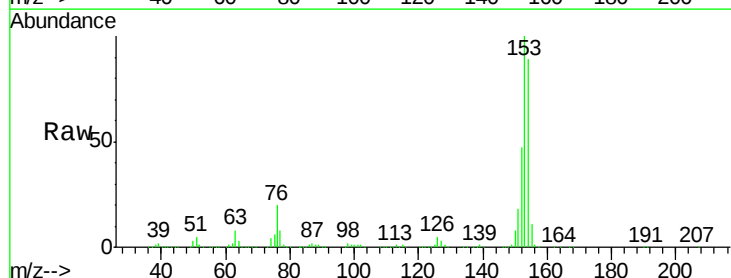
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-COMPMS

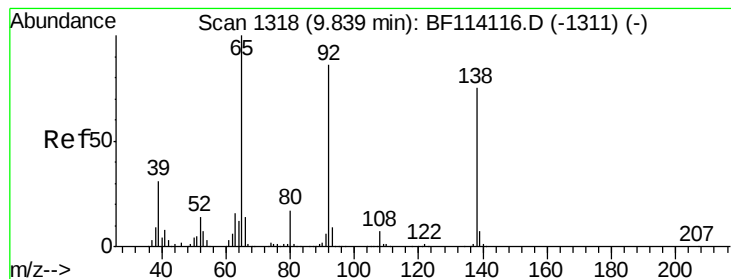
Tot Ion:165 Resp: 304862  
 Ion Ratio Lower Upper  
 165 100  
 63 59.4 50.2 75.4  
 89 55.6 46.6 69.8



#52  
 Acenaphthene  
 Concen: 39.136 ng  
 RT: 9.92 min Scan# 1332  
 Delta R.T. 0.00 min  
 Lab File: BF114310.D  
 Acq: 16 May 2019 15:48

Tgt Ion:154 Resp: 1084054  
 Ion Ratio Lower Upper  
 154 100  
 153 112.7 90.5 135.7  
 152 52.9 43.4 65.2





#53

3-Nitroaniline

Concen: 4.759 ng

RT: 9.85 min Scan# 1319

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

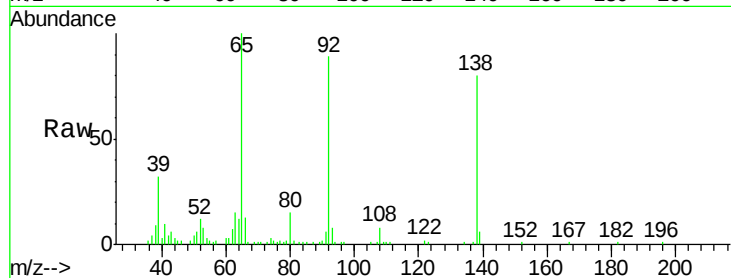
Tot Ion:138 Resp: 43909

Ion Ratio Lower Upper

138 100

108 10.6 7.8 11.6

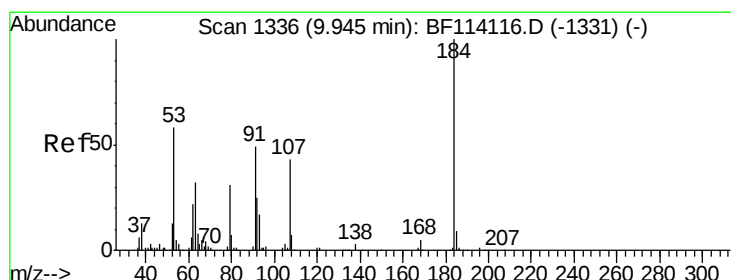
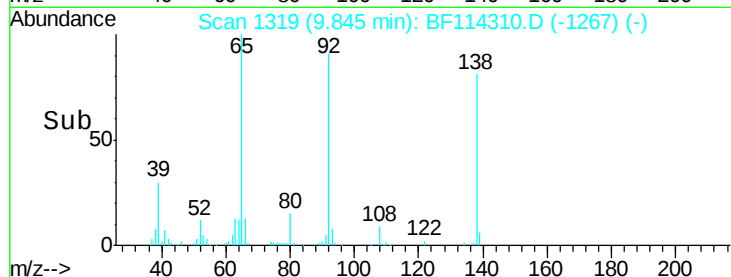
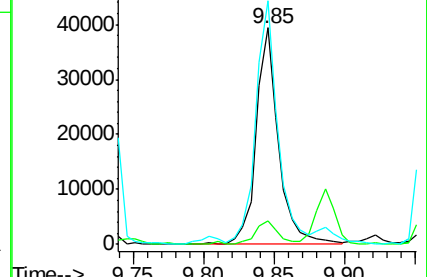
92 112.4 91.2 136.8



Abundance Ion 138.00 (137.70 to 138.70): E

Ion 108.00 (107.70 to 108.70): E

Ion 92.00 (91.70 to 92.70): BF1



#54

2,4-Dinitrophenol

Concen: 69.986 ng

RT: 9.96 min Scan# 1339

Delta R.T. 0.02 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

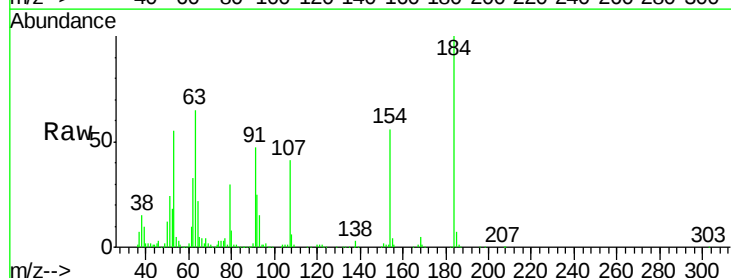
Tgt Ion:184 Resp: 258111

Ion Ratio Lower Upper

184 100

63 65.4 55.6 83.4

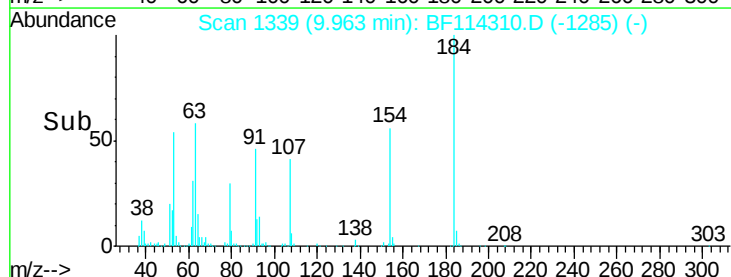
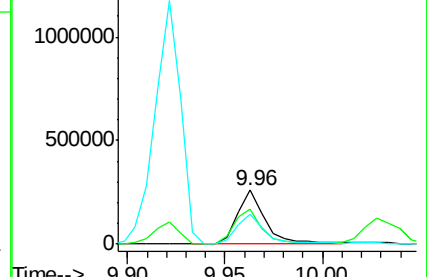
154 56.2 46.0 69.0

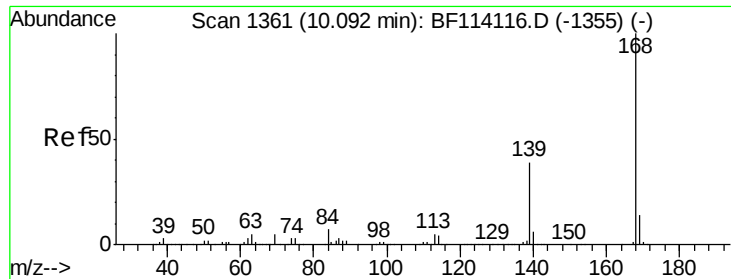


Abundance Ion 184.00 (183.70 to 184.70): E

Ion 63.00 (62.70 to 63.70): BF1

Ion 154.00 (153.70 to 154.70): E

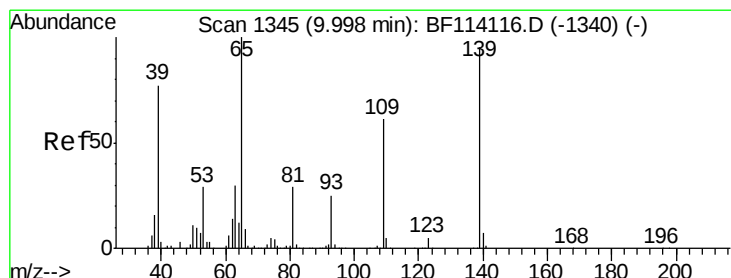
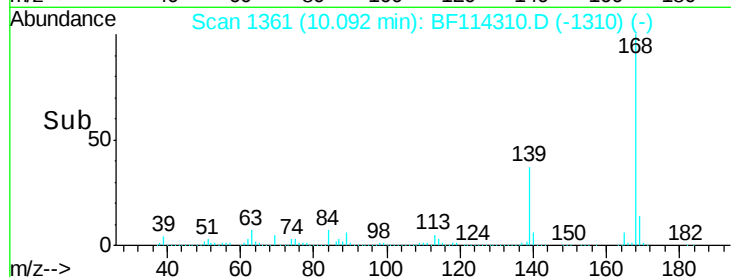
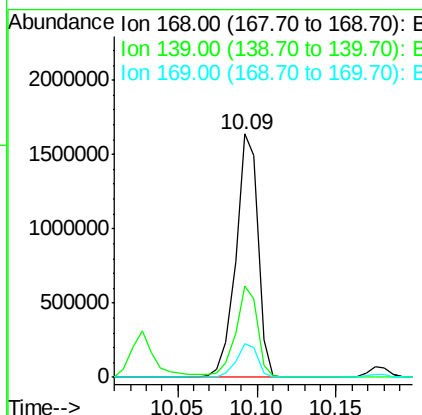
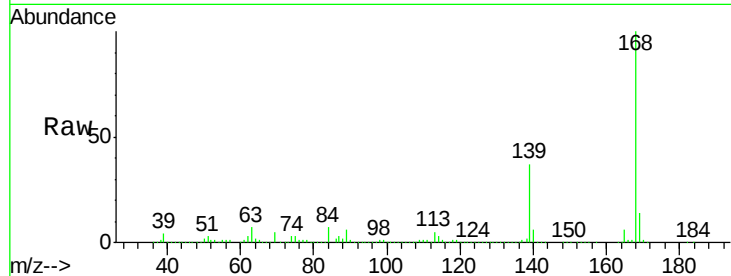




#55  
Dibenzenofuran  
Concen: 38.984 ng  
RT: 10.09 min Scan# 1361  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

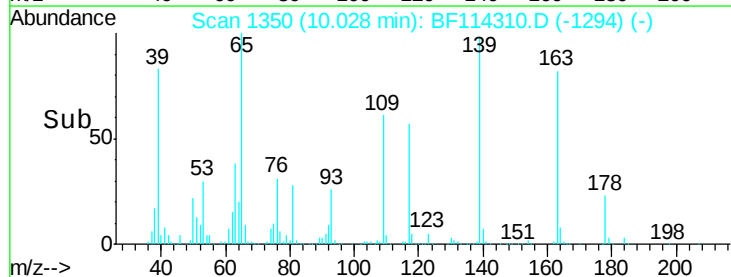
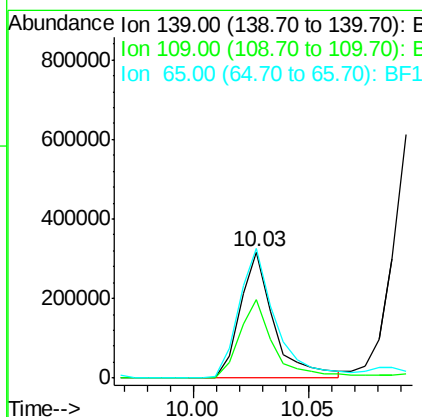
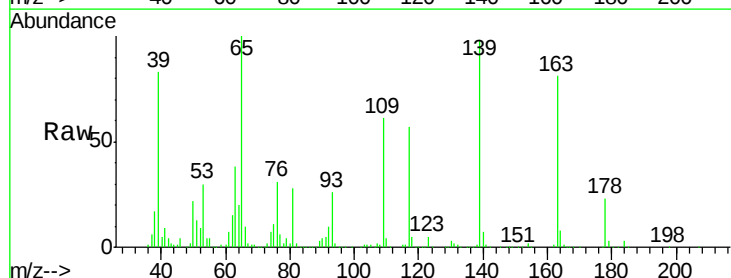
Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-COMPMS

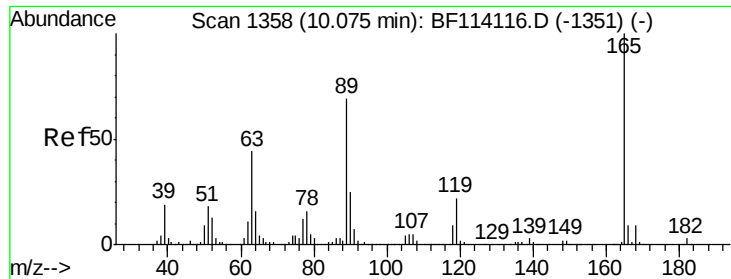
Tot Ion:168 Resp: 1583432  
Ion Ratio Lower Upper  
168 100  
139 37.3 31.1 46.7  
169 14.0 11.4 17.0



#56  
4-Nitrophenol  
Concen: 49.852 ng  
RT: 10.03 min Scan# 1350  
Delta R.T. 0.03 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Tgt Ion:139 Resp: 325273  
Ion Ratio Lower Upper  
139 100  
109 62.5 43.9 83.9  
65 102.4 85.7 125.7

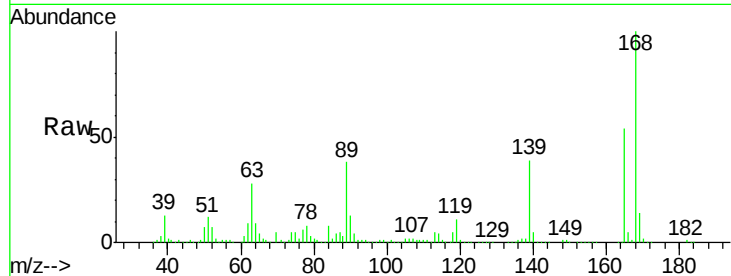




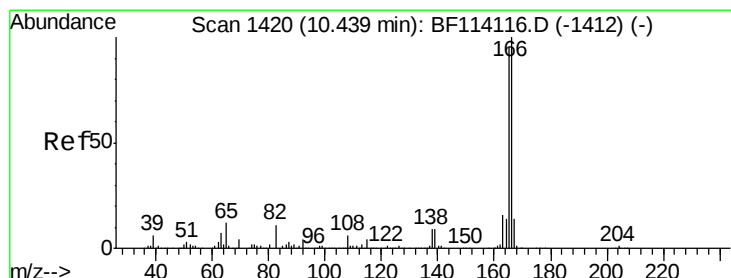
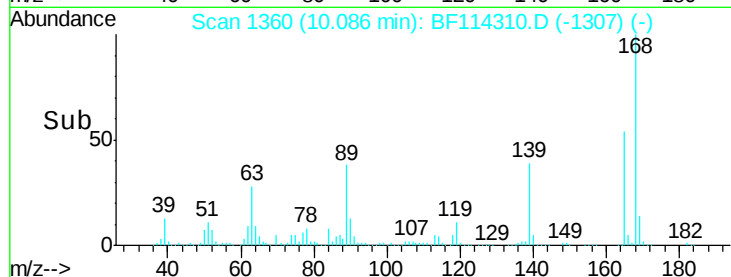
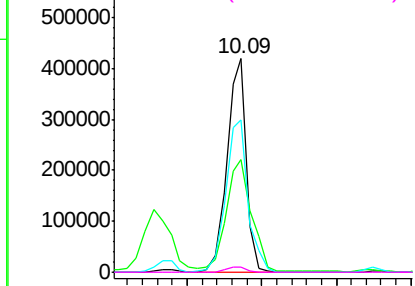
#57  
2,4-Dinitrotoluene  
Concen: 37.920 ng  
RT: 10.09 min Scan# 1360  
Delta R.T. 0.01 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-COMPMS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 52.6  | 35.5  | 53.3  |
| 89      | 71.1  | 55.2  | 82.8  |
| 182     | 2.5   | 2.2   | 3.2   |

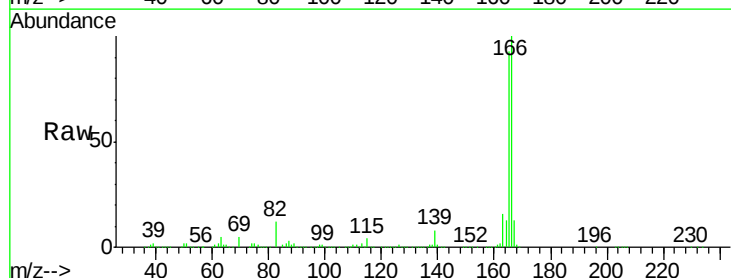


Abundance Ion 165.00 (164.70 to 165.70): E  
Ion 63.00 (62.70 to 63.70): BF1  
Ion 89.00 (88.70 to 89.70): BF1  
Ion 182.00 (181.70 to 182.70): E

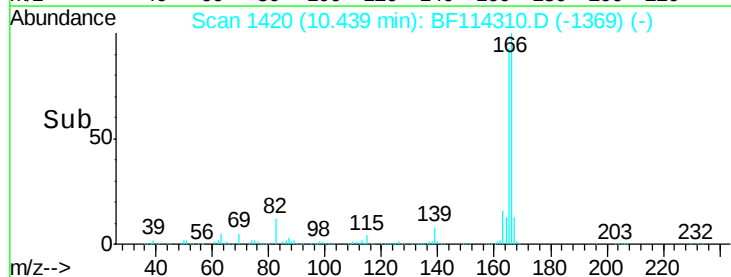
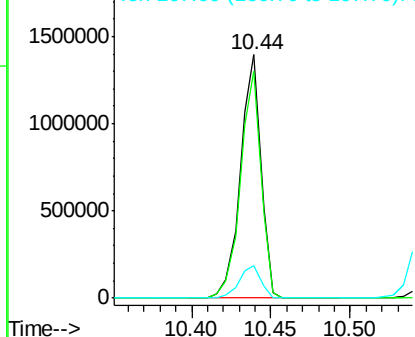


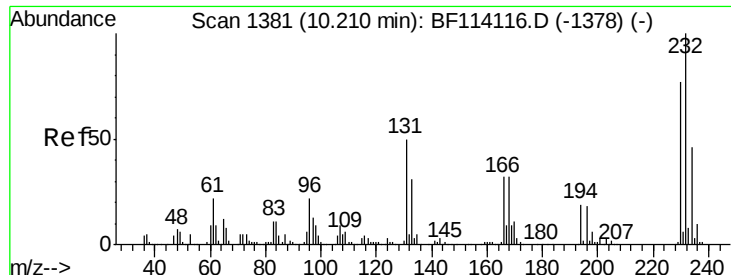
#58  
Fluorene  
Concen: 39.874 ng  
RT: 10.44 min Scan# 1420  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 93.3  | 76.1  | 114.1 |
| 167     | 13.5  | 11.1  | 16.7  |



Abundance Ion 166.00 (165.70 to 166.70): E  
Ion 165.00 (164.70 to 165.70): E  
Ion 167.00 (166.70 to 167.70): E

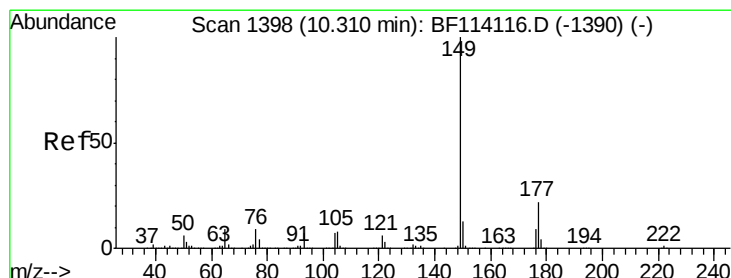
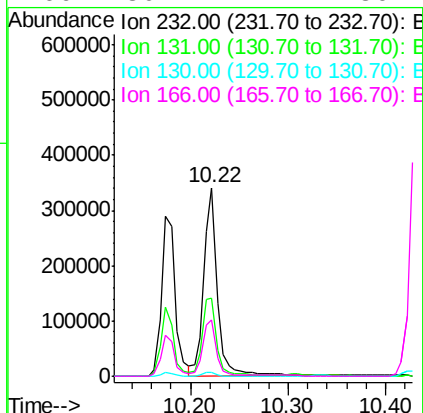
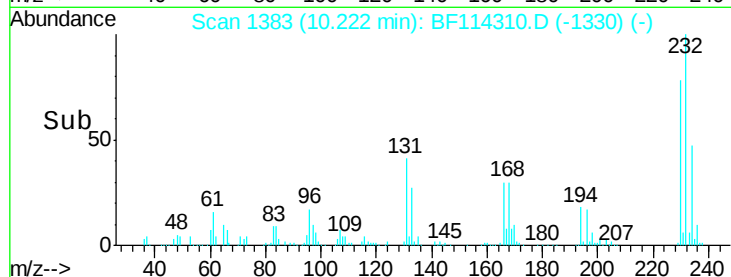
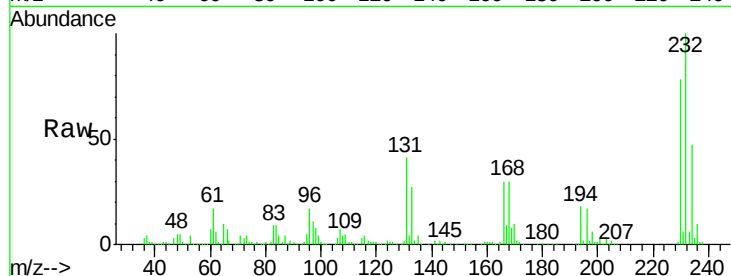




#59  
2,3,4,6-Tetrachlorophenol  
Concen: 39.182 ng  
RT: 10.22 min Scan# 1383  
Delta R.T. 0.01 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

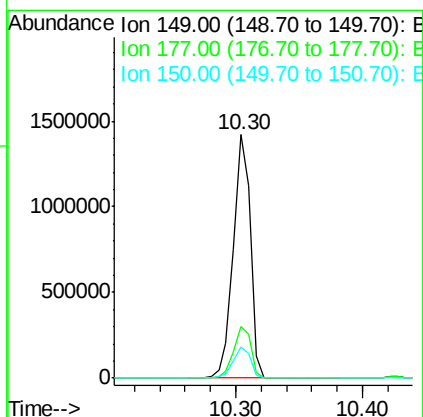
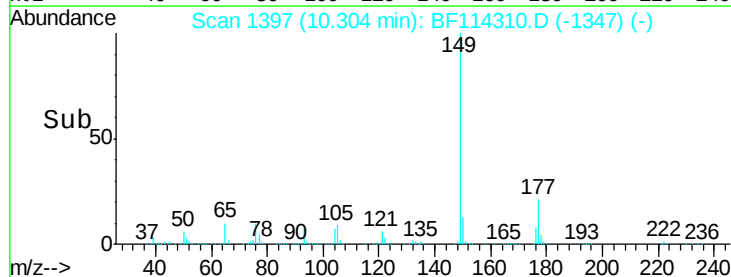
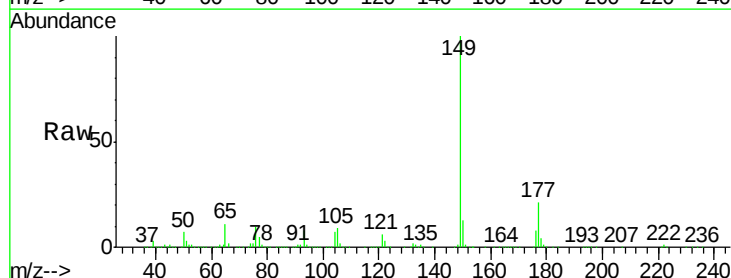
Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-COMPMS

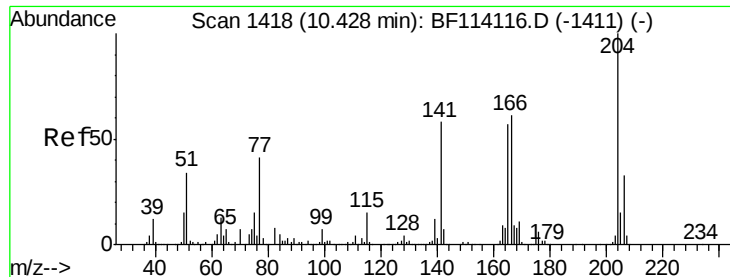
Tot Ion:232 Resp: 329760  
Ion Ratio Lower Upper  
232 100  
131 42.9 35.6 53.4  
130 2.3 1.6 2.4  
166 30.1 24.1 36.1



#60  
Diethylphthalate  
Concen: 38.389 ng  
RT: 10.30 min Scan# 1397  
Delta R.T. -0.01 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Tgt Ion:149 Resp: 1307073  
Ion Ratio Lower Upper  
149 100  
177 21.4 17.8 26.6  
150 13.0 10.2 15.2

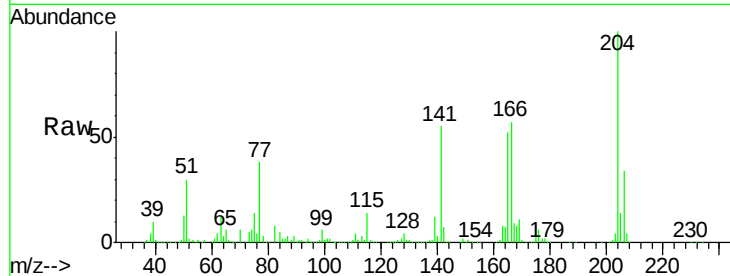




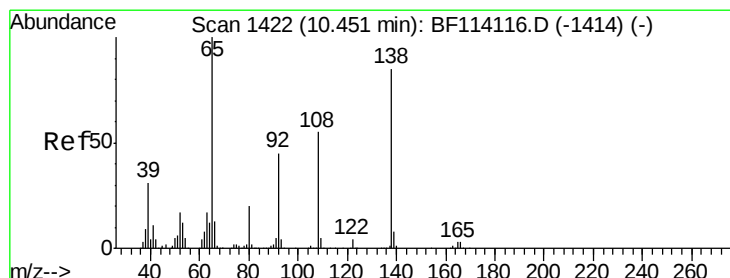
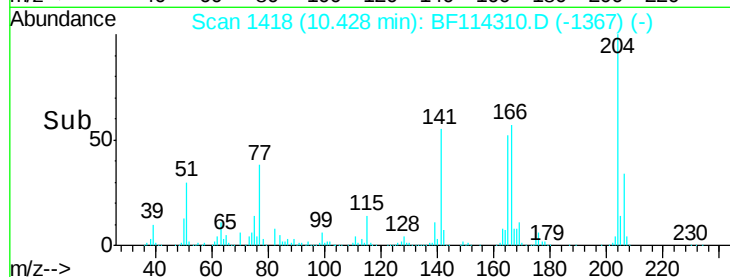
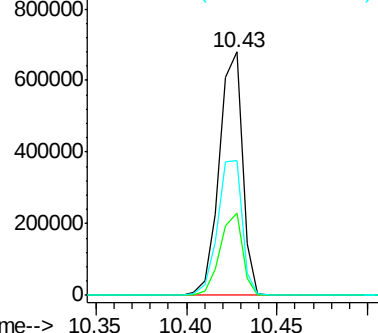
#61  
4-Chlorophenyl-phenylether  
Concen: 39.203 ng  
RT: 10.43 min Scan# 1418  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-COMPMS

Tot Ion:204 Resp: 604076  
Ion Ratio Lower Upper  
204 100  
206 33.6 26.6 39.8  
141 55.1 46.4 69.6

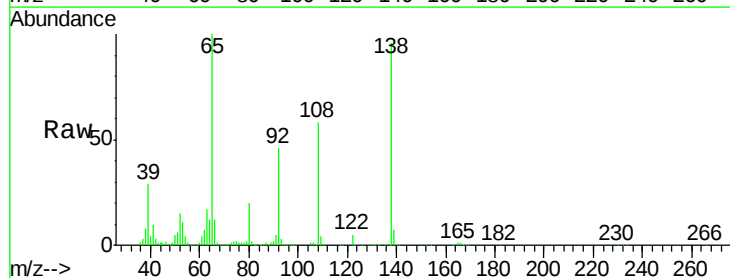


Abundance Ion 204.00 (203.70 to 204.70): E  
Ion 206.00 (205.70 to 206.70): E  
Ion 141.00 (140.70 to 141.70): E

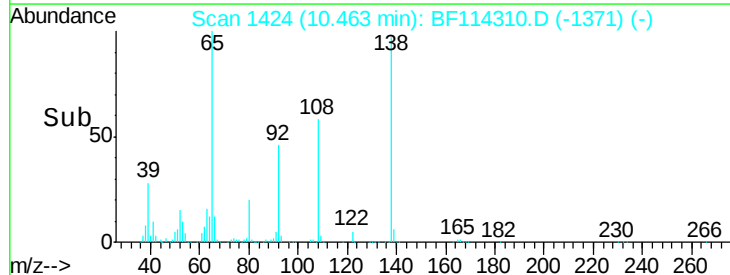
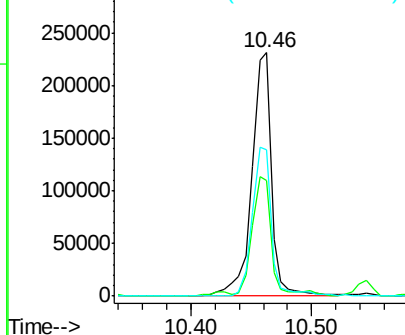


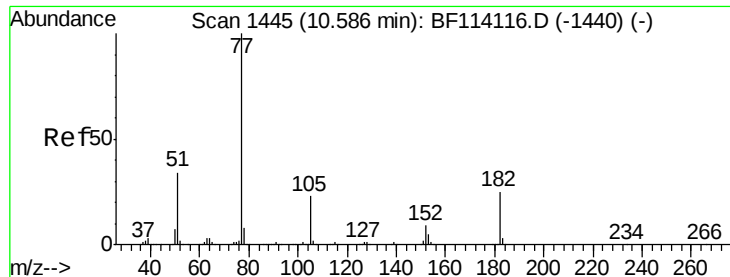
#62  
4-Nitroaniline  
Concen: 27.428 ng  
RT: 10.46 min Scan# 1424  
Delta R.T. 0.01 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Tgt Ion:138 Resp: 265915  
Ion Ratio Lower Upper  
138 100  
92 47.7 33.0 73.0  
108 60.0 44.9 84.9



Abundance Ion 138.00 (137.70 to 138.70): E  
Ion 92.00 (91.70 to 92.70): BF1  
Ion 108.00 (107.70 to 108.70): E





#63

Azobenzene

Concen: 39.486 ng

RT: 10.59 min Scan# 1445

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

Tot Ion: 77 Resp: 1301323

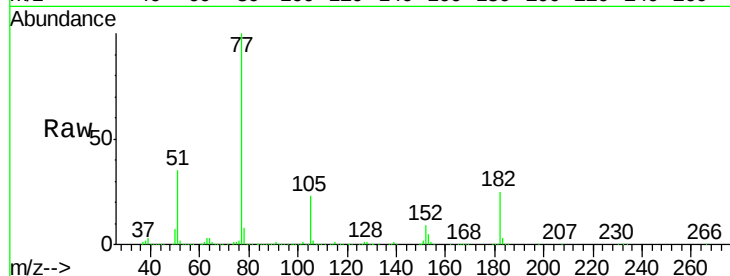
Ion Ratio Lower Upper

77 100

182 24.5 4.7 44.7

105 23.1 2.9 42.9

51 34.6 14.6 54.6

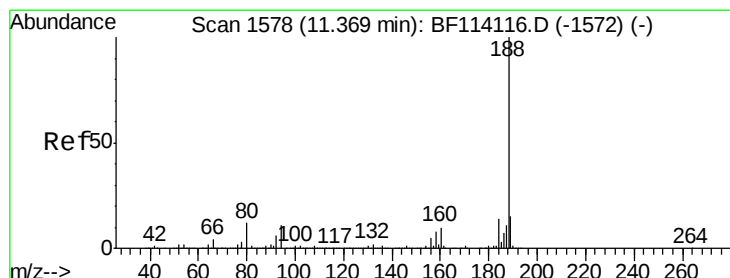
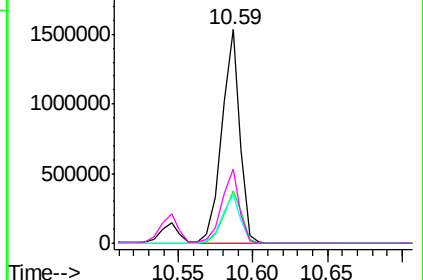
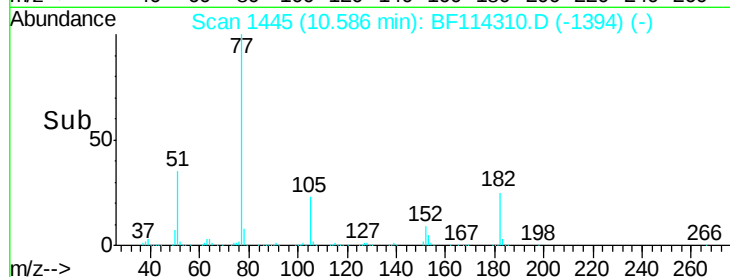


Abundance Ion 77.00 (76.70 to 77.70): BF1

Ion 182.00 (181.70 to 182.70): BF1

Ion 105.00 (104.70 to 105.70): BF1

Ion 51.00 (50.70 to 51.70): BF1



#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.37 min Scan# 1579

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

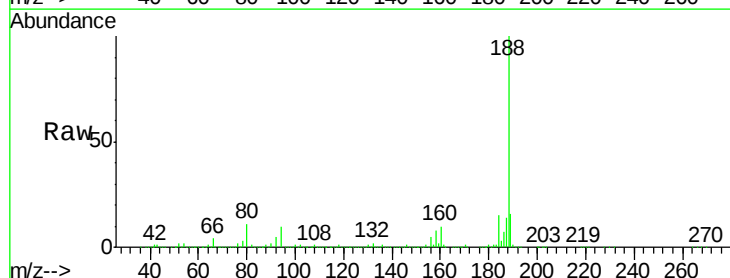
Tgt Ion: 188 Resp: 822277

Ion Ratio Lower Upper

188 100

94 10.4 8.4 12.6

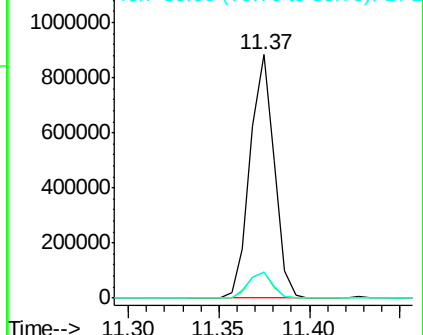
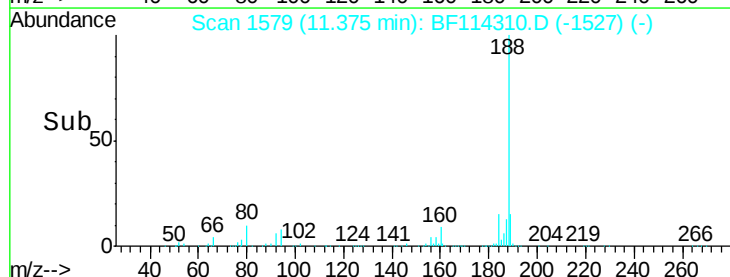
80 10.8 9.2 13.8

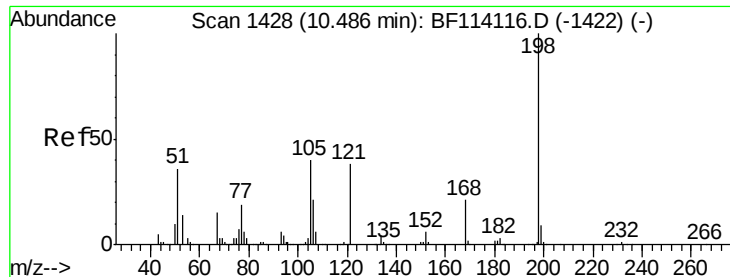


Abundance Ion 188.00 (187.70 to 188.70): BF1

Ion 94.00 (93.70 to 94.70): BF1

Ion 80.00 (79.70 to 80.70): BF1





#65

4,6-Dinitro-2-methylphenol

Concen: 40.923 ng

RT: 10.50 min Scan# 1430

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

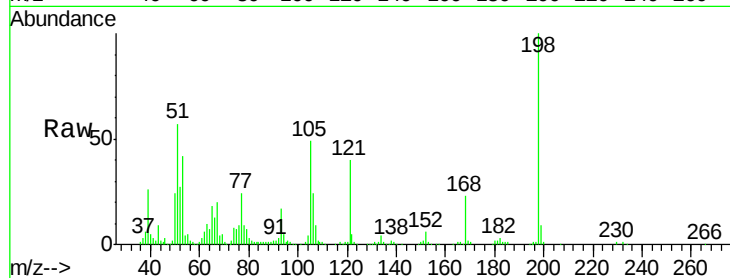
Tot Ion:198 Resp: 161691

Ion Ratio Lower Upper

198 100

51 56.6 28.0 68.0

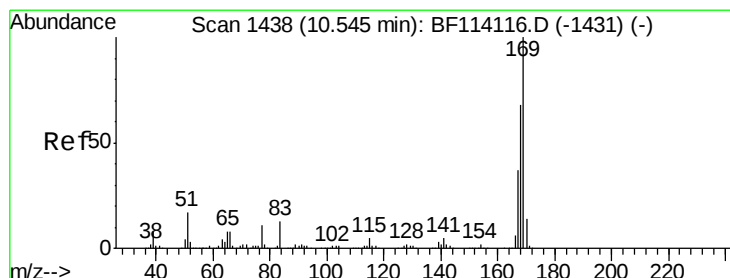
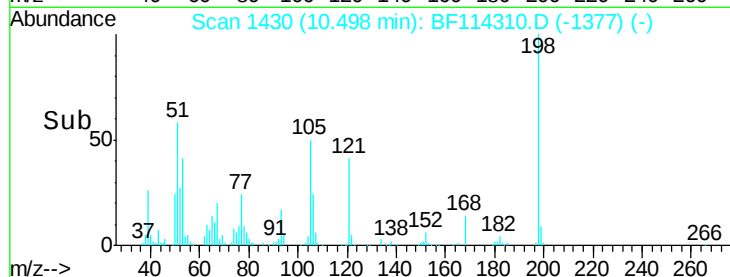
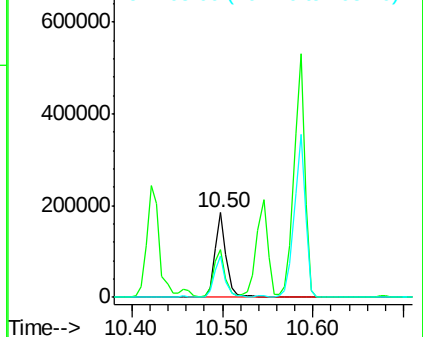
105 48.8 21.1 61.1



Abundance Ion 198.00 (197.70 to 198.70): E

Ion 51.00 (50.70 to 51.70): BF1

Ion 105.00 (104.70 to 105.70): E



#66

n-Nitrosodiphenylamine

Concen: 43.568 ng

RT: 10.55 min Scan# 1438

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

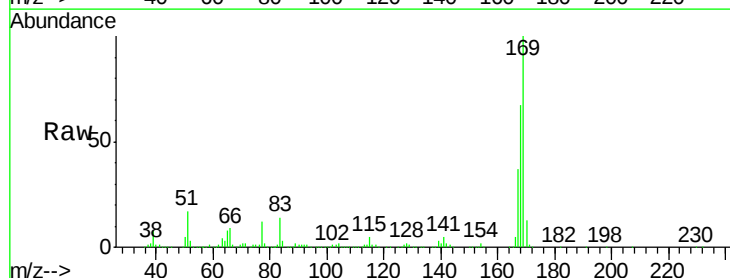
Tgt Ion:169 Resp: 1087288

Ion Ratio Lower Upper

169 100

168 66.6 54.2 81.2

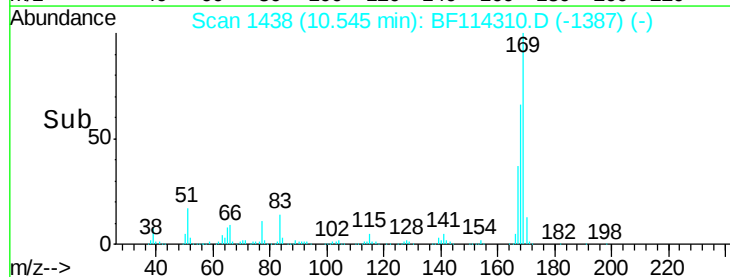
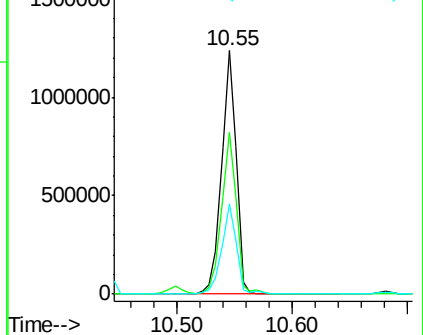
167 36.9 29.8 44.8

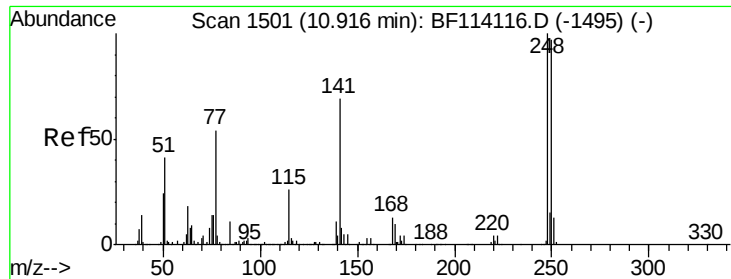


Abundance Ion 169.00 (168.70 to 169.70): E

Ion 168.00 (167.70 to 168.70): E

Ion 167.00 (166.70 to 167.70): E

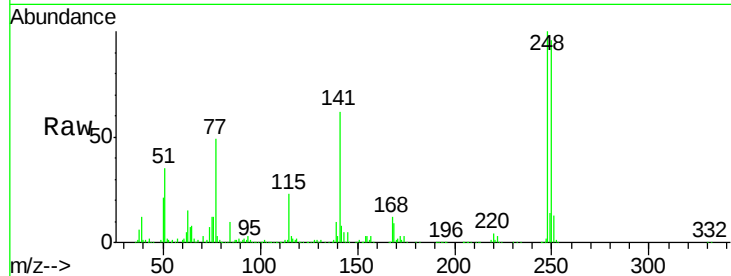




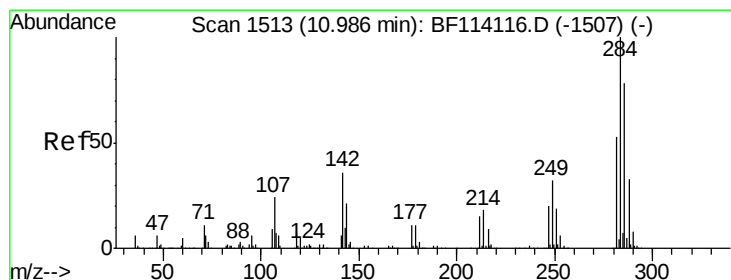
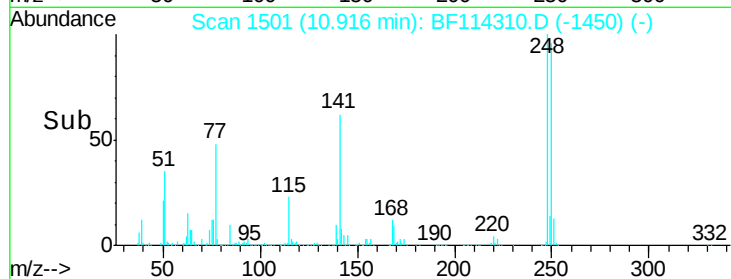
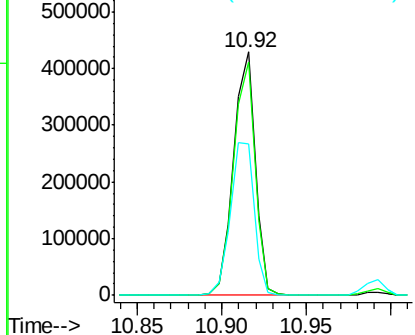
#67  
4-Bromophenyl-phenylether  
Concen: 42.500 ng  
RT: 10.92 min Scan# 1501  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-COMPMS

Tot Ion:248 Resp: 384781  
Ion Ratio Lower Upper  
248 100  
250 96.1 77.4 116.2  
141 62.1 55.6 83.4

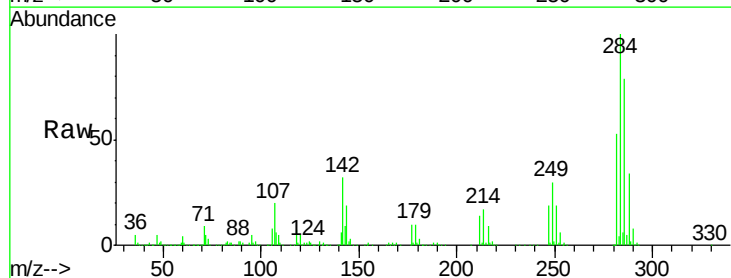


Abundance Ion 248.00 (247.70 to 248.70): E  
Ion 250.00 (249.70 to 250.70): E  
Ion 141.00 (140.70 to 141.70): E

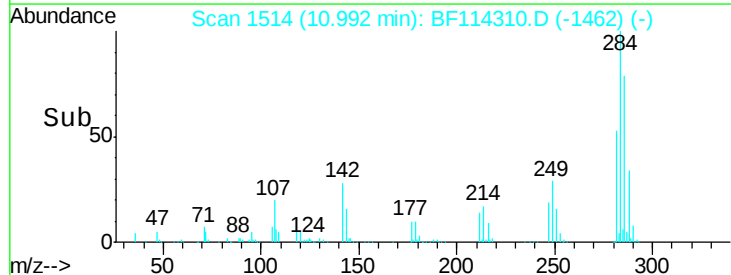
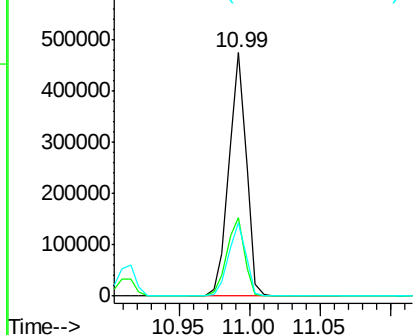


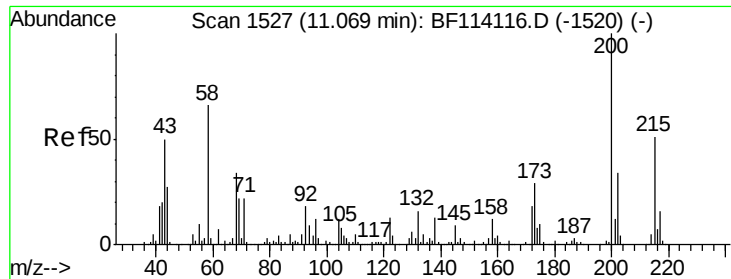
#68  
Hexachlorobenzene  
Concen: 40.522 ng  
RT: 10.99 min Scan# 1514  
Delta R.T. 0.01 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Tgt Ion:284 Resp: 405858  
Ion Ratio Lower Upper  
284 100  
142 32.4 28.4 42.6  
249 30.3 25.2 37.8



Abundance Ion 283.80 (283.50 to 284.50): E  
Ion 142.00 (141.70 to 142.70): E  
Ion 249.00 (248.70 to 249.70): E





#69

Atrazine

Concen: 32.724 ng

RT: 11.07 min Scan# 1528

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

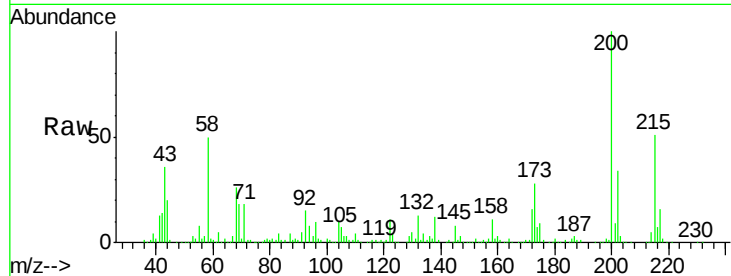
Tot Ion:200 Resp: 254144

Ion Ratio Lower Upper

200 100

173 27.5 8.9 48.9

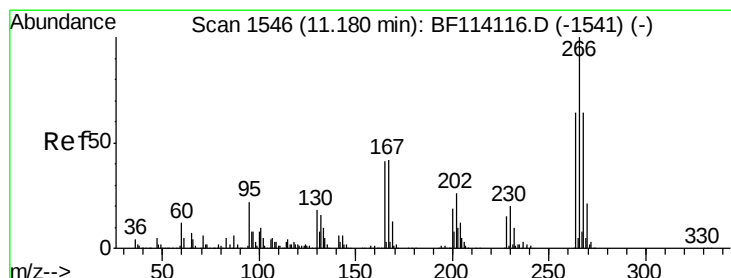
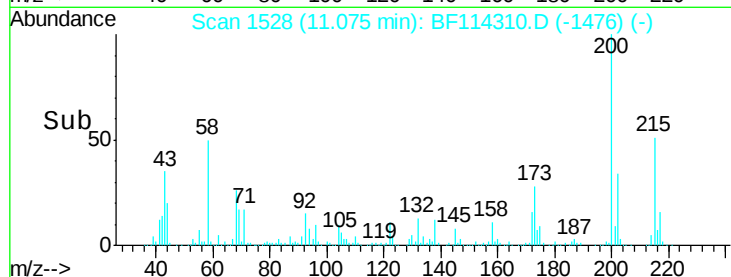
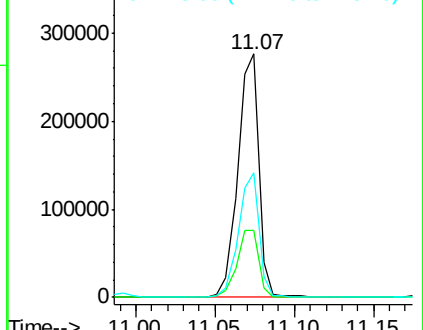
215 51.0 30.7 70.7



Abundance Ion 200.00 (199.70 to 200.70): E

Ion 173.00 (172.70 to 173.70): E

Ion 215.00 (214.70 to 215.70): E



#70

Pentachlorophenol

Concen: 70.344 ng

RT: 11.19 min Scan# 1548

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

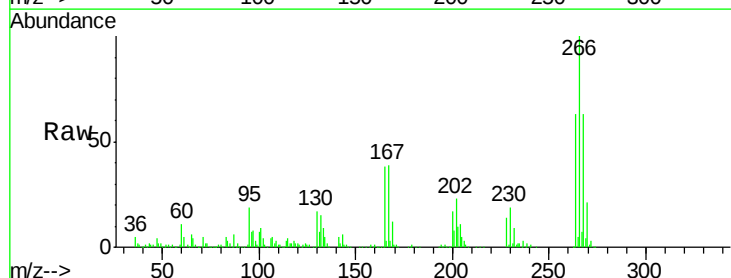
Tgt Ion:266 Resp: 333986

Ion Ratio Lower Upper

266 100

268 63.2 51.1 76.7

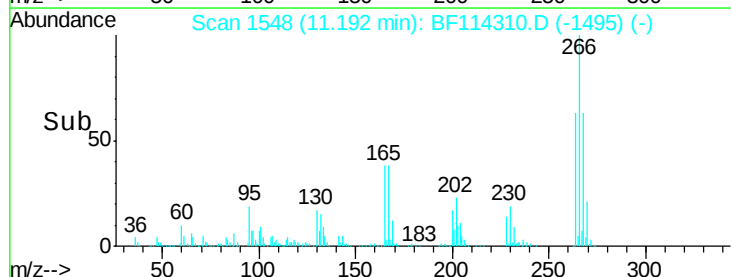
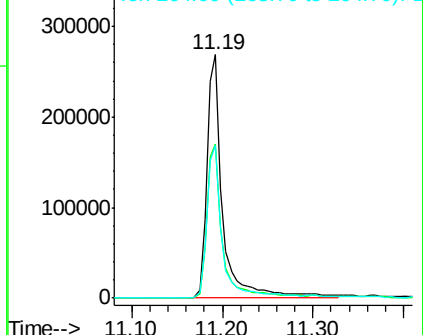
264 62.7 51.1 76.7

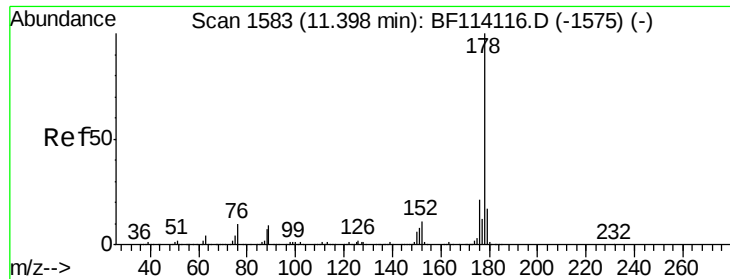


Abundance Ion 265.70 (265.40 to 266.40): E

Ion 268.00 (267.70 to 268.70): E

Ion 264.00 (263.70 to 264.70): E

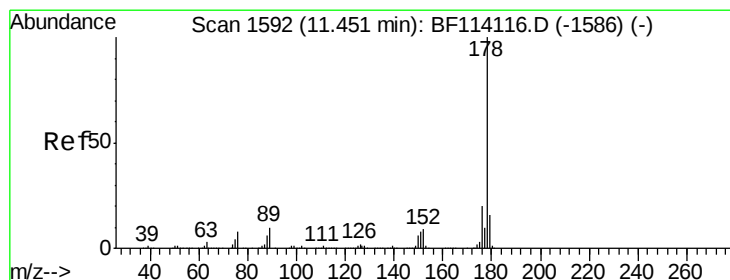
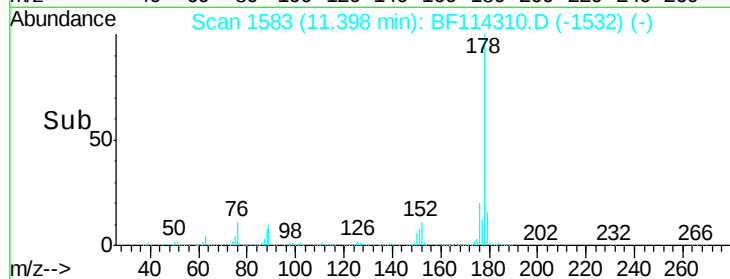
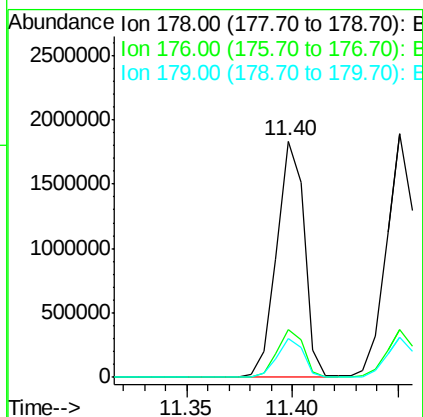
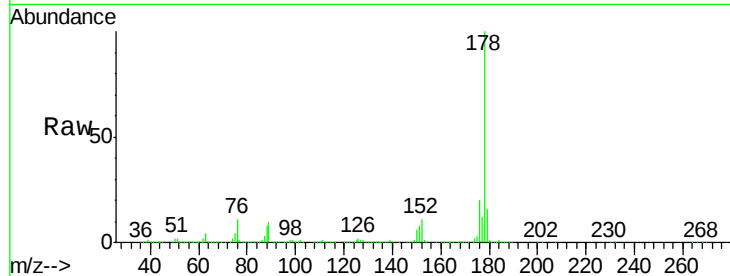




#71  
Phenanthrene  
Concen: 41.758 ng  
RT: 11.40 min Scan# 1583  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

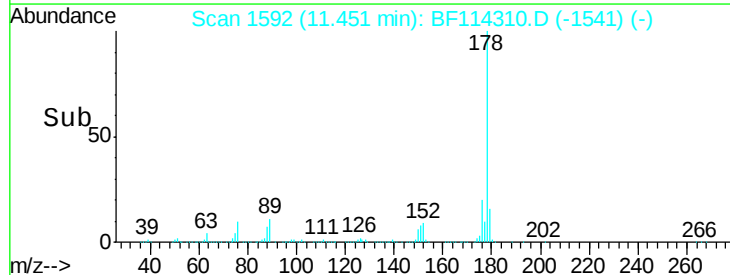
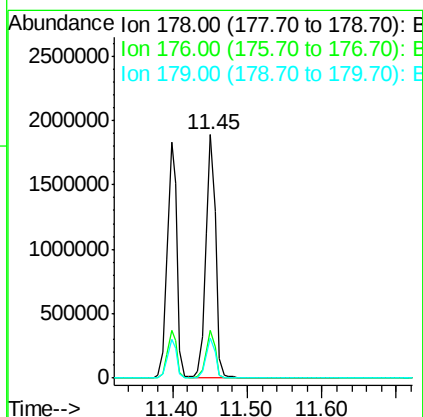
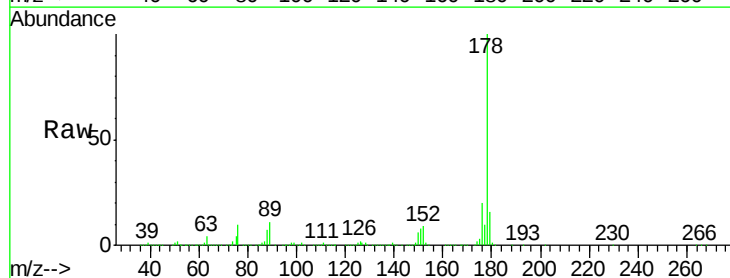
Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-COMPMS

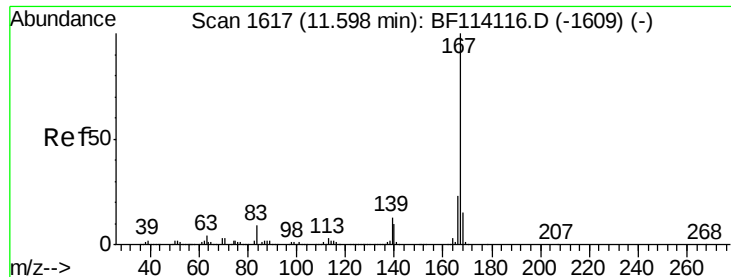
Tot Ion:178 Resp: 1670537  
Ion Ratio Lower Upper  
178 100  
176 20.2 16.4 24.6  
179 16.2 13.2 19.8



#72  
Anthracene  
Concen: 43.217 ng  
RT: 11.45 min Scan# 1592  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Tgt Ion:178 Resp: 1736521  
Ion Ratio Lower Upper  
178 100  
176 19.7 15.8 23.8  
179 16.2 13.0 19.4

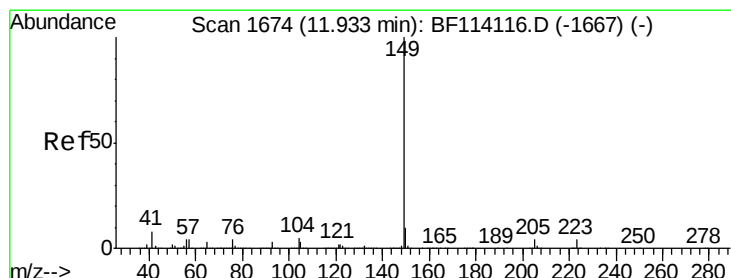
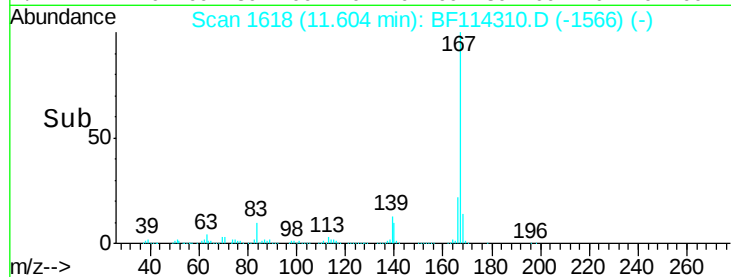
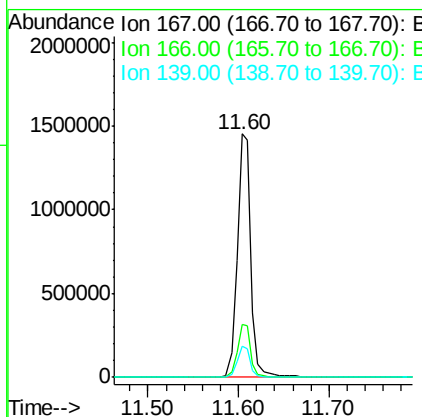
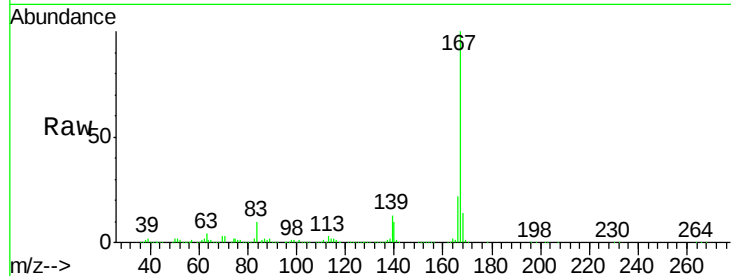




#73  
 Carbazole  
 Concen: 39.791 ng  
 RT: 11.60 min Scan# 1618  
 Delta R.T. 0.01 min  
 Lab File: BF114310.D  
 Acq: 16 May 2019 15:48

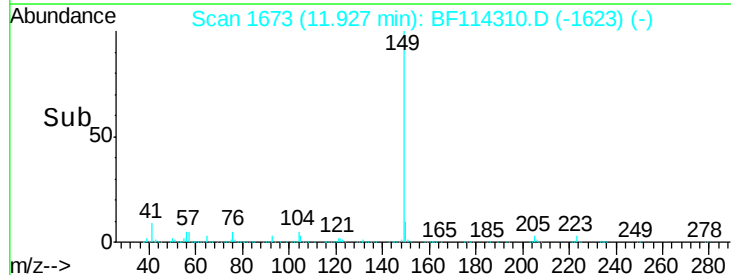
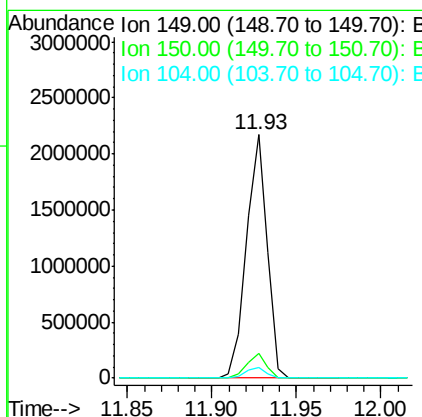
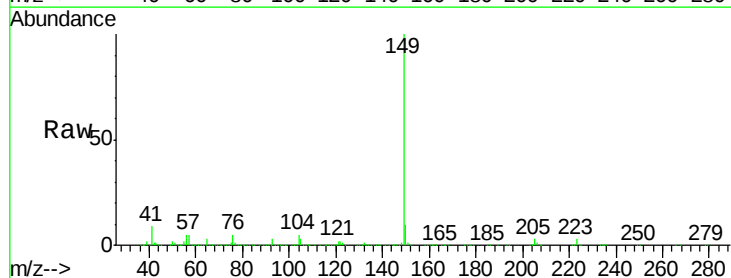
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-COMPMS

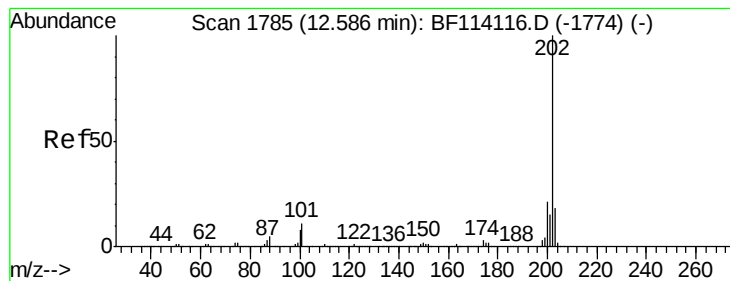
Tot Ion:167 Resp: 1524645  
 Ion Ratio Lower Upper  
 167 100  
 166 21.6 18.2 27.2  
 139 12.9 10.6 16.0



#74  
 Di-n-butylphthalate  
 Concen: 42.313 ng  
 RT: 11.93 min Scan# 1673  
 Delta R.T. -0.01 min  
 Lab File: BF114310.D  
 Acq: 16 May 2019 15:48

Tgt Ion:149 Resp: 1867839  
 Ion Ratio Lower Upper  
 149 100  
 150 10.0 7.7 11.5  
 104 4.6 3.6 5.4





#75

Fluoranthene

Concen: 37.483 ng

RT: 12.59 min Scan# 1785

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

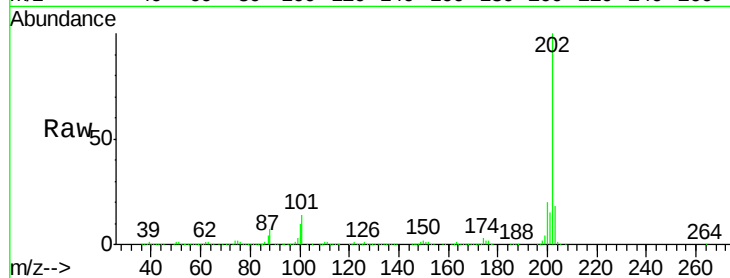
BNA\_F

ClientSampleId :

SOIL-COMPMS

Tot Ion:202 Resp: 1614767

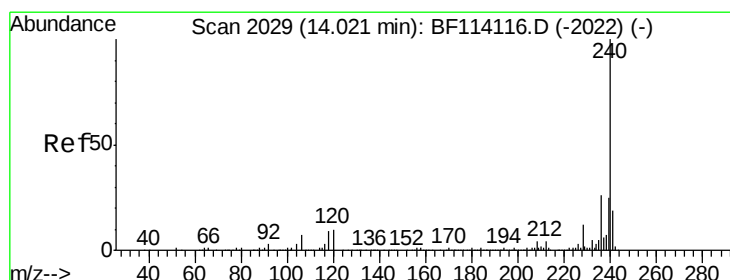
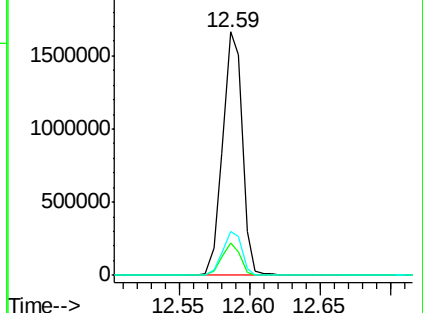
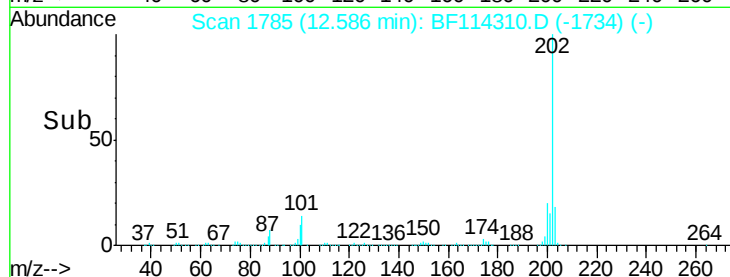
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 202 | 100   |       |       |
| 101 | 13.6  | 0.0   | 31.0  |
| 203 | 18.3  | 0.0   | 38.4  |



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



#76

Chrysene-d12

Concen: 20.000 ng

RT: 14.02 min Scan# 2029

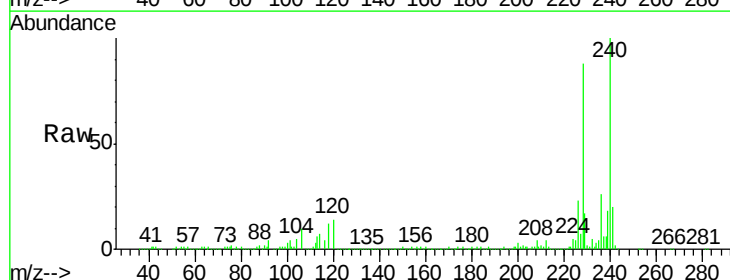
Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Tgt Ion:240 Resp: 454988

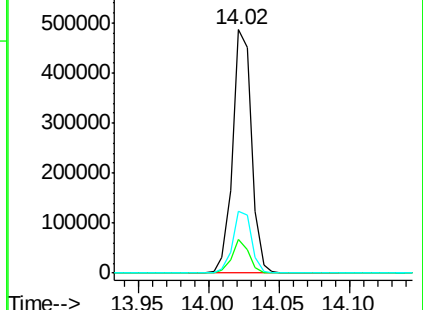
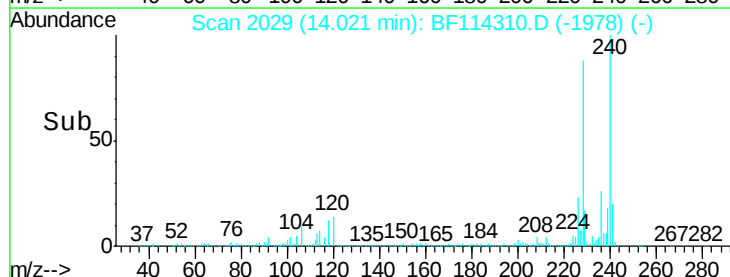
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 240 | 100   |       |       |
| 120 | 13.6  | 8.3   | 12.5# |
| 236 | 25.6  | 20.8  | 31.2  |

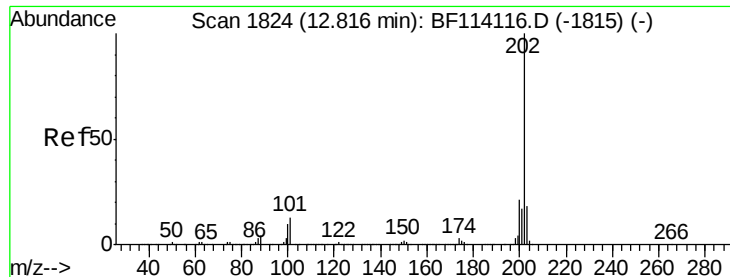


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#78

Pvrene

Concen: 43.958 ng

RT: 12.82 min Scan# 1824

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

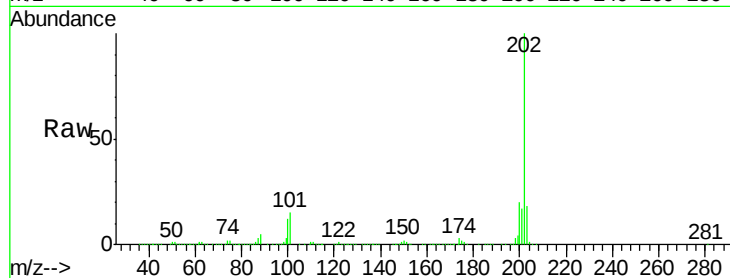
Tot Ion:202 Resp: 1608947

Ion Ratio Lower Upper

202 100

200 20.5 16.9 25.3

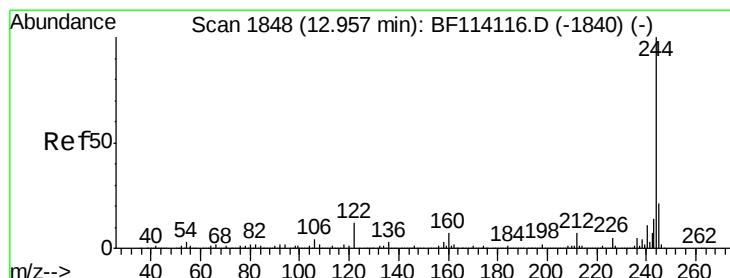
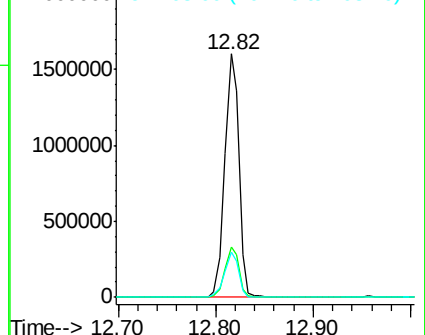
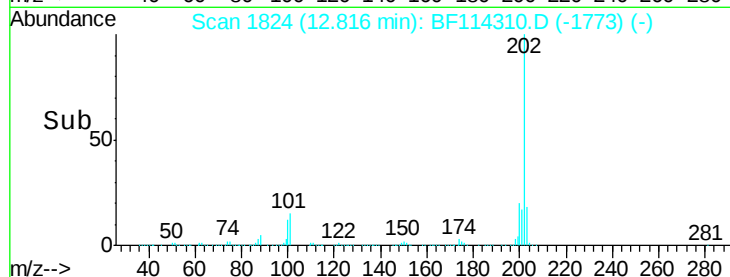
203 18.3 14.5 21.7



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



#79

Terphenyl-d14

Concen: 84.620 ng

RT: 12.96 min Scan# 1848

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

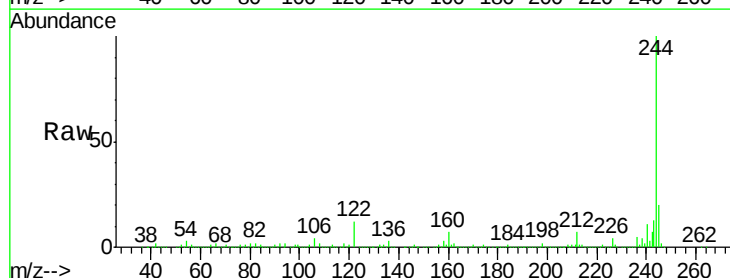
Tgt Ion:244 Resp: 1867677

Ion Ratio Lower Upper

244 100

212 6.7 5.8 8.6

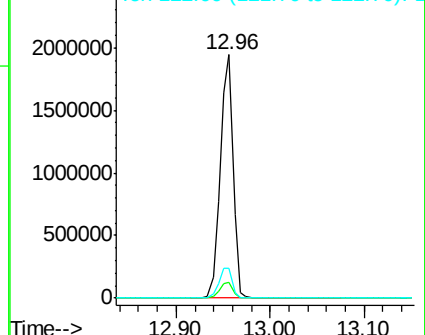
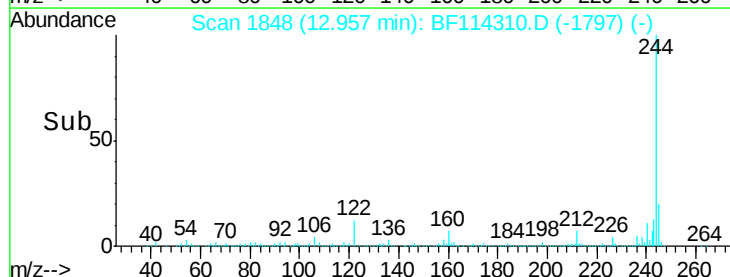
122 12.1 9.4 14.2

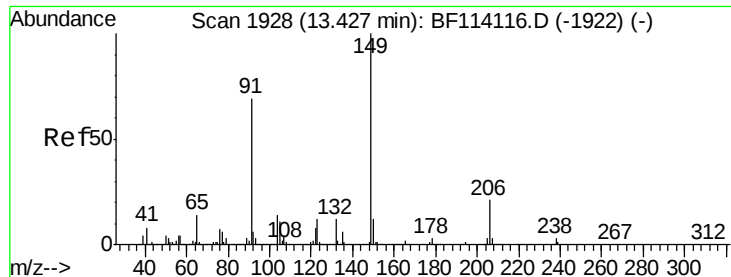


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E

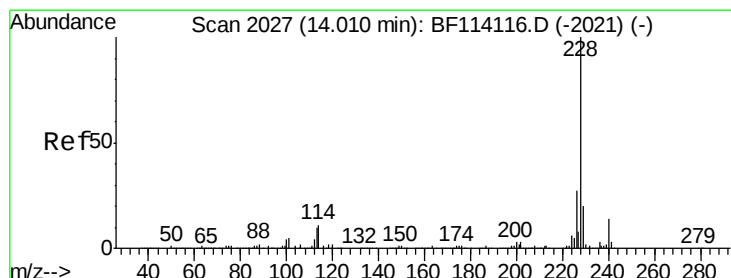
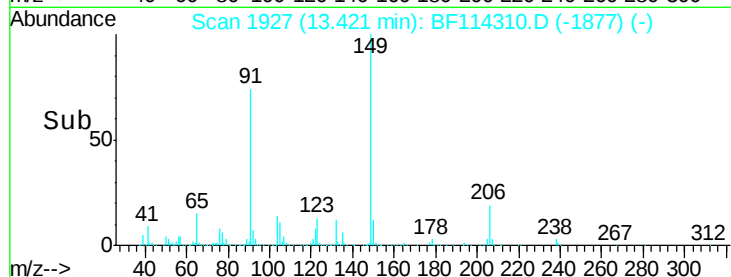
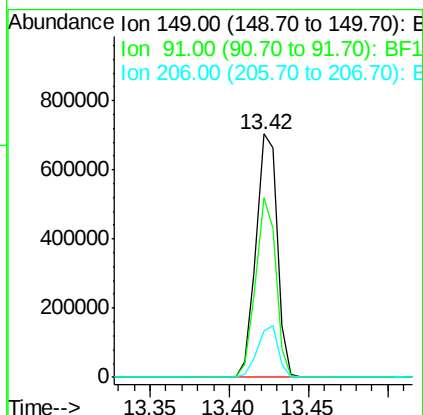
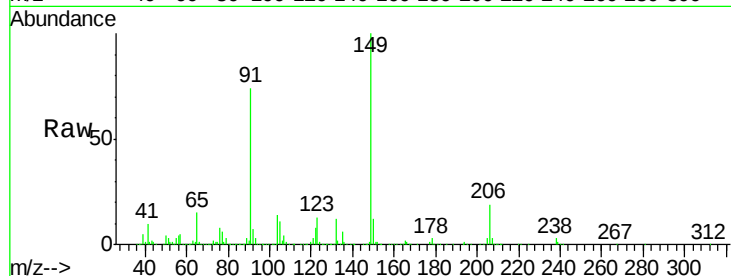




#80  
Butylbenzylphthalate  
Concen: 43.118 ng  
RT: 13.42 min Scan# 1927  
Delta R.T. -0.01 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

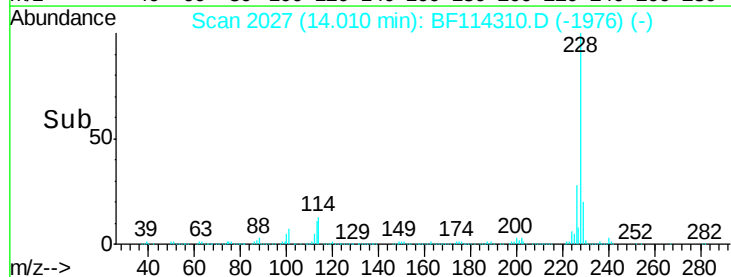
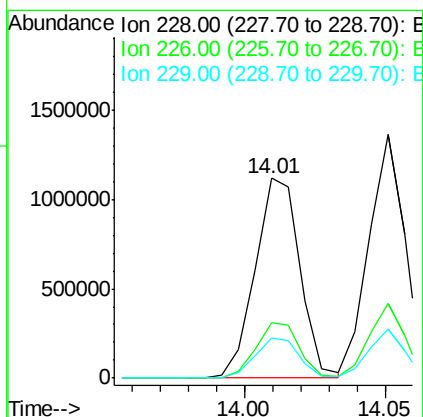
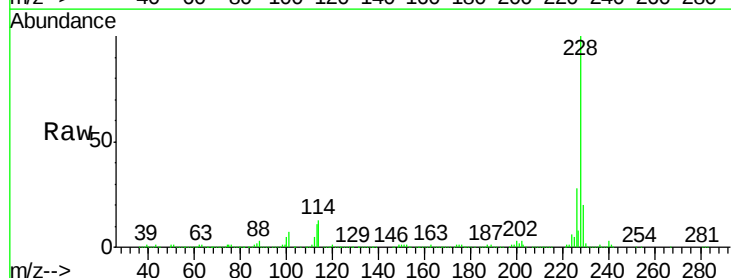
Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-COMPMS

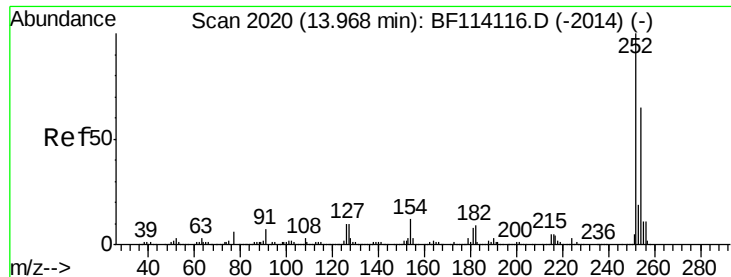
Tot Ion:149 Resp: 664279  
Ion Ratio Lower Upper  
149 100  
91 73.7 55.0 82.4  
206 19.3 16.9 25.3



#81  
Benzo(a)anthracene  
Concen: 41.678 ng  
RT: 14.01 min Scan# 2027  
Delta R.T. 0.00 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Tgt Ion:228 Resp: 1226524  
Ion Ratio Lower Upper  
228 100  
226 27.9 22.2 33.2  
229 19.8 16.4 24.6

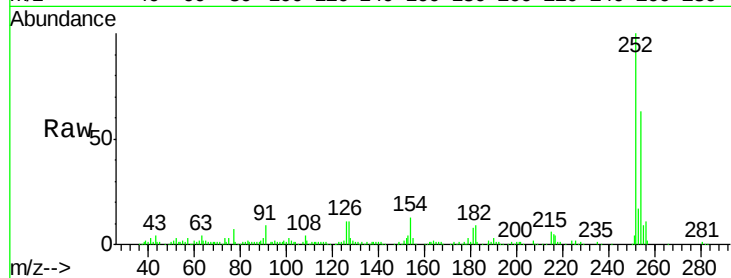




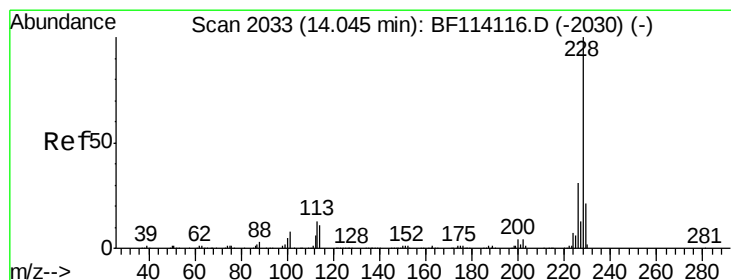
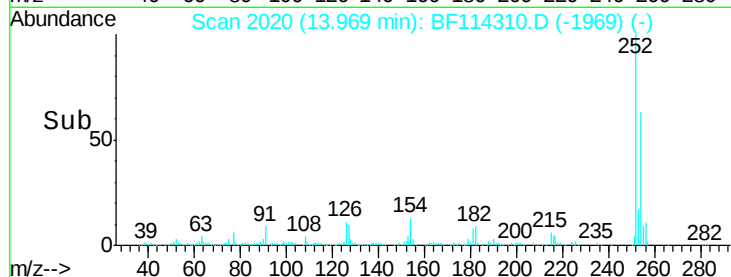
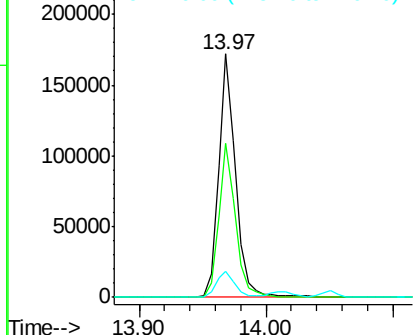
#82  
 3,3'-Dichlorobenzidine  
 Concen: 14.174 ng  
 RT: 13.97 min Scan# 2020  
 Delta R.T. 0.00 min  
 Lab File: BF114310.D  
 Acq: 16 May 2019 15:48

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-COMPMS

Tot Ion:252 Resp: 161816  
 Ion Ratio Lower Upper  
 252 100  
 254 63.2 51.9 77.9  
 126 10.9 7.9 11.9

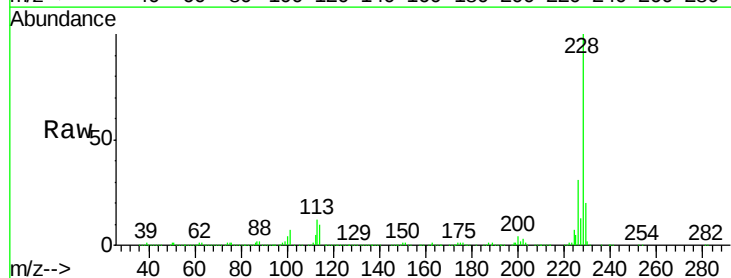


Abundance Ion 252.00 (251.70 to 252.70): E  
 Ion 254.00 (253.70 to 254.70): E  
 Ion 126.00 (125.70 to 126.70): E

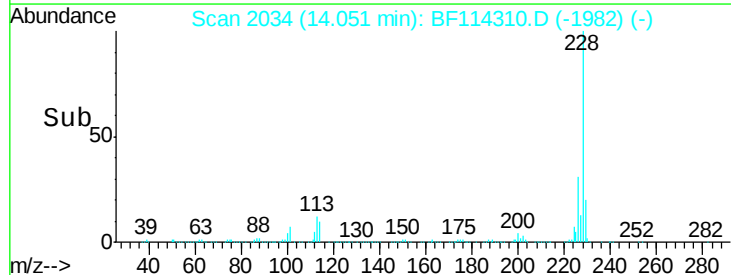
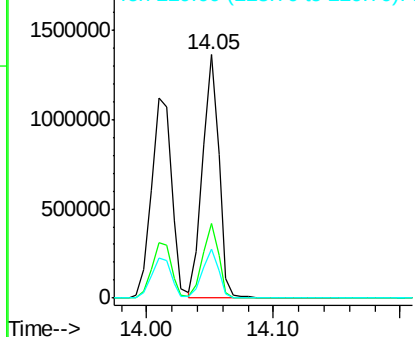


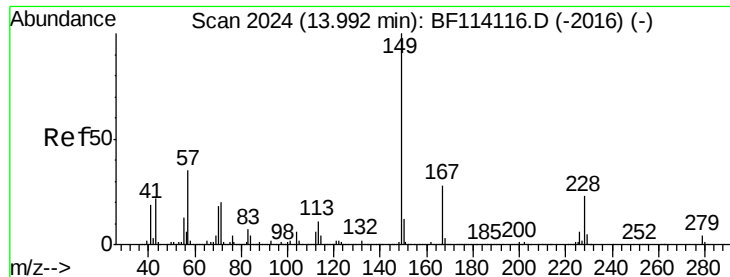
#83  
 Chrysene  
 Concen: 42.152 ng  
 RT: 14.05 min Scan# 2034  
 Delta R.T. 0.01 min  
 Lab File: BF114310.D  
 Acq: 16 May 2019 15:48

Tgt Ion:228 Resp: 1216006  
 Ion Ratio Lower Upper  
 228 100  
 226 30.6 25.0 37.6  
 229 20.4 17.0 25.6



Abundance Ion 228.00 (227.70 to 228.70): E  
 Ion 226.00 (225.70 to 226.70): E  
 Ion 229.00 (228.70 to 229.70): E





#84

Bis(2-ethylhexyl)phthalate

Concen: 42.642 ng

RT: 13.99 min Scan# 2024

Delta R.T. 0.00 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

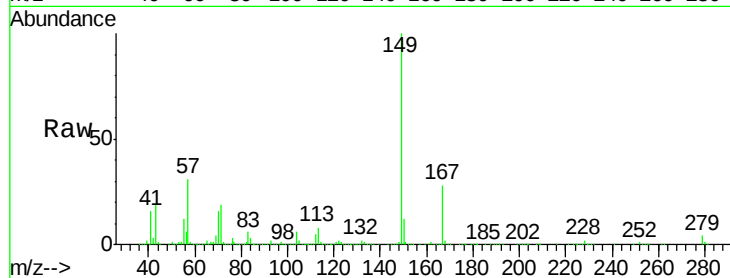
Tot Ion:149 Resp: 859199

Ion Ratio Lower Upper

149 100

167 28.4 22.6 33.8

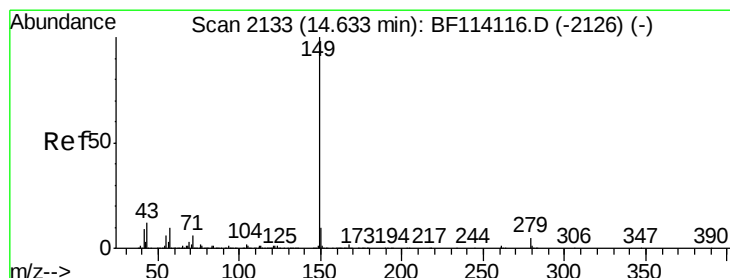
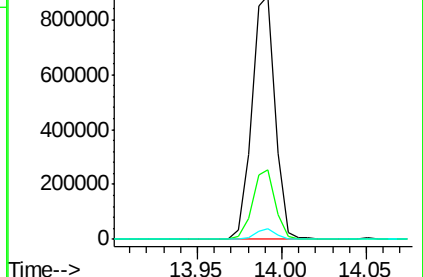
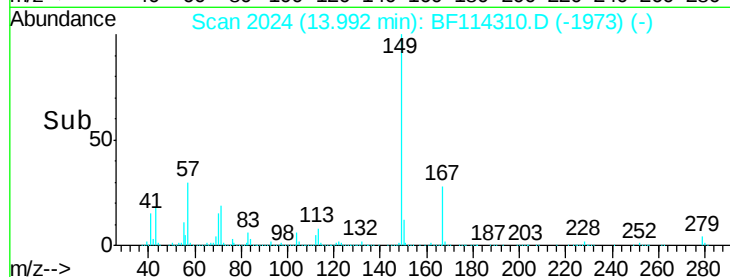
279 4.3 3.0 4.6



Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E



#85

Di-n-octyl phthalate

Concen: 42.784 ng

RT: 14.62 min Scan# 2131

Delta R.T. -0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

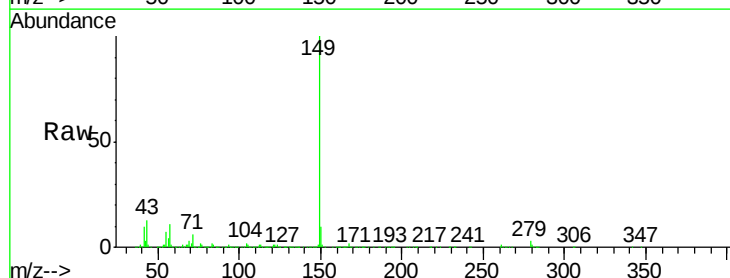
Tgt Ion:149 Resp: 1397456

Ion Ratio Lower Upper

149 100

167 1.5 1.3 1.9

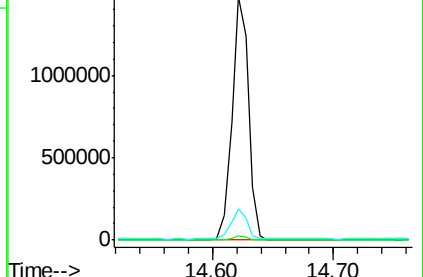
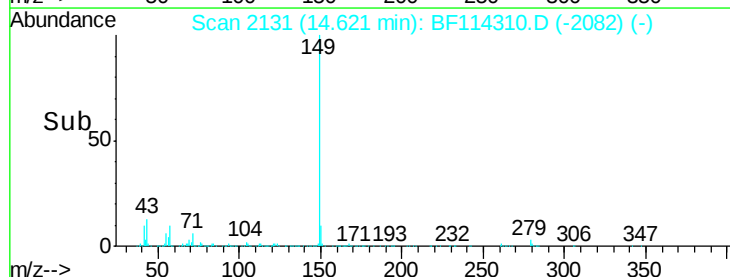
43 12.0 10.1 15.1

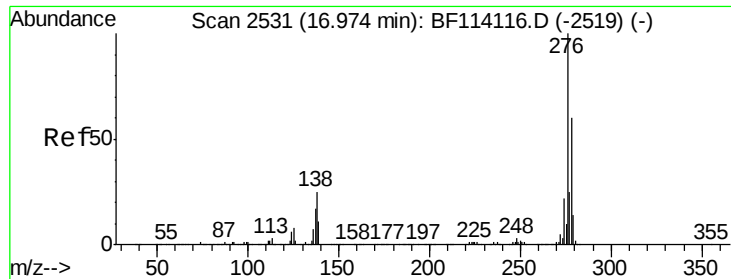


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 43.00 (42.70 to 43.70): BF1





#86

Indeno(1,2,3-cd)pyrene

Concen: 67.027 ng

RT: 17.02 min Scan# 2538

Delta R.T. 0.04 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

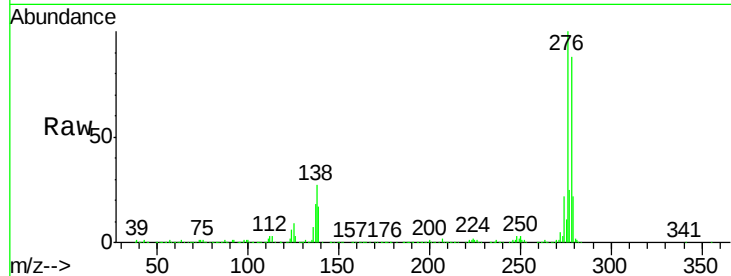
Tot Ion:276 Resp: 1708893

Ion Ratio Lower Upper

276 100

138 26.6 20.2 30.2

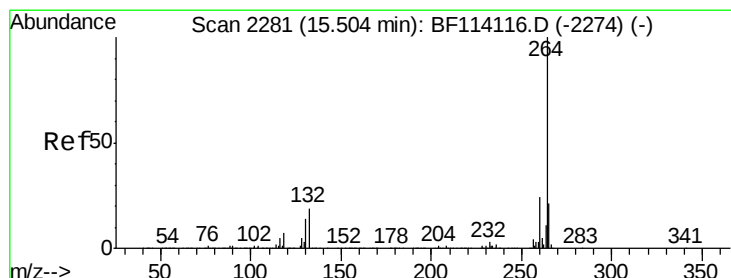
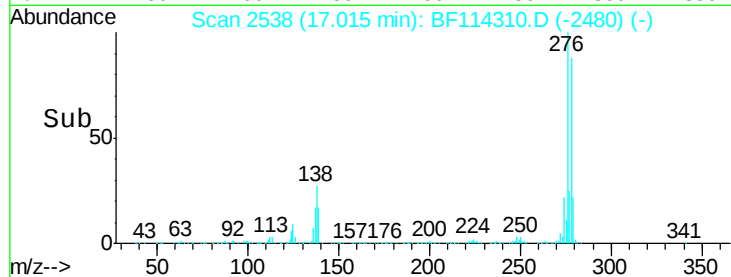
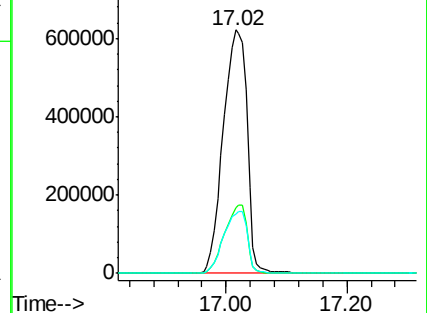
277 25.2 20.0 30.0



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#87

Perylene-d12

Concen: 20.000 ng

RT: 15.52 min Scan# 2283

Delta R.T. 0.01 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

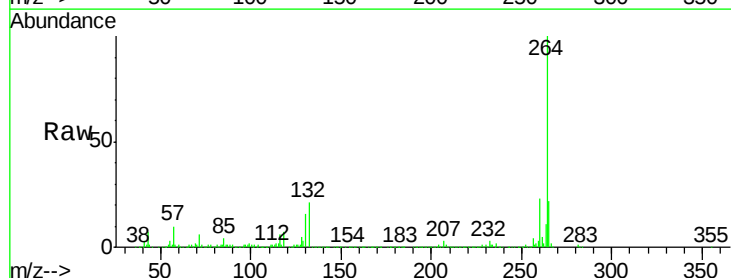
Tgt Ion:264 Resp: 564855

Ion Ratio Lower Upper

264 100

260 23.2 19.4 29.0

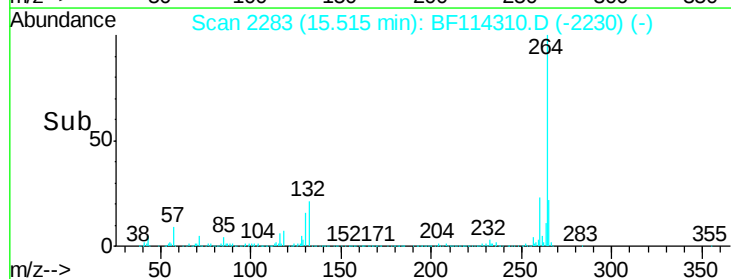
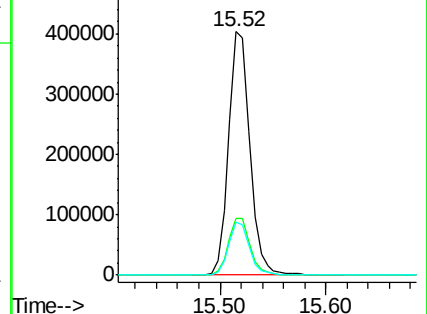
265 21.7 16.9 25.3

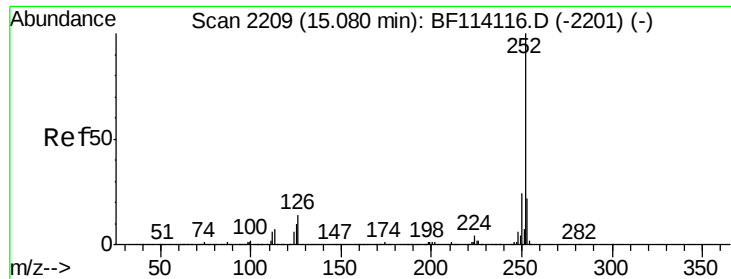


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E

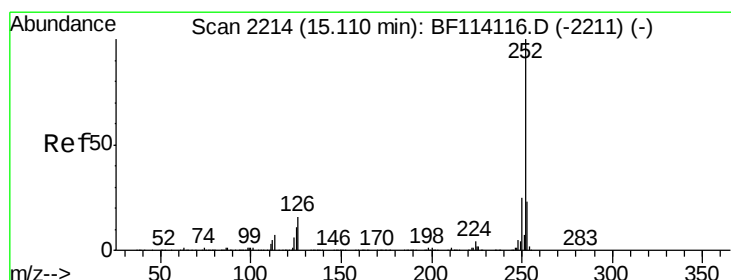
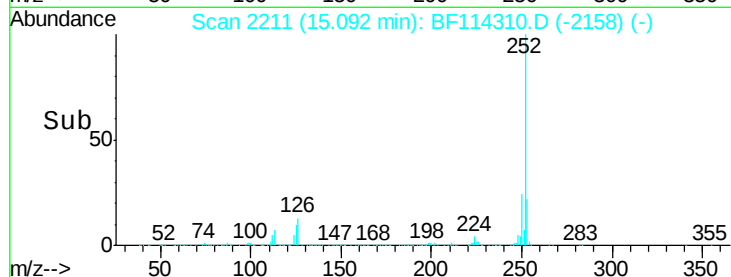
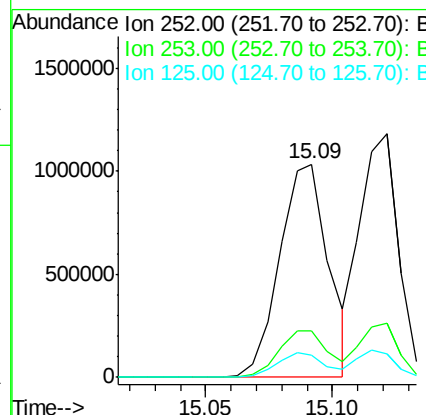
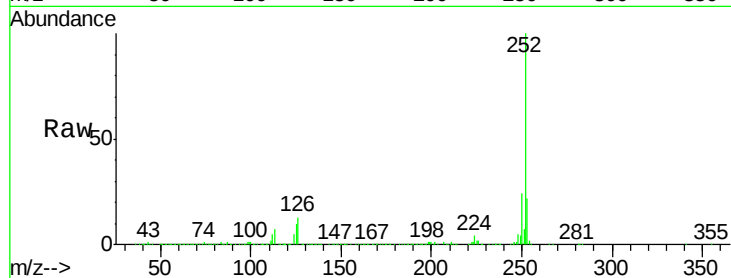




#88  
Benzo(b)fluoranthene  
Concen: 38.419 ng  
RT: 15.09 min Scan# 2211  
Delta R.T. 0.01 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

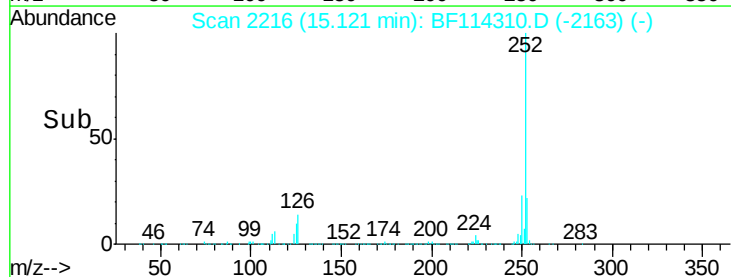
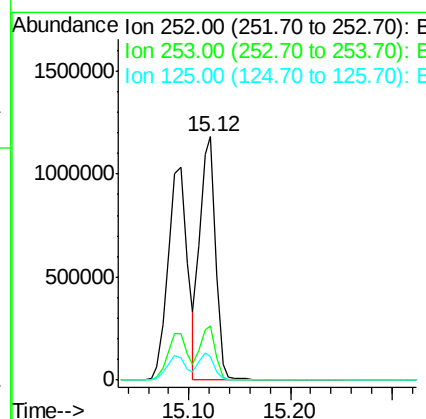
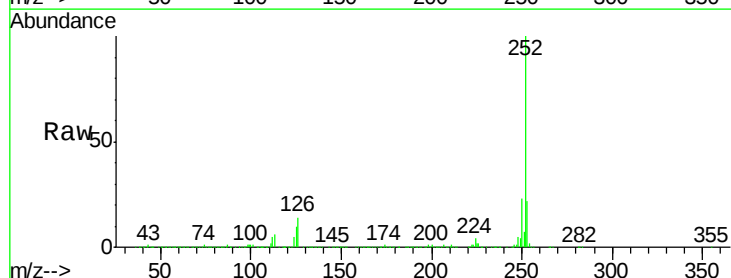
Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-COMPMS

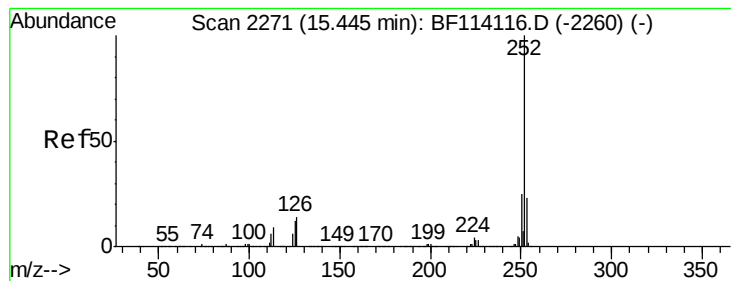
Tot Ion:252 Resp: 1390302  
Ion Ratio Lower Upper  
252 100  
253 21.8 17.8 26.8  
125 10.1 8.3 12.5



#89  
Benzo(k)fluoranthene  
Concen: 37.856 ng  
RT: 15.12 min Scan# 2216  
Delta R.T. 0.01 min  
Lab File: BF114310.D  
Acq: 16 May 2019 15:48

Tgt Ion:252 Resp: 1258420  
Ion Ratio Lower Upper  
252 100  
253 22.3 18.2 27.2  
125 9.8 8.6 13.0





#90

Benzo(a)pyrene

Concen: 42.270 ng

RT: 15.46 min Scan# 2274

Delta R.T. 0.02 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

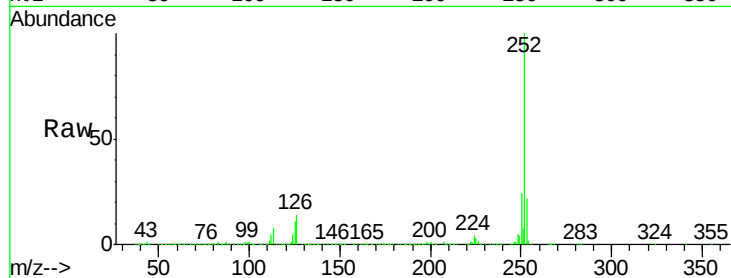
Tot Ion:252 Resp: 1346228

Ion Ratio Lower Upper

252 100

253 21.9 18.1 27.1

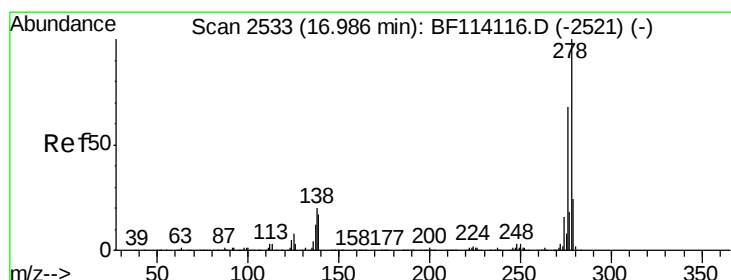
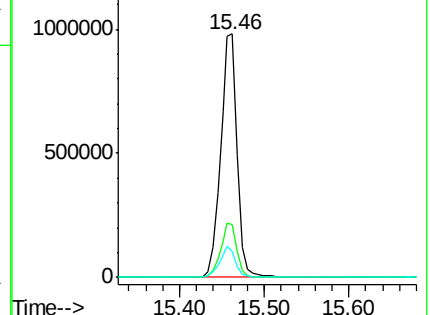
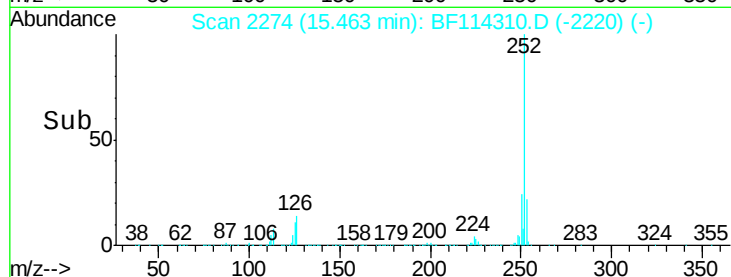
125 10.8 9.5 14.3



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



#91

Dibenzo(a,h)anthracene

Concen: 53.110 ng

RT: 17.03 min Scan# 2540

Delta R.T. 0.04 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

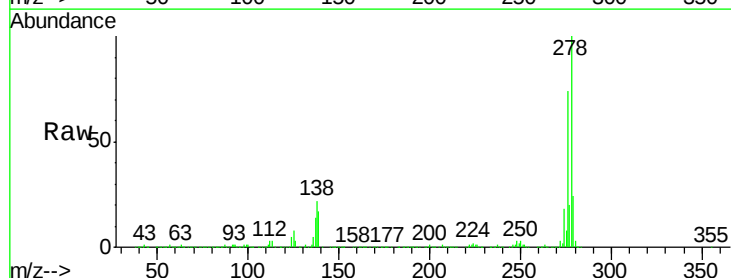
Tgt Ion:278 Resp: 1405520

Ion Ratio Lower Upper

278 100

139 16.9 13.5 20.3

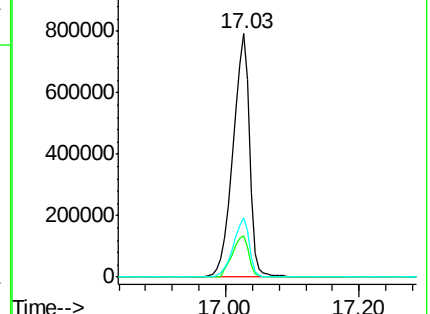
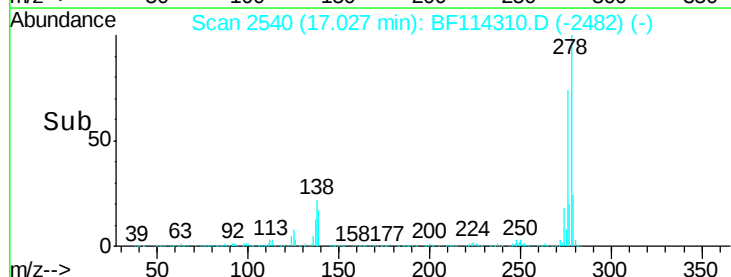
279 24.2 19.0 28.6

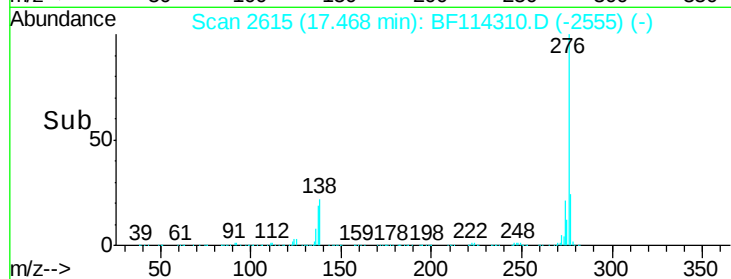
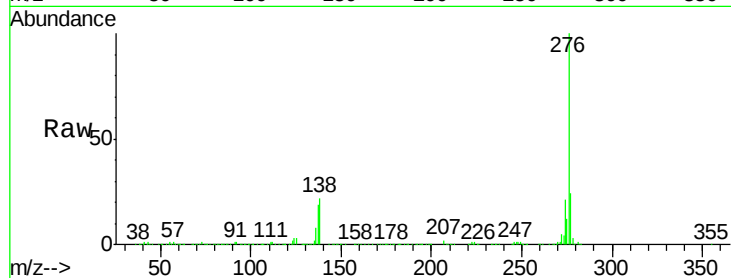
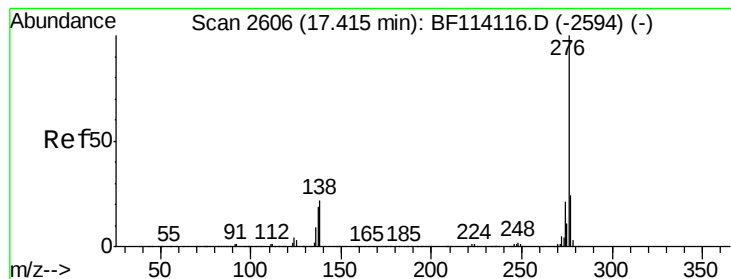


Abundance Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E





#92

Benzo(a,h,i)perylene

Concen: 57.877 ng

RT: 17.47 min Scan# 2615

Delta R.T. 0.05 min

Lab File: BF114310.D

Acq: 16 May 2019 15:48

Instrument :

BNA\_F

ClientSampleId :

SOIL-COMPMS

Tot Ion:276 Resp: 1534988

Ion Ratio Lower Upper

276 100

277 23.9 19.0 28.4

138 21.9 17.8 26.6

