

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN091019\  
 Data File : BN007581.D  
 Acq On : 10 Sep 2019 18:02  
 Operator : HP/JU  
 Sample : K4781-03  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :

Quant Time: Sep 10 18:34:39 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\8270-SIM-BN091019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Sep 10 16:53:18 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.73  | 152  | 5253     | 0.40 | ng    | 0.00     |
| 7) Naphthalene-d8         | 10.49 | 136  | 22212    | 0.40 | ng    | 0.00     |
| 13) Acenaphthene-d10      | 14.35 | 164  | 13126    | 0.40 | ng    | 0.00     |
| 19) Phenanthrene-d10      | 17.09 | 188  | 31705    | 0.40 | ng    | 0.00     |
| 27) Chrysene-d12          | 21.28 | 240  | 33041    | 0.40 | ng    | -0.01    |
| 34) Perylene-d12          | 23.51 | 264  | 36362    | 0.40 | ng    | 0.00     |

|                             |       |     |       |      |    |       |
|-----------------------------|-------|-----|-------|------|----|-------|
| System Monitoring Compounds |       |     |       |      |    |       |
| 4) 2-Fluorophenol           | 5.34  | 112 | 2945  | 0.18 | ng | 0.00  |
| 5) Phenol-d6                | 6.90  | 99  | 2699  | 0.12 | ng | 0.00  |
| 8) Nitrobenzene-d5          | 8.86  | 82  | 6269  | 0.46 | ng | 0.00  |
| 11) 2-Methylnaphthalene-d10 | 12.09 | 152 | 14383 | 0.38 | ng | 0.00  |
| 14) 2,4,6-Tribromophenol    | 15.83 | 330 | 2100  | 0.42 | ng | -0.01 |
| 15) 2-Fluorobiphenyl        | 12.98 | 172 | 22619 | 0.42 | ng | 0.00  |
| 25) Fluoranthene-d10        | 19.12 | 212 | 39674 | 0.39 | ng | 0.00  |
| 29) Terphenyl-d14           | 19.73 | 244 | 33008 | 0.38 | ng | 0.00  |

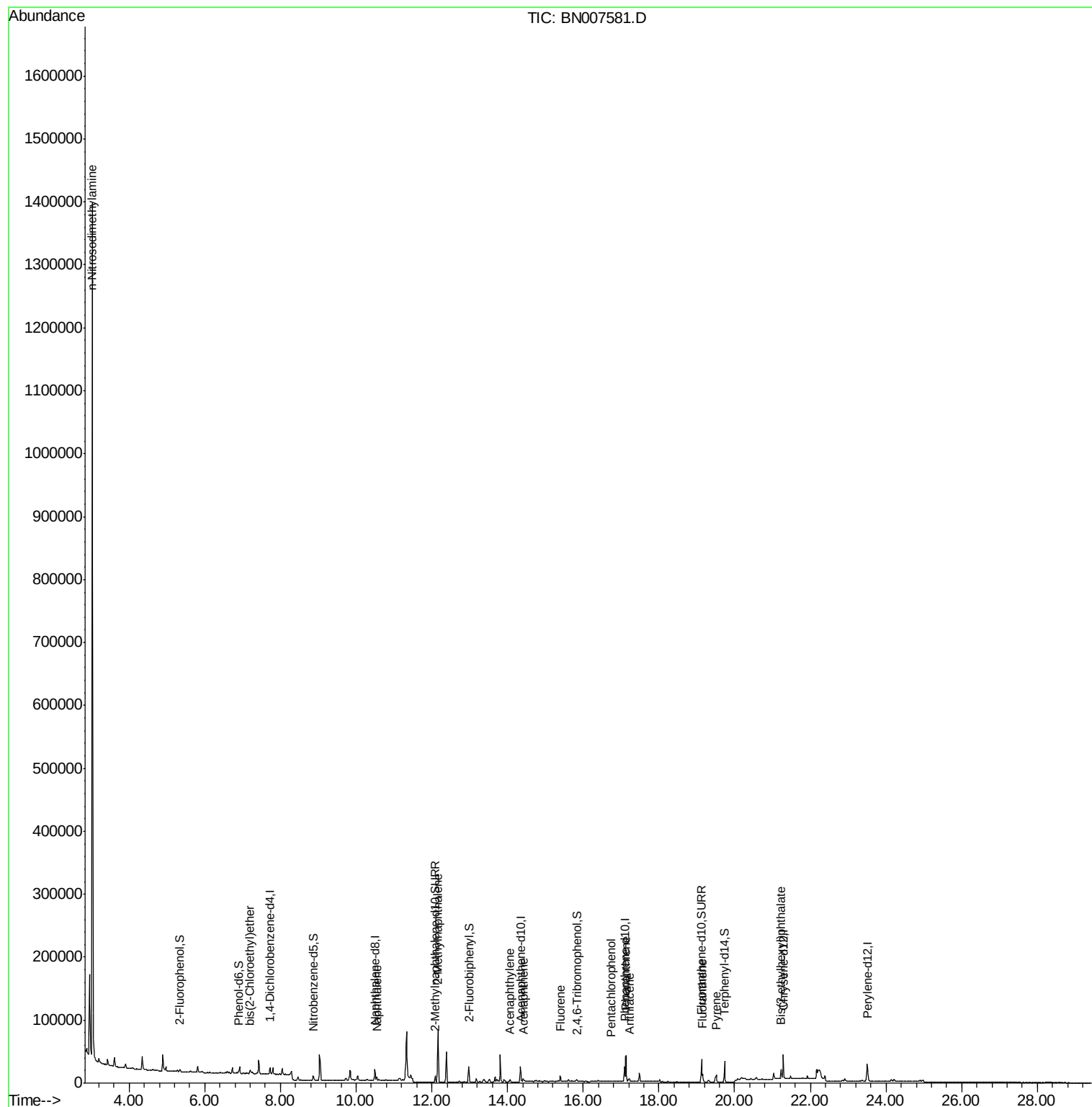
|                                |       |     |        |        |    |       |
|--------------------------------|-------|-----|--------|--------|----|-------|
| Target Compounds               |       |     |        | Qvalue |    |       |
| 3) n-Nitrosodimethylamine      | 3.03  | 42  | 102593 | 32.694 | ng | # 100 |
| 6) bis(2-Chloroethyl)ether     | 7.19  | 93  | 767    | 0.261  | ng | # 23  |
| 9) Naphthalene                 | 10.54 | 128 | 7937   | 0.127  | ng | 97    |
| 12) 2-Methylnaphthalene        | 12.16 | 142 | 57549  | 1.314  | ng | 99    |
| 16) Acenaphthylene             | 14.07 | 152 | 1961   | 0.028  | ng | # 72  |
| 17) Acenaphthene               | 14.41 | 154 | 2415   | 0.054  | ng | # 82  |
| 18) Fluorene                   | 15.39 | 166 | 5369   | 0.092  | ng | # 97  |
| 22) Pentachlorophenol          | 16.74 | 266 | 29     | 0.208  | ng | # 62  |
| 23) Phenanthrene               | 17.13 | 178 | 47246  | 0.483  | ng | 100   |
| 24) Anthracene                 | 17.22 | 178 | 4468   | 0.049  | ng | # 80  |
| 26) Fluoranthene               | 19.15 | 202 | 11396  | 0.096  | ng | 97    |
| 28) Pyrene                     | 19.52 | 202 | 10821  | 0.091  | ng | # 93  |
| 32) Bis(2-ethylhexyl)phthalate | 21.23 | 149 | 13137  | 0.325  | ng | 94    |

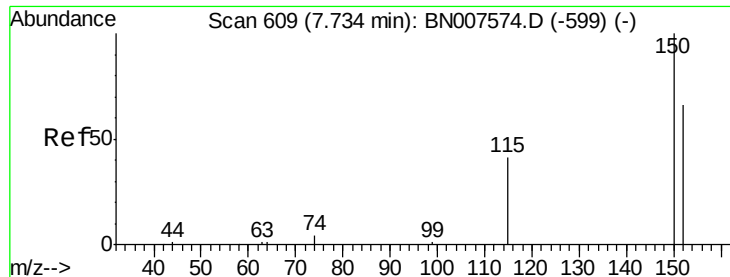
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN091019\  
Data File : BN007581.D  
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Sample : K4781-03  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :

Quant Time: Sep 10 18:34:39 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\8270-SIM-BN091019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
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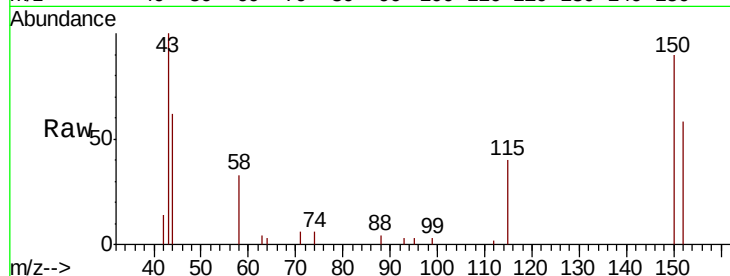


#1

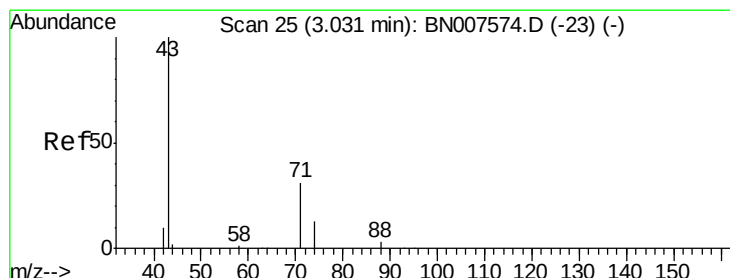
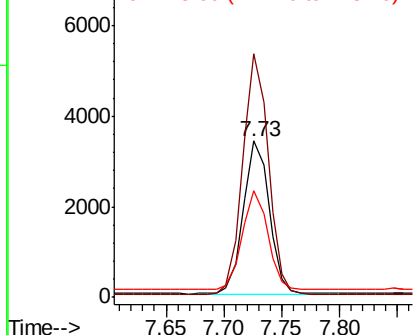
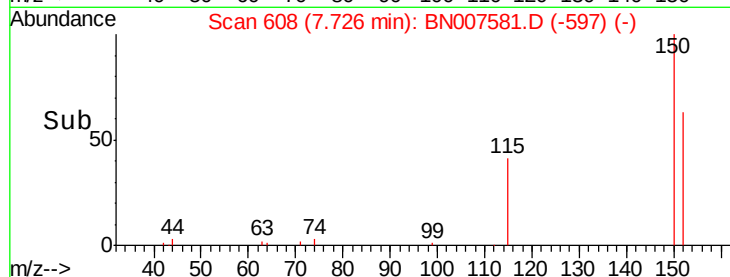
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.73 min Scan# 608  
Delta R.T. -0.01 min  
Lab File: BN007581.D  
Acq: 10 Sep 2019 18:02

Instrument :  
BNA\_N  
ClientSampleId :

Tot Ion:152 Resp: 5253  
Ion Ratio Lower Upper  
152 100  
150 155.8 119.5 179.3  
115 68.3 53.0 79.6



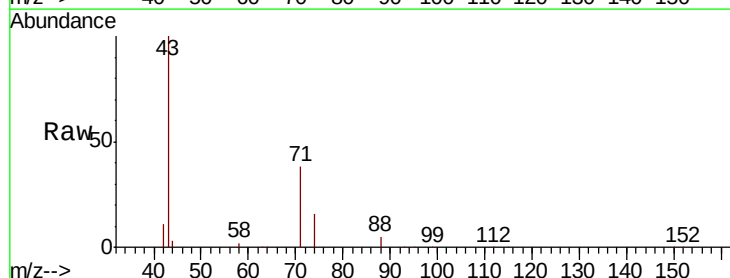
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



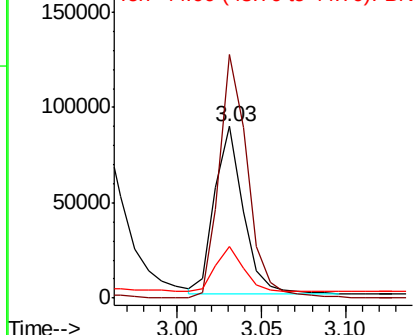
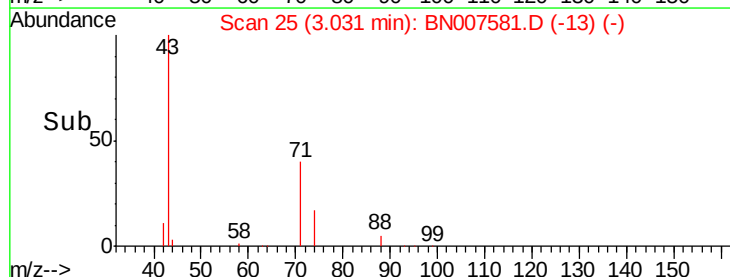
#3

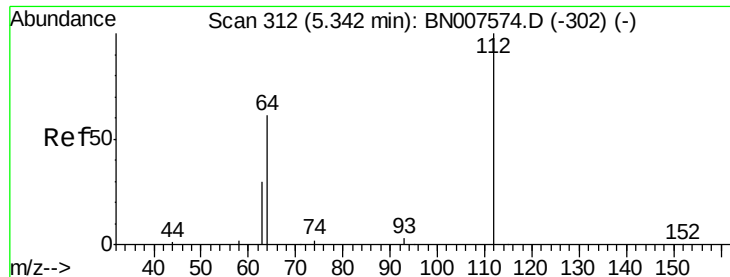
n-Nitrosodimethylamine  
Concen: 32.694 ng  
RT: 3.03 min Scan# 25  
Delta R.T. 0.00 min  
Lab File: BN007581.D  
Acq: 10 Sep 2019 18:02

Tgt Ion: 42 Resp: 102593  
Ion Ratio Lower Upper  
42 100  
74 145.3 0.0 0.0#  
44 27.1 0.0 0.0#



Abundance Ion 42.00 (41.70 to 42.70): BNC  
Ion 74.00 (73.70 to 74.70): BNC  
Ion 44.00 (43.70 to 44.70): BNC





#4

2-Fluorophenol

Concen: 0.184 ng

RT: 5.34 min Scan# 312

Delta R.T. 0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

Instrument :

BNA\_N

ClientSampleId :

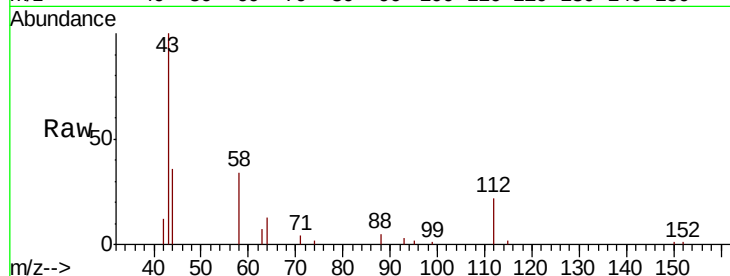
Tot Ion: 112 Resp: 2945

Ion Ratio Lower Upper

112 100

64 56.2 49.2 73.8

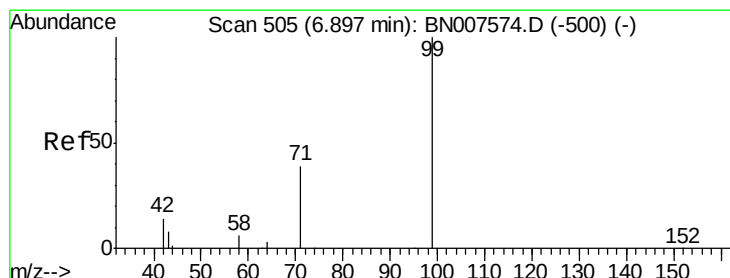
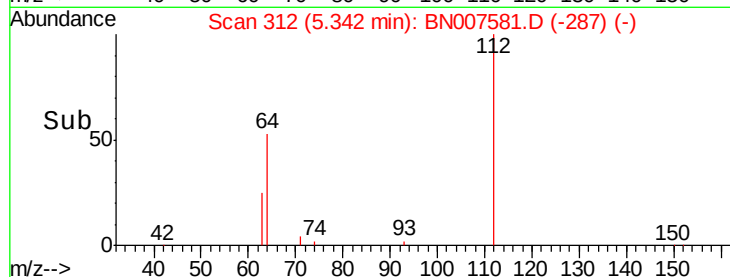
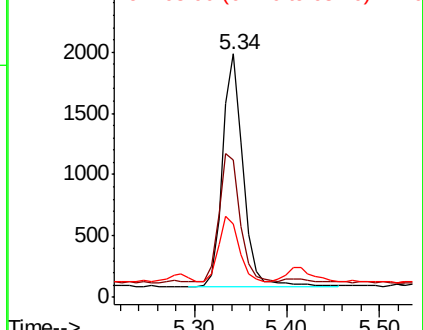
63 28.1 26.0 39.0



Abundance Ion 112.00 (111.70 to 112.70): B

Ion 64.00 (63.70 to 64.70): BN

Ion 63.00 (62.70 to 63.70): BN



#5

Phenol-d6

Concen: 0.124 ng

RT: 6.90 min Scan# 505

Delta R.T. 0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

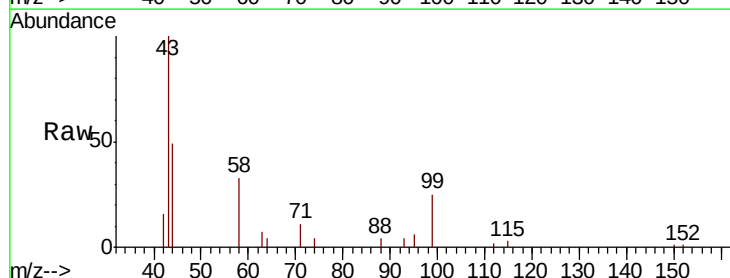
Tgt Ion: 99 Resp: 2699

Ion Ratio Lower Upper

99 100

42 0.0 11.8 17.8#

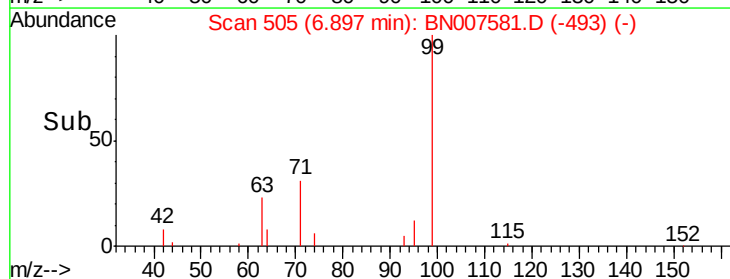
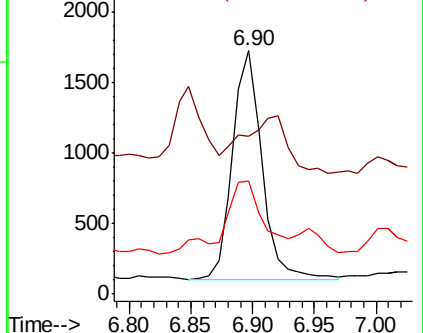
71 42.8 28.8 43.2

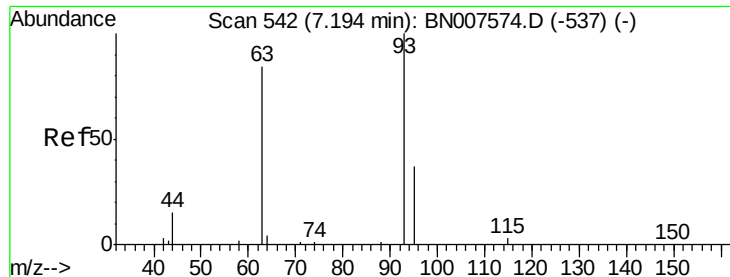


Abundance Ion 99.00 (98.70 to 99.70): BN

Ion 42.00 (41.70 to 42.70): BN

Ion 71.00 (70.70 to 71.70): BN

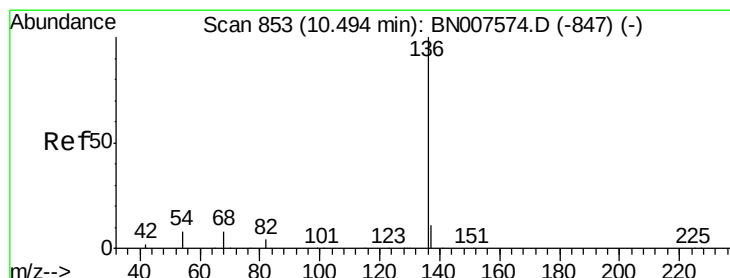
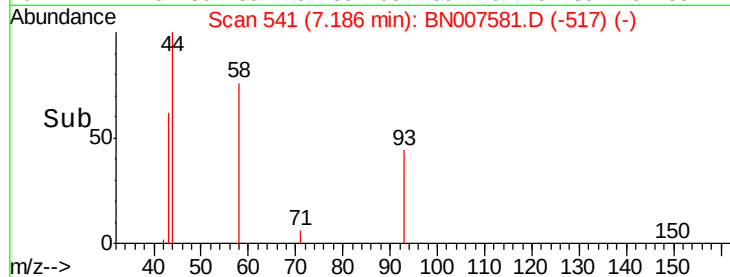
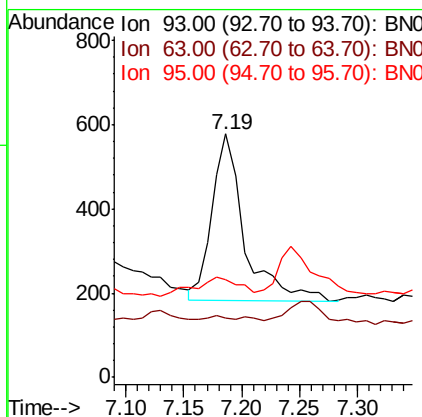
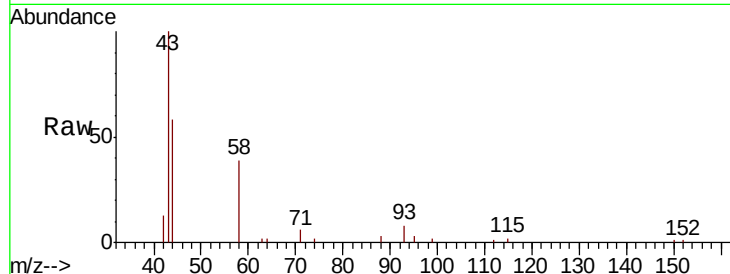




#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.261 ng  
 RT: 7.19 min Scan# 541  
 Delta R.T. -0.01 min  
 Lab File: BN007581.D  
 Acq: 10 Sep 2019 18:02

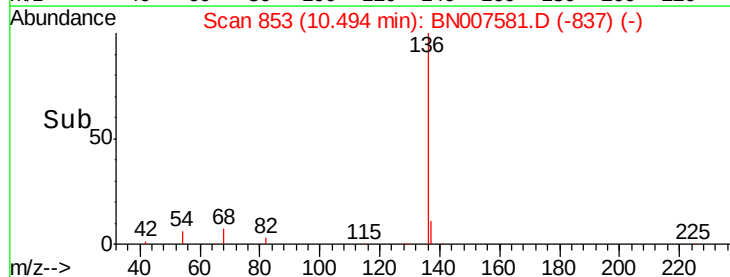
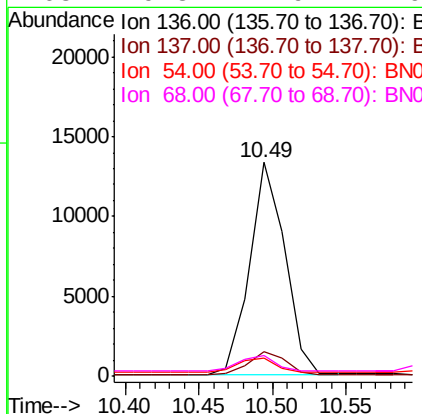
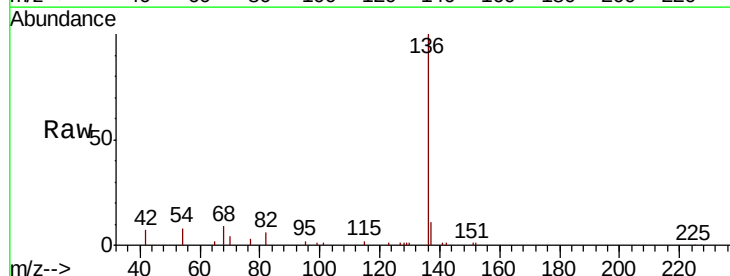
Instrument :  
 BNA\_N  
 ClientSampleId :

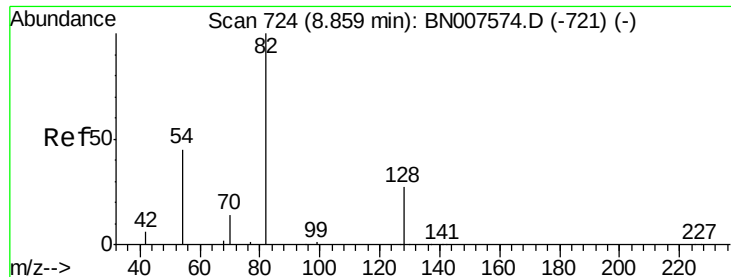
| Tot Ion: | 93    | Resp: | 767    |
|----------|-------|-------|--------|
| Ion      | Ratio | Lower | Upper  |
| 93       | 100   |       |        |
| 63       | 2.7   | 69.8  | 104.6# |
| 95       | 14.9  | 42.8  | 64.2#  |



#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.49 min Scan# 853  
 Delta R.T. 0.00 min  
 Lab File: BN007581.D  
 Acq: 10 Sep 2019 18:02

| Tgt Ion: | 136   | Resp: | 22212 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.4  | 9.1   | 13.7  |
| 54       | 8.2   | 7.5   | 11.3  |
| 68       | 9.3   | 7.9   | 11.9  |





#8

Nitrobenzene-d5

Concen: 0.463 ng

RT: 8.86 min Scan# 724

Delta R.T. 0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

Instrument :

BNA\_N

ClientSampleId :

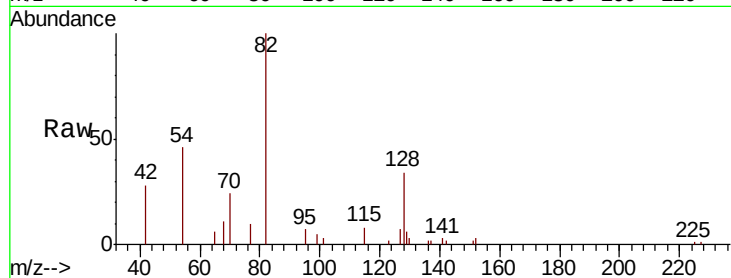
Tot Ion: 82 Resp: 6269

Ion Ratio Lower Upper

82 100

128 33.6 23.4 35.2

54 45.7 38.2 57.2

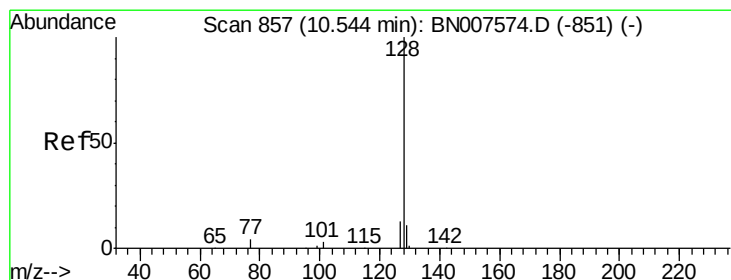
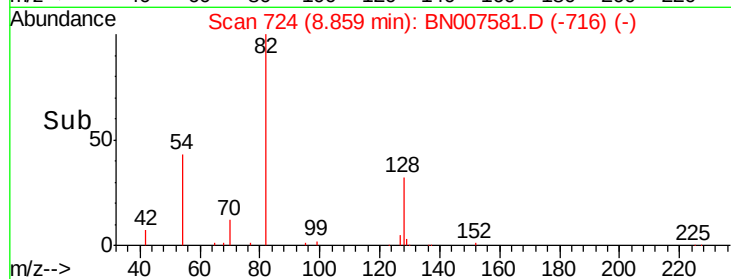
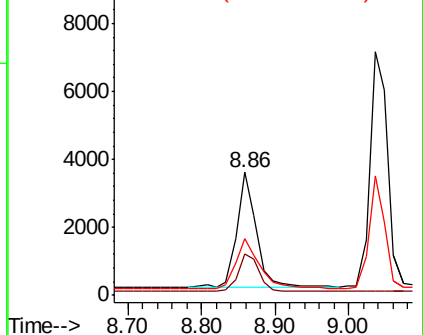


Abundance

Ion 82.00 (81.70 to 82.70): BN0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BN0



#9

Naphthalene

Concen: 0.127 ng

RT: 10.54 min Scan# 857

Delta R.T. 0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

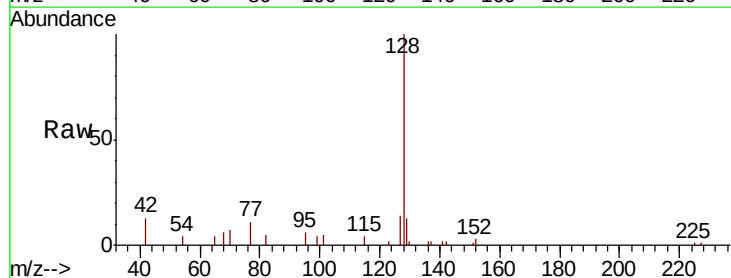
Tgt Ion:128 Resp: 7937

Ion Ratio Lower Upper

128 100

129 13.3 9.3 13.9

127 14.2 11.0 16.4

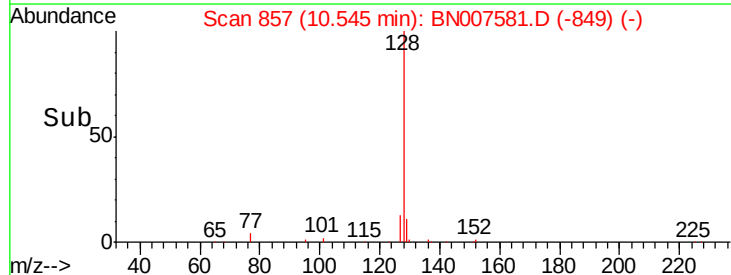
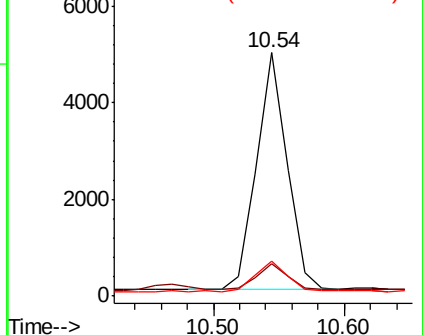


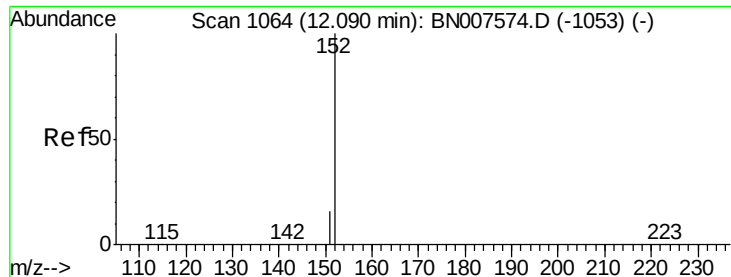
Abundance

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

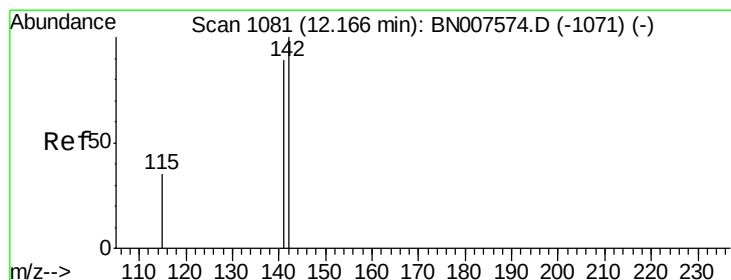
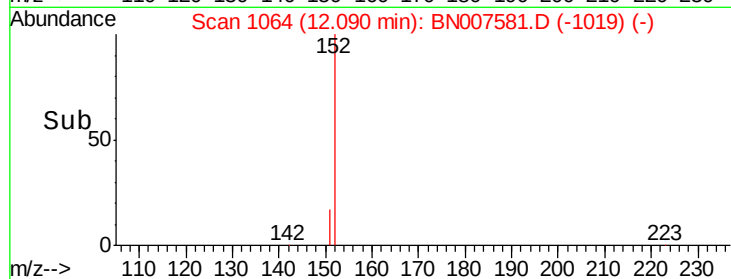
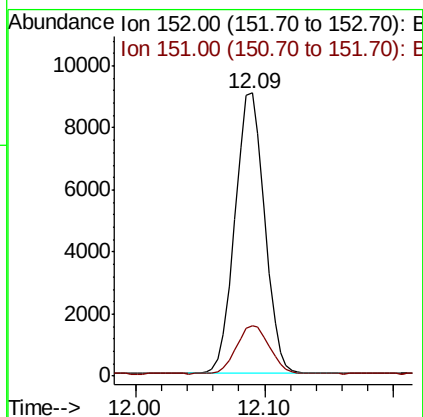
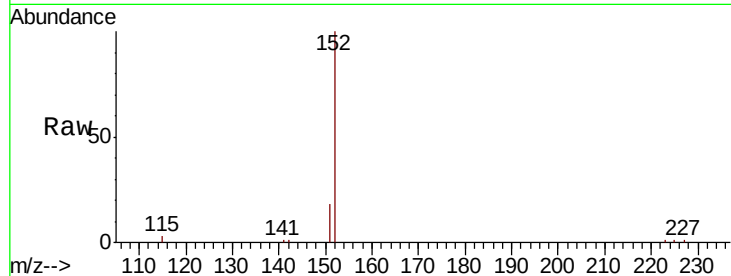




#11  
 2-Methylnaphthalene-d10  
 Concen: 0.375 ng  
 RT: 12.09 min Scan# 1064  
 Delta R.T. 0.00 min  
 Lab File: BN007581.D  
 Acq: 10 Sep 2019 18:02

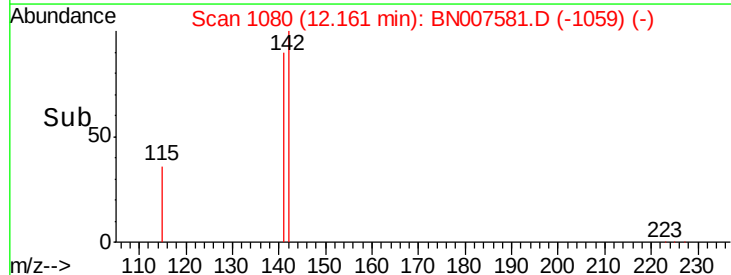
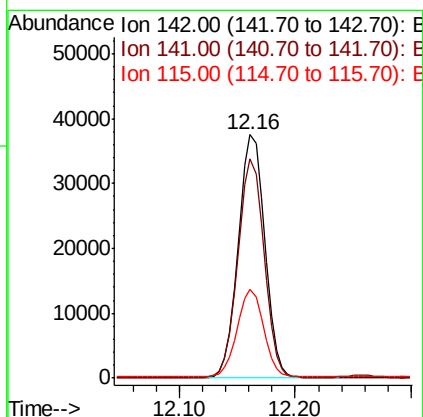
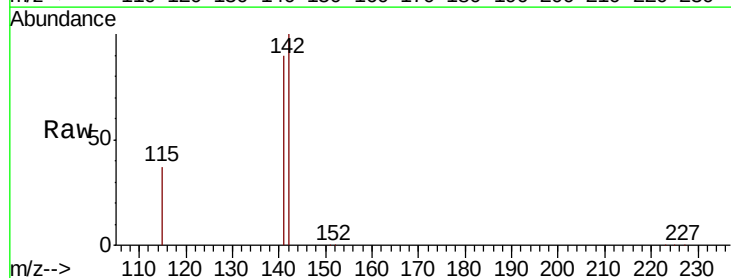
Instrument :  
 BNA\_N  
 ClientSampled :

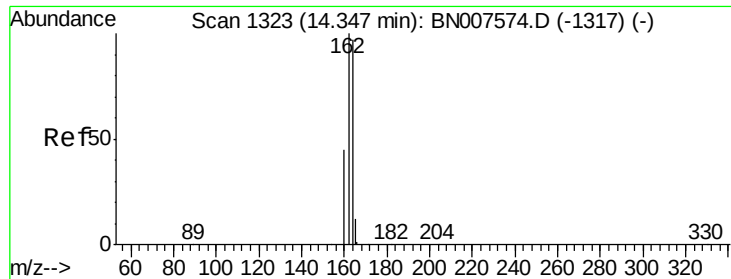
Tot Ion:152 Resp: 14383  
 Ion Ratio Lower Upper  
 152 100  
 151 19.1 15.3 22.9



#12  
 2-Methylnaphthalene  
 Concen: 1.314 ng  
 RT: 12.16 min Scan# 1080  
 Delta R.T. -0.00 min  
 Lab File: BN007581.D  
 Acq: 10 Sep 2019 18:02

Tgt Ion:142 Resp: 57549  
 Ion Ratio Lower Upper  
 142 100  
 141 90.3 71.0 106.6  
 115 36.5 29.1 43.7





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.35 min Scan# 1323

Delta R.T. 0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

Instrument :

BNA\_N

ClientSampleId :

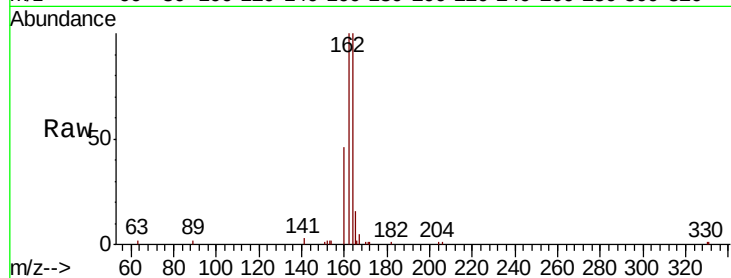
Tot Ion:164 Resp: 13126

Ion Ratio Lower Upper

164 100

162 100.1 82.2 123.2

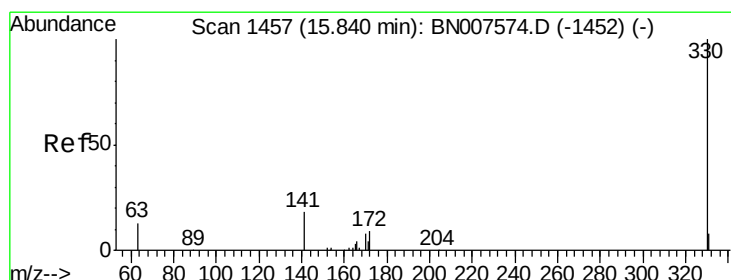
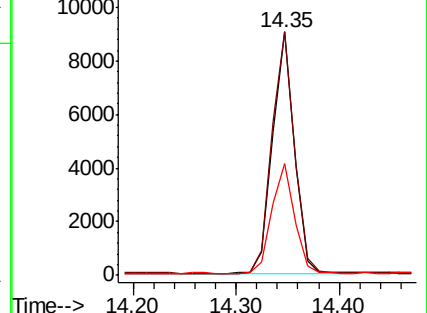
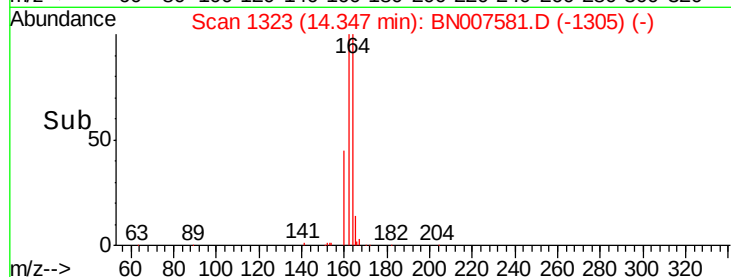
160 45.8 37.4 56.0



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



#14

2,4,6-Tribromophenol

Concen: 0.421 ng

RT: 15.83 min Scan# 1456

Delta R.T. -0.01 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

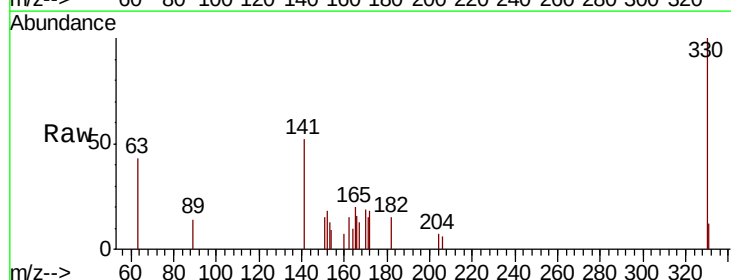
Tgt Ion:330 Resp: 2100

Ion Ratio Lower Upper

330 100

332 0.0 0.0 0.0

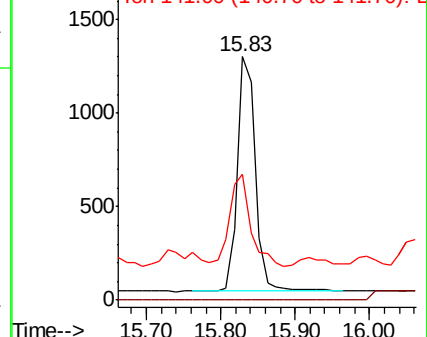
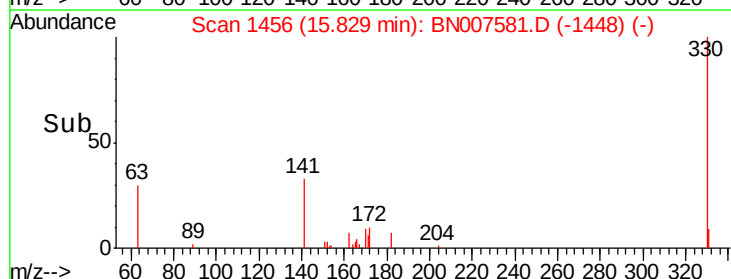
141 45.5 30.6 45.8



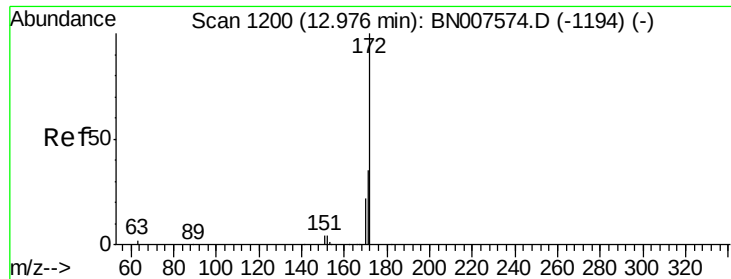
Abundance Ion 330.00 (329.70 to 330.70): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



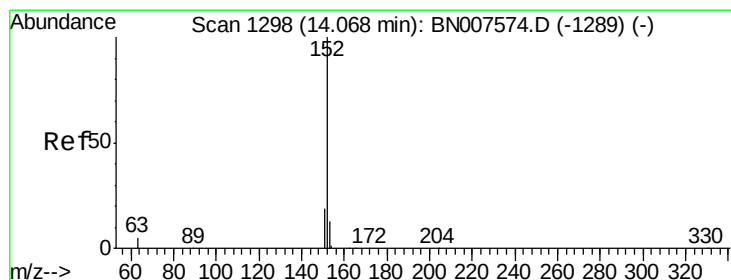
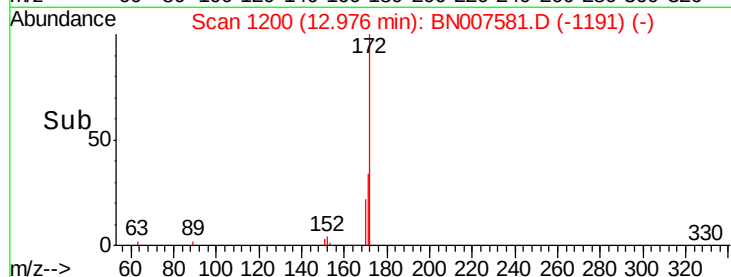
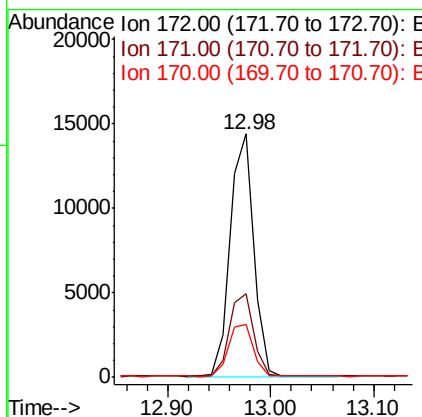
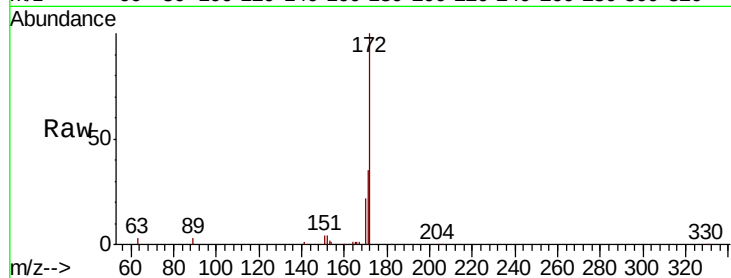




#15  
2-Fluorobiphenyl  
Concen: 0.417 ng  
RT: 12.98 min Scan# 1200  
Delta R.T. 0.00 min  
Lab File: BN007581.D  
Acq: 10 Sep 2019 18:02

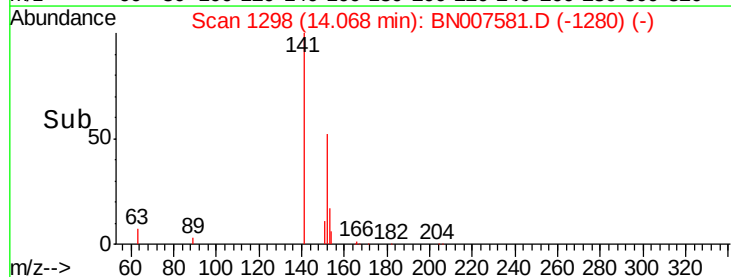
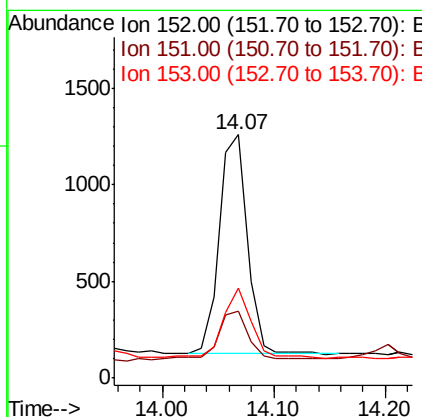
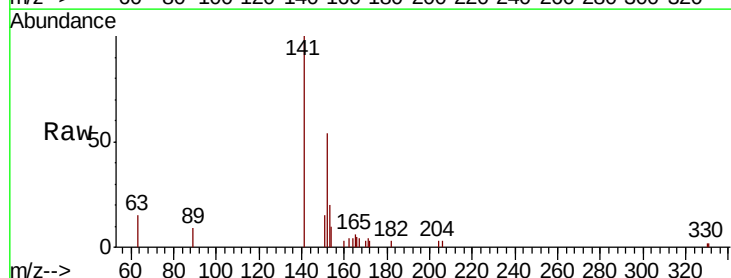
Instrument :  
BNA\_N  
ClientSampleId :

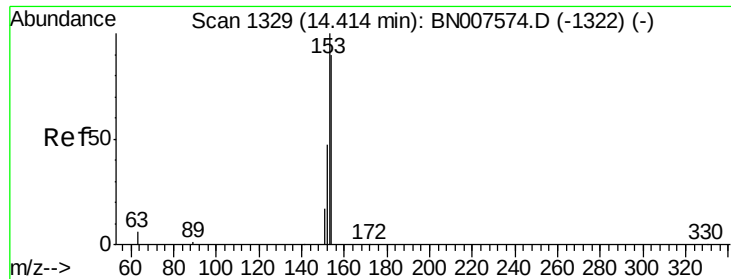
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 34.6  | 28.2  | 42.2  |
| 170     | 22.0  | 18.3  | 27.5  |



#16  
Acenaphthylene  
Concen: 0.028 ng  
RT: 14.07 min Scan# 1298  
Delta R.T. 0.00 min  
Lab File: BN007581.D  
Acq: 10 Sep 2019 18:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 25.9  | 15.8  | 23.6# |
| 153     | 32.4  | 10.4  | 15.6# |





#17

Acenaphthene

Concen: 0.054 ng

RT: 14.41 min Scan# 1329

Delta R.T. 0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

Instrument :

BNA\_N

ClientSampleId :

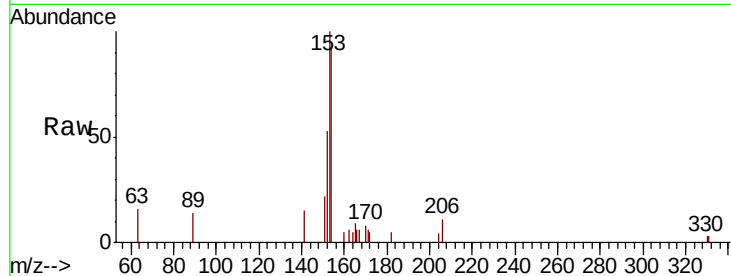
Tot Ion:154 Resp: 2415

Ion Ratio Lower Upper

154 100

153 124.5 89.4 134.2

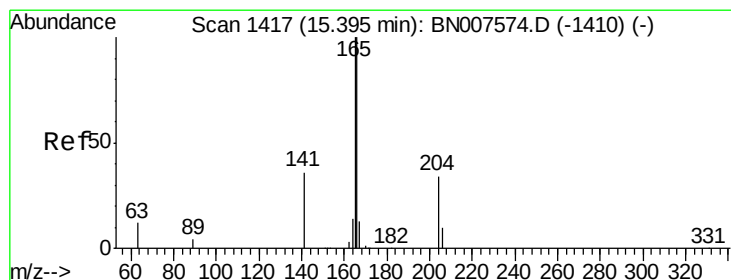
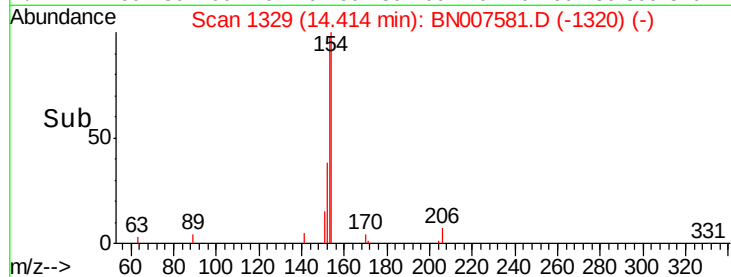
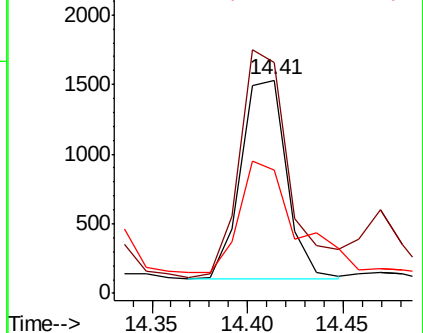
152 75.8 43.4 65.0#



Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E



#18

Fluorene

Concen: 0.092 ng

RT: 15.39 min Scan# 1417

Delta R.T. 0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

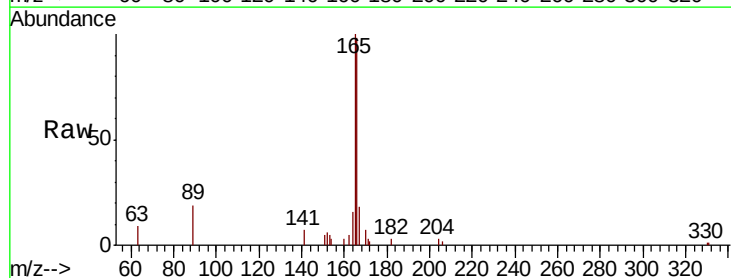
Tgt Ion:166 Resp: 5369

Ion Ratio Lower Upper

166 100

165 99.9 77.8 116.6

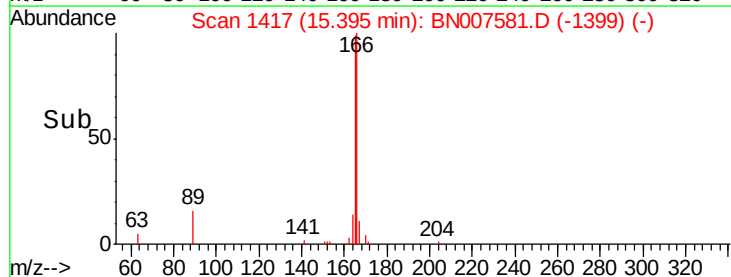
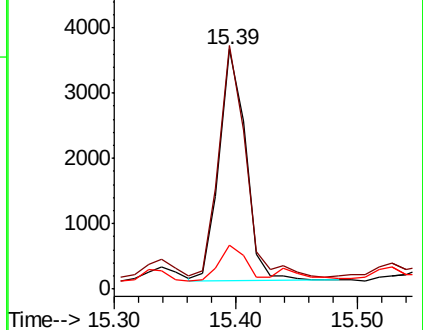
167 16.5 11.0 16.4#

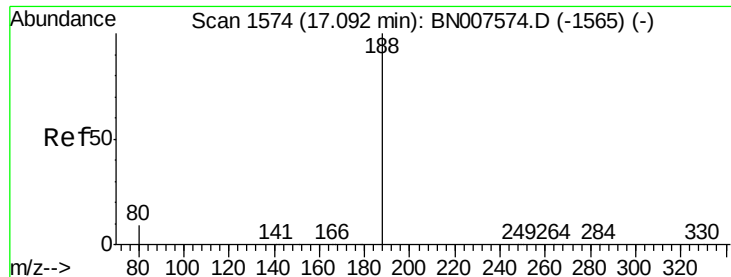


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.09 min Scan# 1574

Delta R.T. 0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

Instrument :

BNA\_N

ClientSampleId :

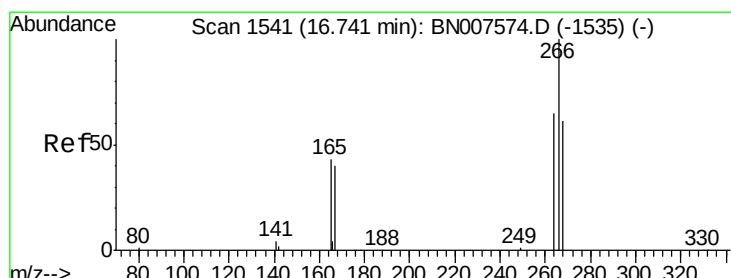
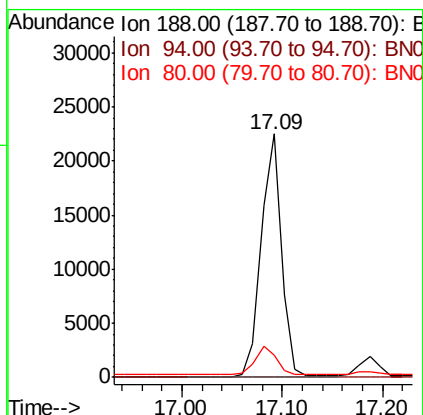
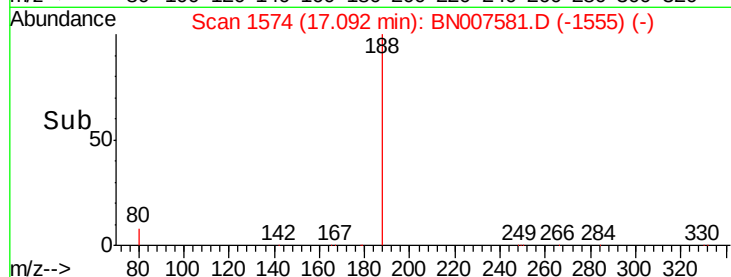
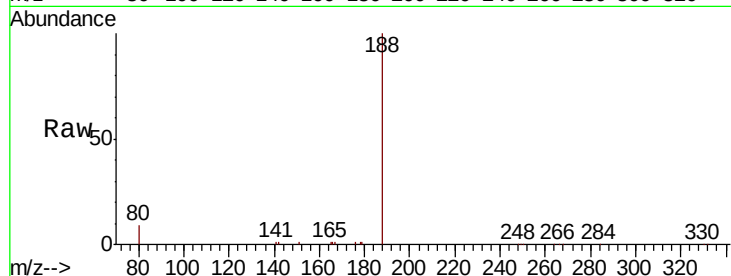
Tot Ion:188 Resp: 31705

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 9.0 8.1 12.1



#22

Pentachlorophenol

Concen: 0.208 ng

RT: 16.74 min Scan# 1541

Delta R.T. 0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

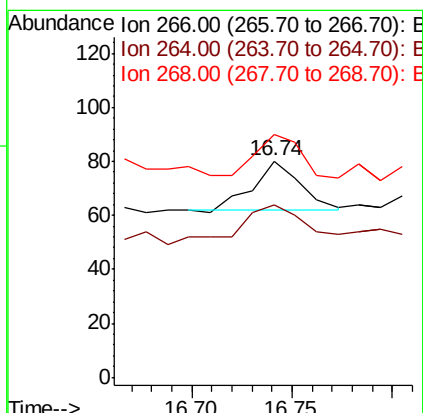
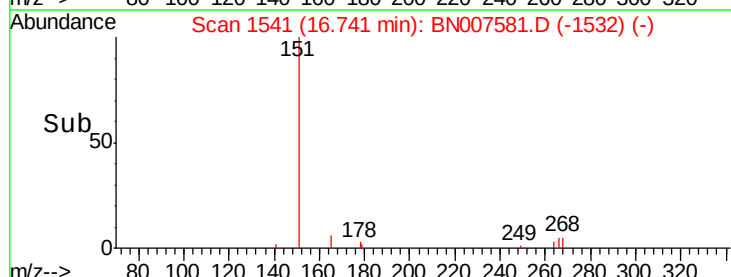
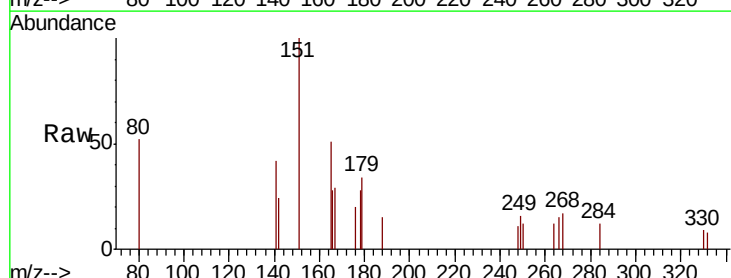
Tgt Ion:266 Resp: 29

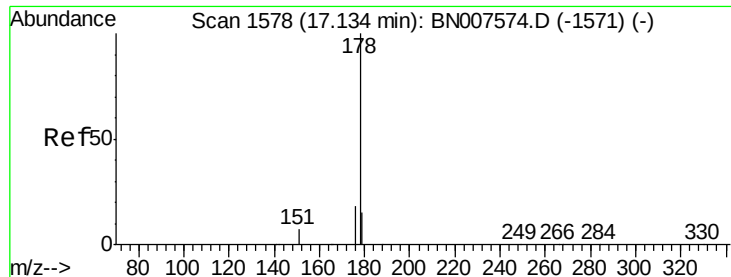
Ion Ratio Lower Upper

266 100

264 80.0 52.0 78.0#

268 112.5 53.5 80.3#





#23

Phenanthrene

Concen: 0.483 ng

RT: 17.13 min Scan# 1578

Delta R.T. 0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

Instrument :

BNA\_N

ClientSampleId :

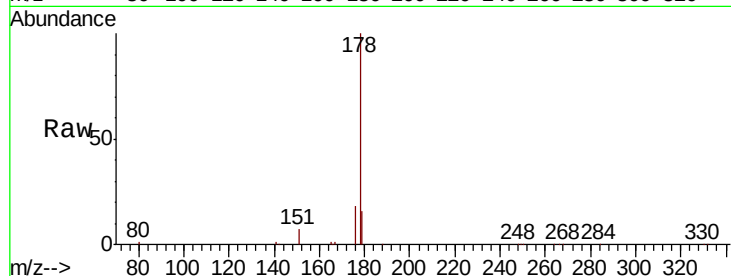
Tot Ion:178 Resp: 47246

Ion Ratio Lower Upper

178 100

176 18.7 15.0 22.4

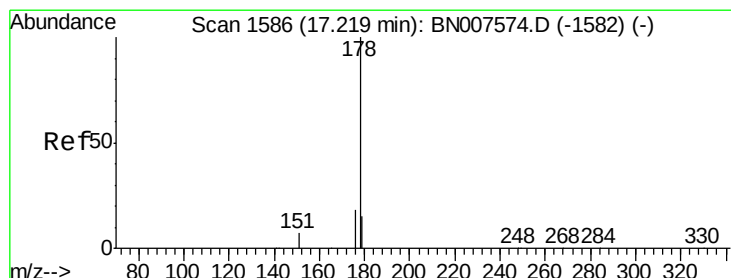
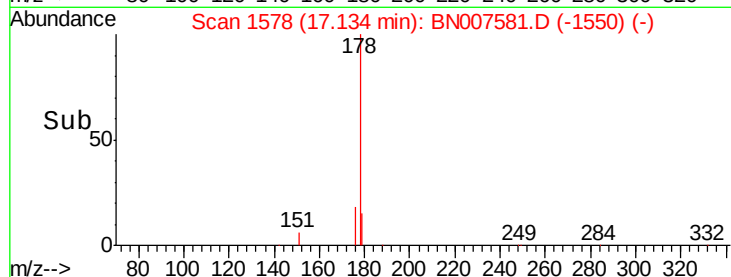
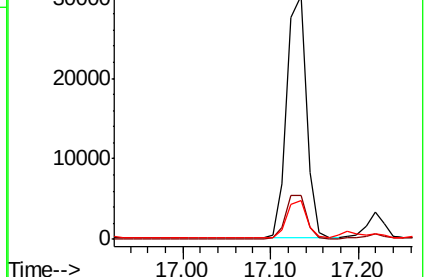
179 15.6 12.2 18.2



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#24

Anthracene

Concen: 0.049 ng

RT: 17.22 min Scan# 1586

Delta R.T. 0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

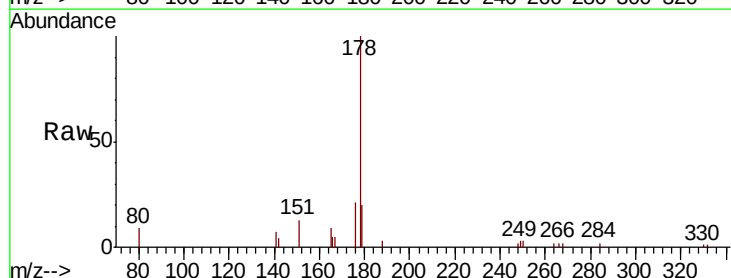
Tgt Ion:178 Resp: 4468

Ion Ratio Lower Upper

178 100

176 20.2 14.4 21.6

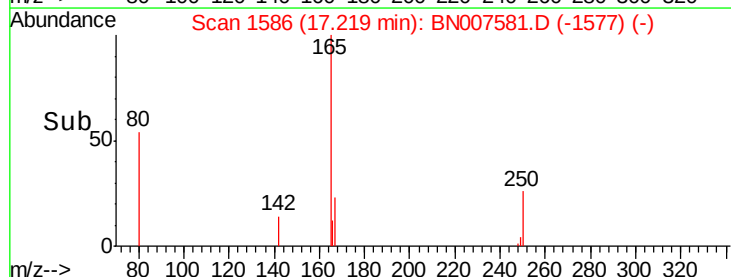
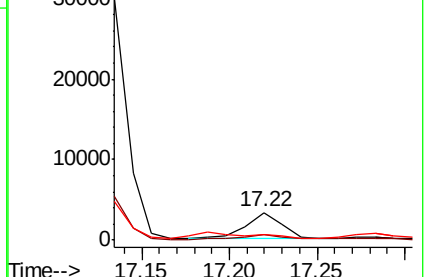
179 0.0 12.5 18.7#

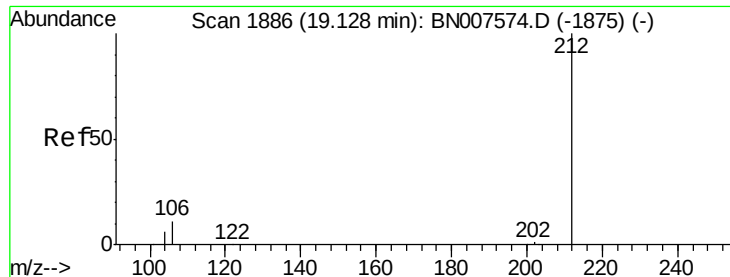


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#25

Fluoranthene-d10

Concen: 0.385 ng

RT: 19.12 min Scan# 1885

Delta R.T. -0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

Instrument :

BNA\_N

ClientSampleId :

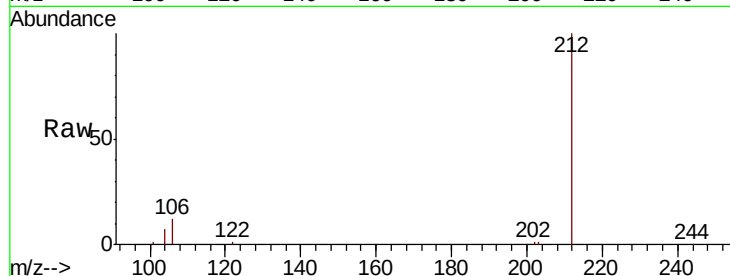
Tot Ion:212 Resp: 39674

Ion Ratio Lower Upper

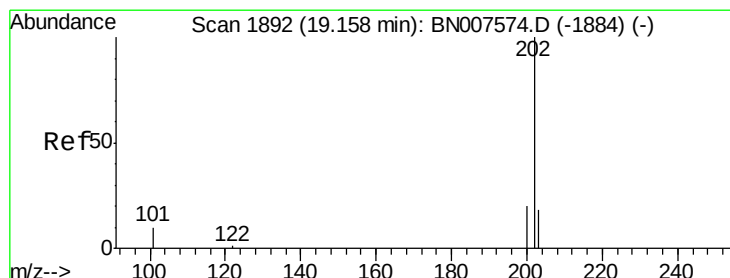
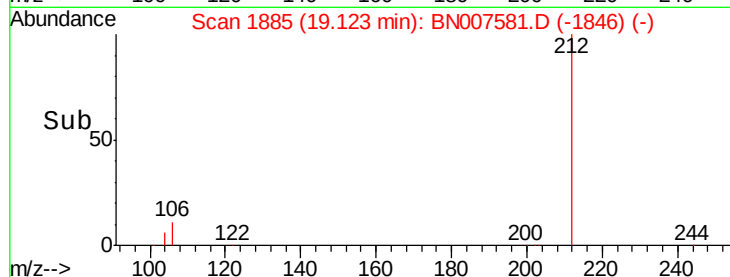
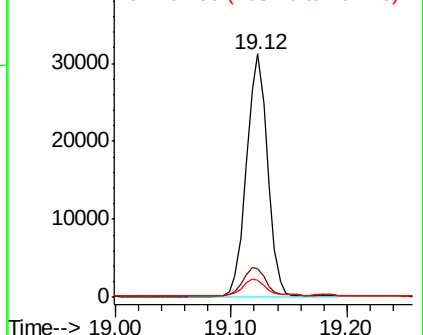
212 100

106 12.4 9.7 14.5

104 6.9 5.5 8.3



Abundance Ion 212.00 (211.70 to 212.70): E  
Ion 106.00 (105.70 to 106.70): E  
Ion 104.00 (103.70 to 104.70): E



#26

Fluoranthene

Concen: 0.096 ng

RT: 19.15 min Scan# 1891

Delta R.T. -0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

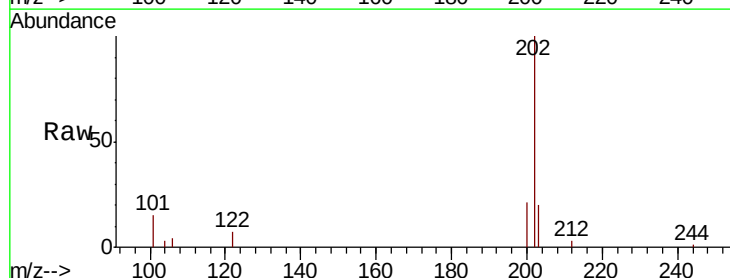
Tgt Ion:202 Resp: 11396

Ion Ratio Lower Upper

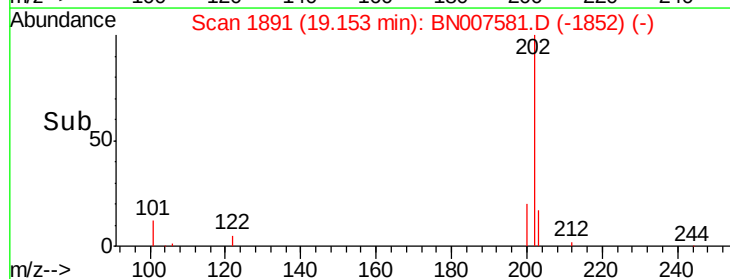
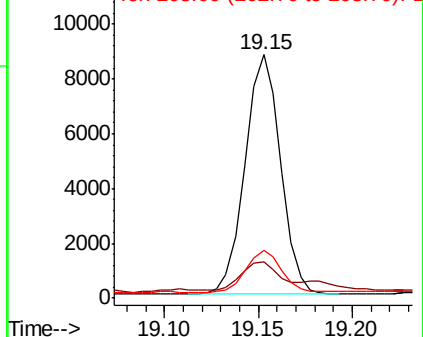
202 100

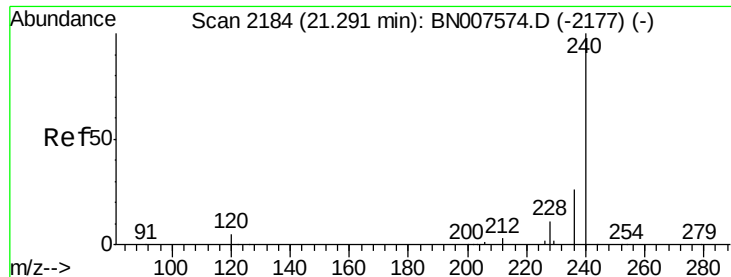
101 13.1 8.8 13.2

203 17.9 13.8 20.8



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





#27

Chrysene-d12

Concen: 0.400 ng

RT: 21.28 min Scan# 2183

Delta R.T. -0.01 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

Instrument :

BNA\_N

ClientSampleId :

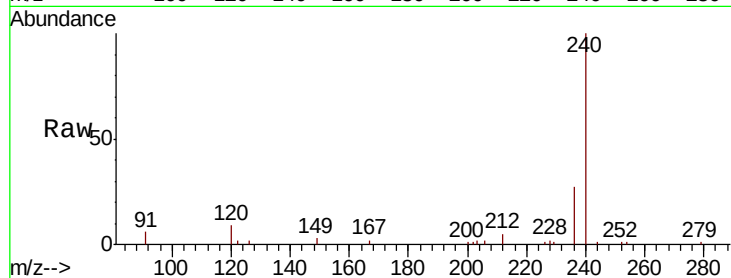
Tot Ion:240 Resp: 33041

Ion Ratio Lower Upper

240 100

120 9.2 5.0 7.4#

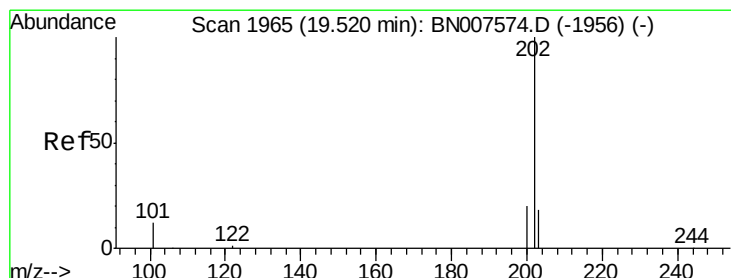
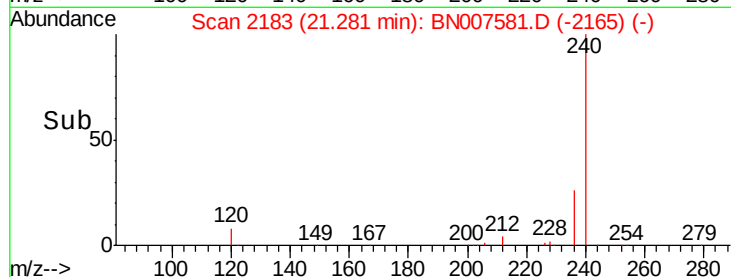
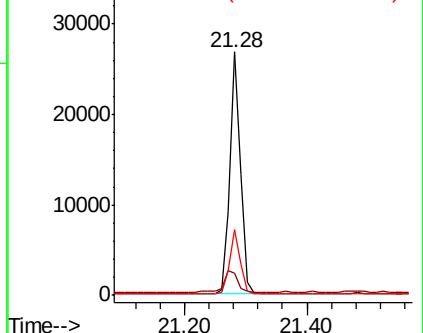
236 26.8 20.6 31.0



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



#28

Pyrene

Concen: 0.091 ng

RT: 19.52 min Scan# 1964

Delta R.T. -0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

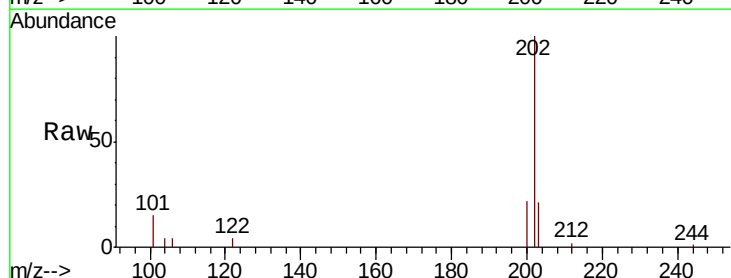
Tgt Ion:202 Resp: 10821

Ion Ratio Lower Upper

202 100

200 21.3 16.3 24.5

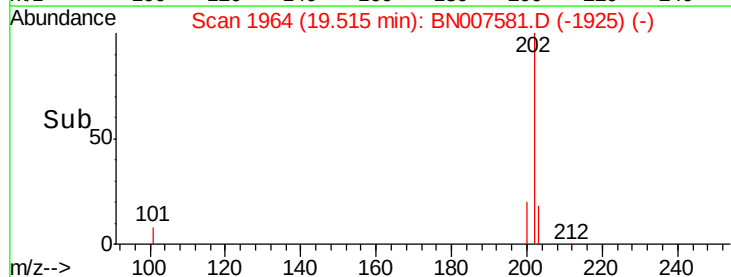
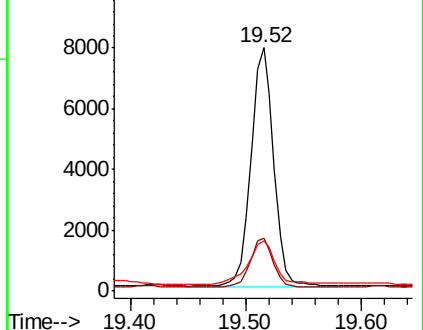
203 23.0 14.1 21.1#

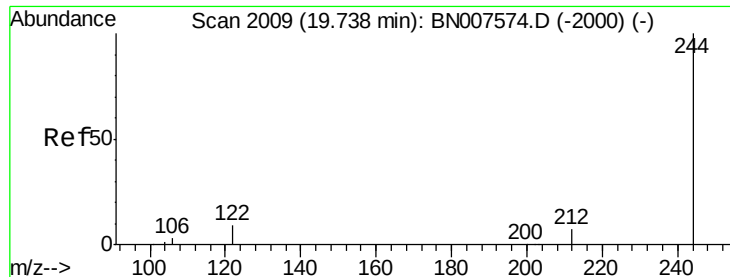


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#29

Terphenyl-d14

Concen: 0.384 ng

RT: 19.73 min Scan# 2008

Delta R.T. -0.00 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

Instrument :

BNA\_N

ClientSampleId :

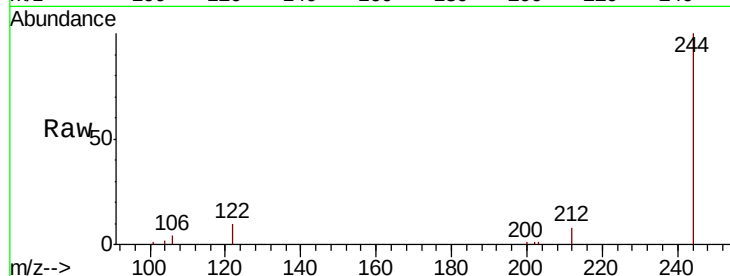
Tot Ion:244 Resp: 33008

Ion Ratio Lower Upper

244 100

212 7.8 5.8 8.8

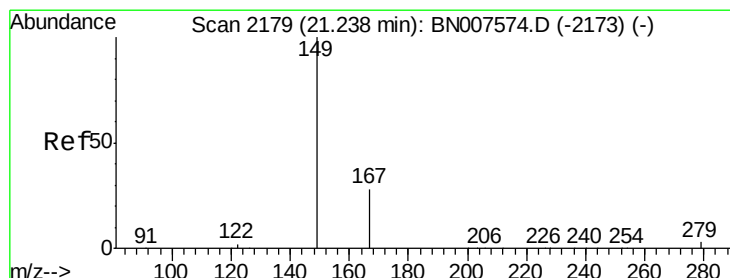
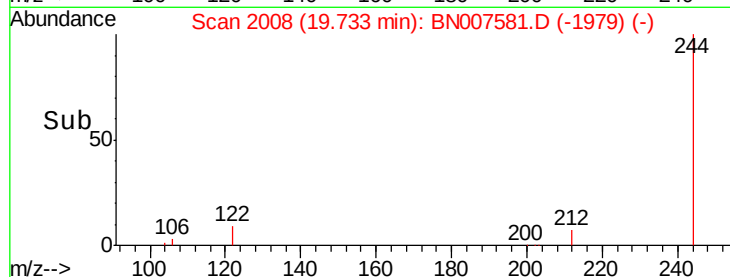
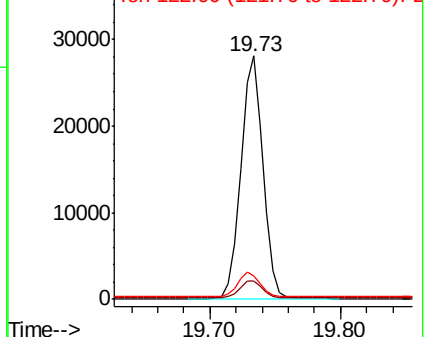
122 9.9 7.8 11.6



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



#32

Bis(2-ethylhexyl)phthalate

Concen: 0.325 ng

RT: 21.23 min Scan# 2178

Delta R.T. -0.01 min

Lab File: BN007581.D

Acq: 10 Sep 2019 18:02

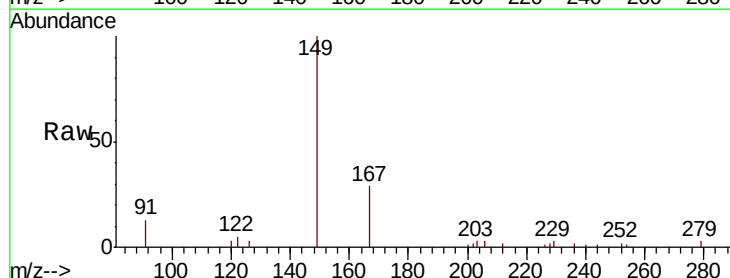
Tgt Ion:149 Resp: 13137

Ion Ratio Lower Upper

149 100

167 31.0 22.1 33.1

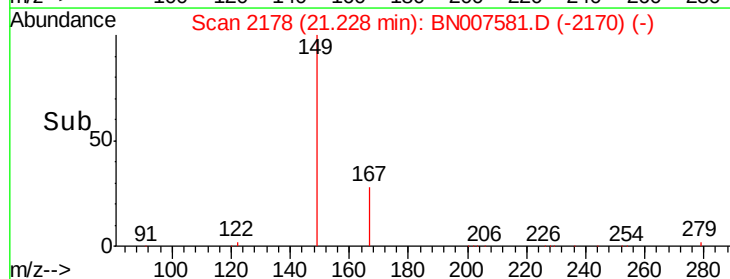
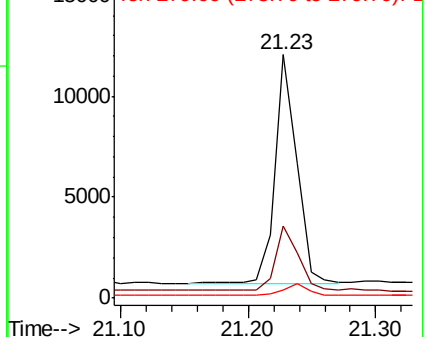
279 5.3 3.9 5.9

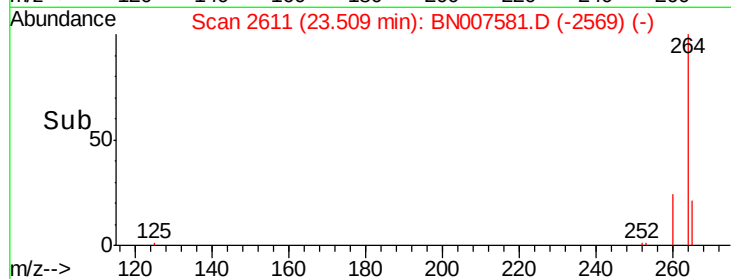
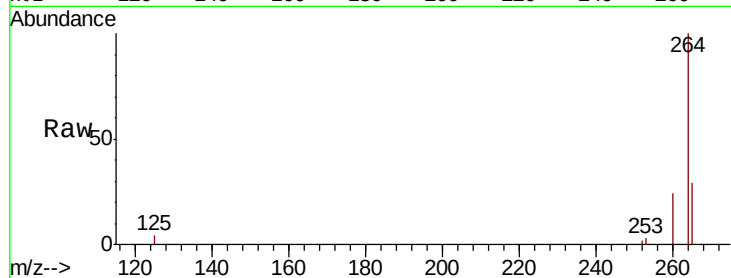
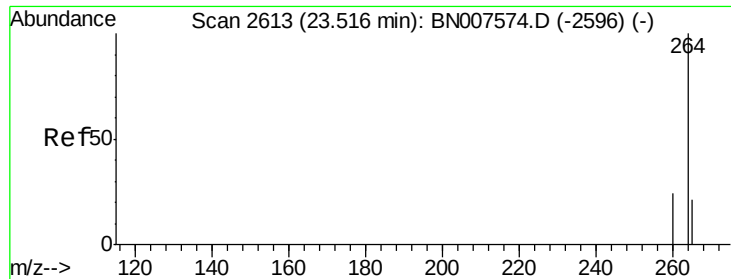


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E





#34  
 Pervlene-d12  
 Concen: 0.400 ng  
 RT: 23.51 min Scan# 2611  
 Delta R.T. -0.01 min  
 Lab File: BN007581.D  
 Acq: 10 Sep 2019 18:02

Instrument :  
 BNA\_N  
 ClientSampleId :

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 264   | Resp: | 36362 |
| Ion Ratio | Lower | Upper |       |
| 264       | 100   |       |       |
| 260       | 24.0  | 19.3  | 28.9  |
| 265       | 29.5  | 25.6  | 38.4  |

