Quantitation Report (Not Reviewed)

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM051316\
Data File : BM005459.D
Acq On : 14 May 2016 10:36
Operator : UM/SJ
Sample : H2834-14MS
Misc :
ALS Vial : 33 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : H4061MS

Quant Time: May 16 03:40:52 2016
Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM050516.M
Quant Title : SVOA CALIBRATION
QLast Update : Sat May 14 00:15:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.75	152	63562	20.00	ng/ul	0.00
18) Naphthalene-d8	10.53	136	296549	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.39	164	189197	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.14	188	444383	20.00	ng/ul	0.00
75) Chrysene-d12	21.34	240	518205	20.00	ng/ul	0.00
83) Perylene-d12	23.61	264	436350	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.25	96	4725	3.50	ng/uL	0.00
5) Phenol-d5	6.93	99	112240	19.47	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	7.09	67	66853	20.33	ng/ul	0.00
9) 2-Chlorophenol-d4	7.29	132	89371	20.53	ng/ul	0.00
13) 4-Methylphenol-d8	8.46	113	93488	19.62	ng/ul	0.00
19) Nitrobenzene-d5	8.90	128	45389	21.44	ng/ul	0.00
22) 2-Nitrophenol-d4	9.63	143	51464	21.47	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.17	165	90811	20.38	ng/ul	0.00
29) 4-Chloroaniline-d4	10.69	131	49386	9.21	ng/ul	0.00
43) Dimethylphthalate-d6	13.80	166	326810	21.55	ng/ul	0.00
46) Acenaphthylene-d8	14.08	160	378947	21.30	ng/ul	0.00
51) 4-Nitrophenol-d4	14.62	143	33803	12.21	ng/ul	0.00
57) Fluorene-d10	15.39	176	270481	20.66	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.52	200	28885	11.55	ng/ul	0.00
70) Anthracene-d10	17.24	188	425152	21.64	ng/ul	0.00
76) Pyrene-d10	19.54	212	518689	21.68	ng/ul	0.00
87) Benzo(a)pyrene-d12	23.47	264	420676	21.78	ng/ul	0.00
Target Compounds						Qvalue
4) Benzaldehyde	6.92	77	2598	0.93	ng/ul#	83
6) Phenol	6.96	94	117588	19.74	ng/ul	98
8) Bis(2-Chloroethyl)ether	7.18	93	214	0.05	ng/ul#	21
10) 2-Chlorophenol	7.32	128	87966	19.75	ng/ul	96
11) 2-Methylphenol	8.09	108	110	0.02	ng/ul#	4
14) Acetophenone	8.58	105	8430	1.19	ng/ul	97
15) N-Nitroso-di-n-propylamine	8.55	70	85877	23.28	ng/ul	99
21) Isophorone	9.63	82	4208	0.41	ng/ul#	67
33) 4-Chloro-3-methylphenol	11.83	107	115439	21.10	ng/ul	98
41) 2-Chloronaphthalene	13.14	162	841	0.07	ng/ul#	39
42) 2-Nitroaniline	13.33	65	985	0.28	ng/ul#	4
44) Dimethylphthalate	13.84	163	105097	6.94	ng/ul	99
45) 2,6-Dinitrotoluene	13.84	165	1055	0.35	ng/ul#	27
49) Acenaphthene	14.46	153	257384	20.75	ng/ul	99
52) 4-Nitrophenol	14.64	109	35270	15.32	ng/ul	92
54) 2,4-Dinitrotoluene	14.77	165	94155	21.13	ng/ul	99
56) Diethylphthalate	15.22	149	535	0.03	ng/ul#	59
58) Fluorene	15.39	166	466	0.03	ng/ul#	9
59) 4-Chlorophenyl-phenylether	15.42	204	2641	0.38	ng/ul#	28
68) Pentachlorophenol	16.80	266	46960	17.69	ng/ul	95
69) Phenanthrene	17.19	178	3313	0.14	ng/ul#	89
71) Anthracene	17.27	178	355	0.02	ng/ul#	60
72) Carbazole	17.57	167	436	0.02	ng/ul#	60

Quantitation Report (Not Reviewed)

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM051316\
Data File : BM005459.D
Acq On : 14 May 2016 10:36
Operator : UM/SJ
Sample : H2834-14MS
Misc :
ALS Vial : 33 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : H4061MS

Quant Time: May 16 03:40:52 2016
Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM050516.M
Quant Title : SVOA CALIBRATION
QLast Update : Sat May 14 00:15:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
73) Di-n-butylphthalate	18.10	149	2443	0.10	ng/ul#	78
74) Fluoranthene	19.21	202	7125	0.28	ng/ul#	92
77) Pyrene	19.57	202	655834	21.82	ng/ul	99
78) Butylbenzylphthalate	20.46	149	1475	0.12	ng/ul#	26
80) Benzo(a)anthracene	21.33	228	6742	0.23	ng/ul	93
81) Bis(2-ethylhexyl)phthalate	21.24	149	3727	0.21	ng/ul#	59
82) Chrysene	21.33	228	7217	0.26	ng/ul	96
84) Di-n-octyl phthalate	22.23	149	665	0.03	ng/ul#	1
85) Benzo(b)fluoranthene	22.94	252	9192	0.36	ng/ul#	1
86) Benzo(k)fluoranthene	22.94	252	9192	0.38	ng/ul#	1
88) Benzo(a)pyrene	23.52	252	3464	0.14	ng/ul#	1
89) Indeno(1,2,3-cd)pyrene	25.93	276	1852	0.07	ng/ul#	49
91) Benzo(g,h,i)perylene	26.64	276	1542	0.07	ng/ul#	62

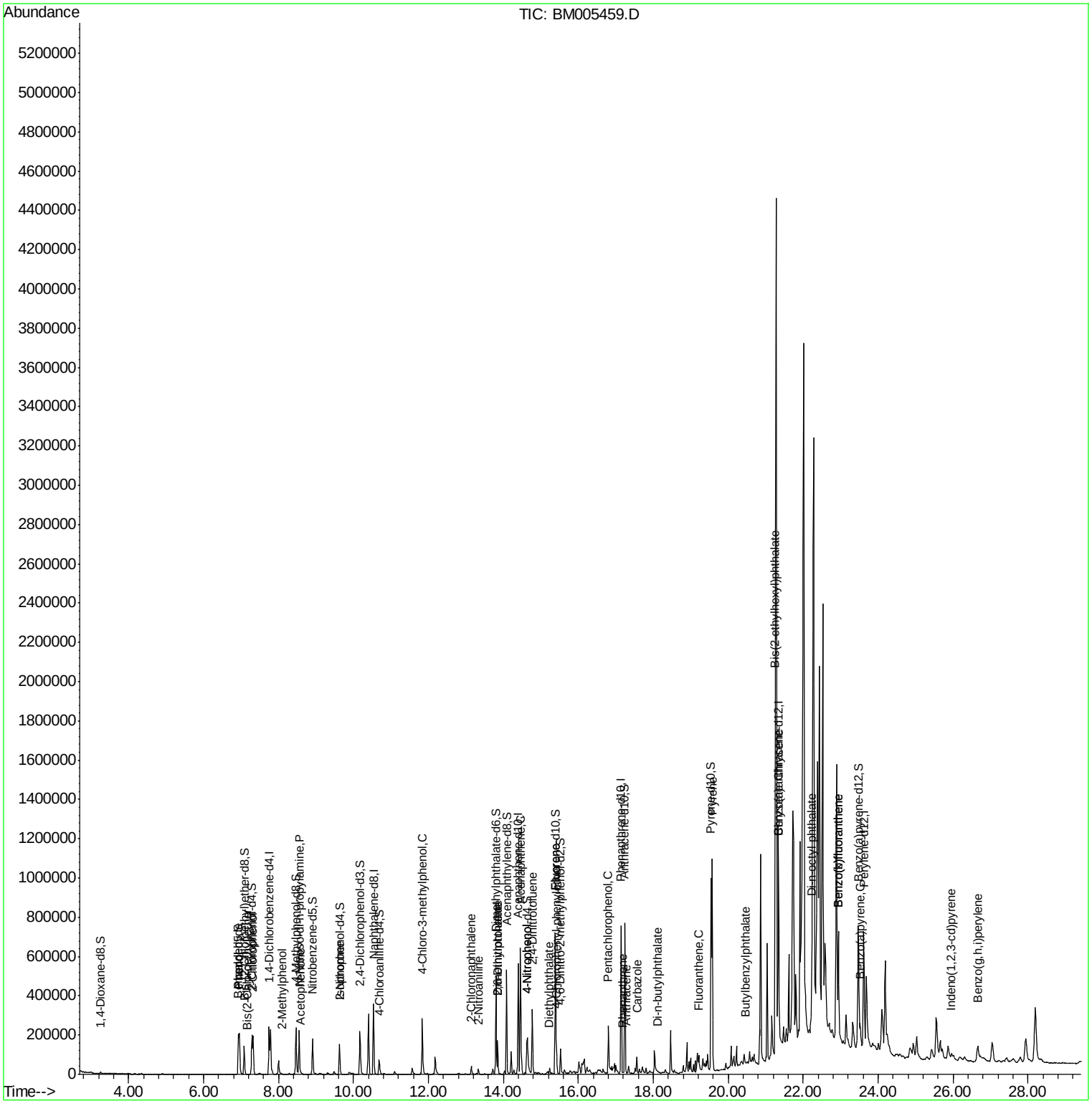
(#) = qualifier out of range (m) = manual integration (+) = signals summed

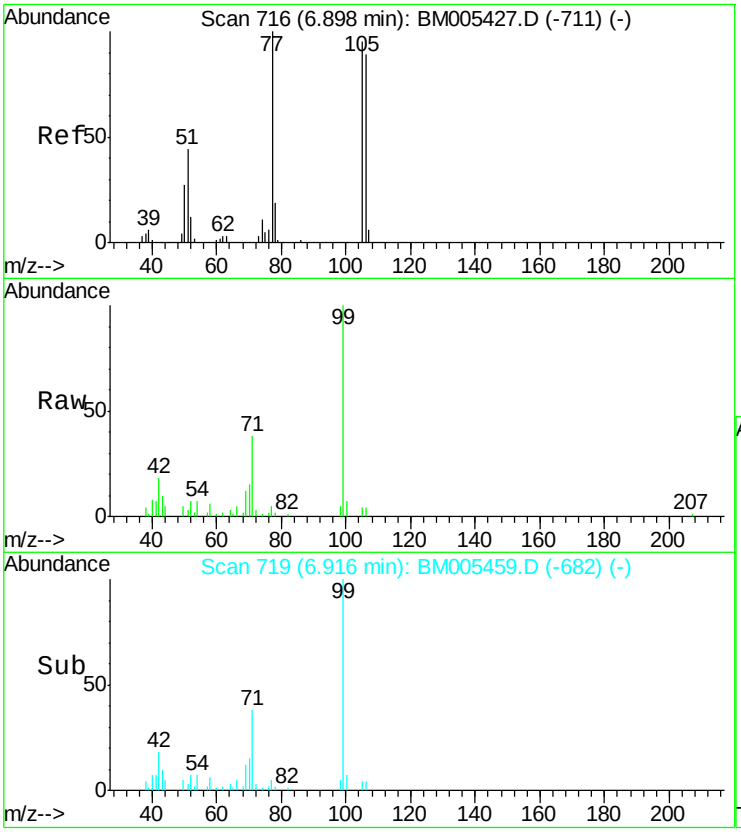
Quantitation Report (Not Reviewed)

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM051316\
Data File : BM005459.D
Acq On : 14 May 2016 10:36
Operator : UM/SJ
Sample : H2834-14MS
Misc :
ALS Vial : 33 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
H4061MS

Quant Time: May 16 03:40:52 2016
Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM050516.M
Quant Title : SVOA CALIBRATION
QLast Update : Sat May 14 00:15:57 2016
Response via : Initial Calibration



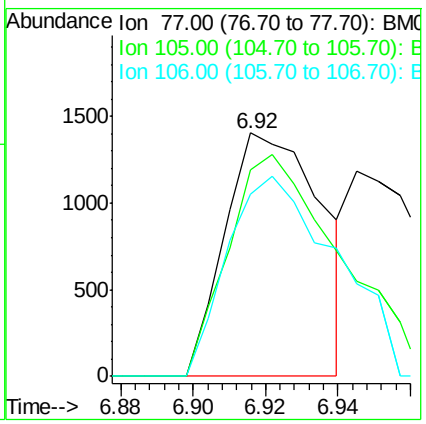


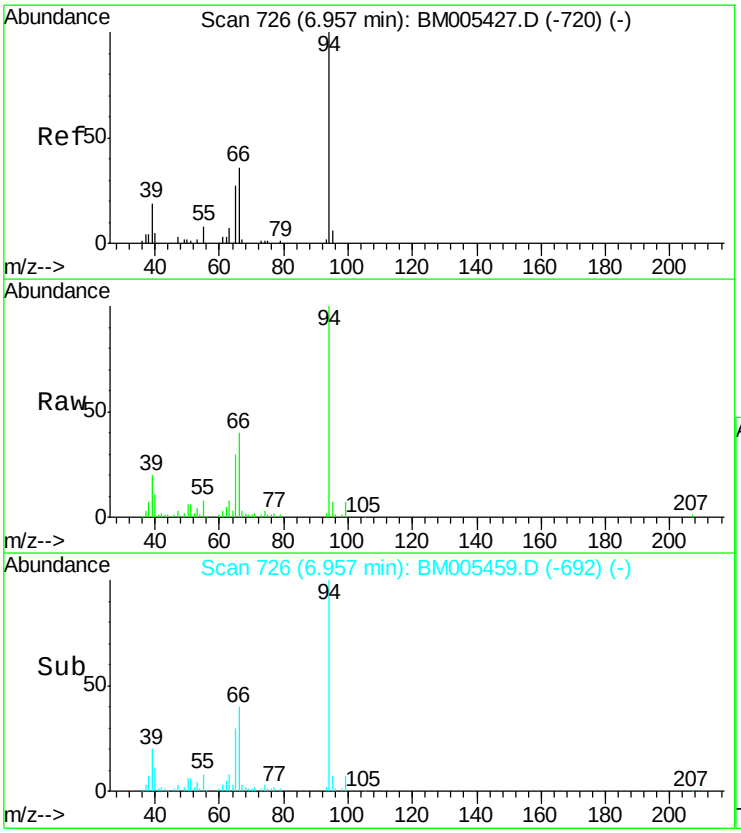
#4
Benzaldehyde
Concen: 0.93 ng/ul
RT: 6.92 min Scan# 719
Delta R.T. 0.02 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion: 77 Resp: 2598

Ion	Ratio	Lower	Upper
77	100		
105	85.0	77.6	116.4
106	75.0	77.9	116.9#

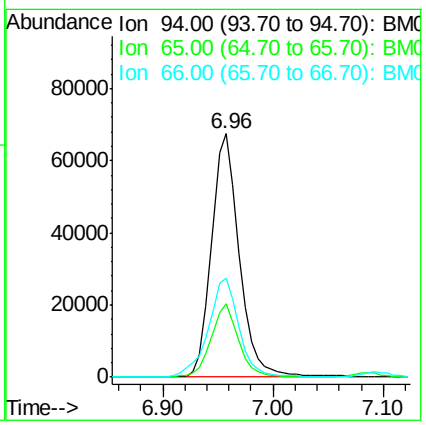


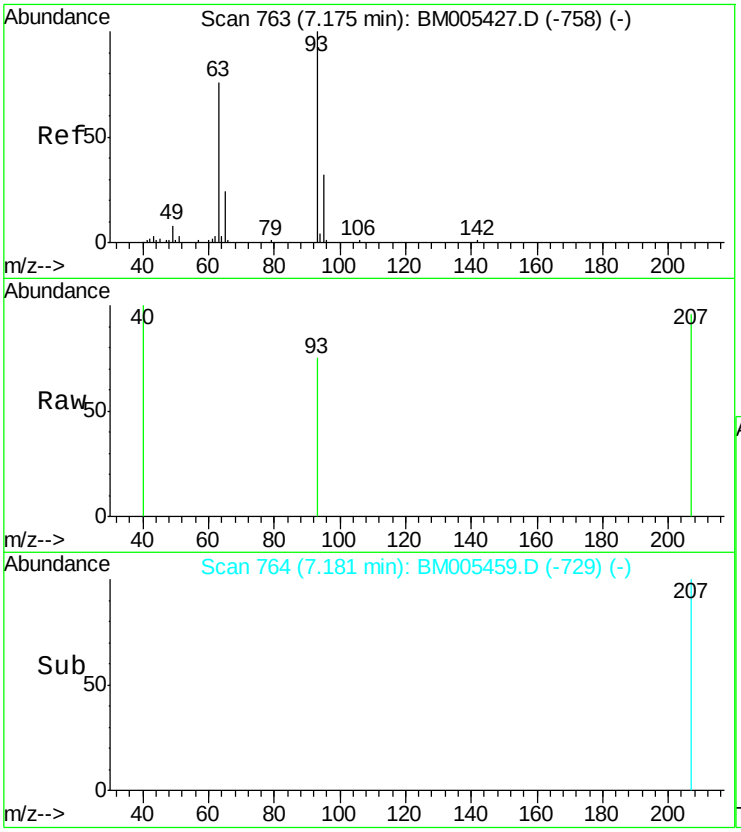


#6
Phenol
Concen: 19.74 ng/ul
RT: 6.96 min Scan# 726
Delta R.T. -0.00 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion: 94 Resp: 117588

Ion	Ratio	Lower	Upper
94	100		
65	30.1	22.7	34.1
66	40.5	31.7	47.5



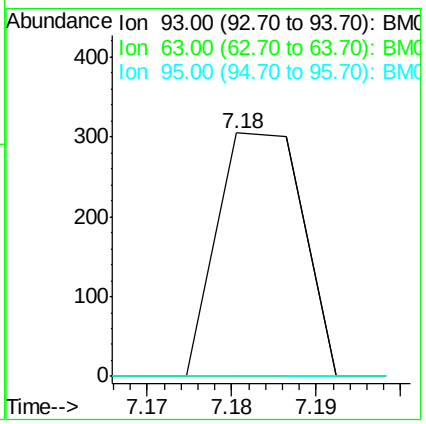


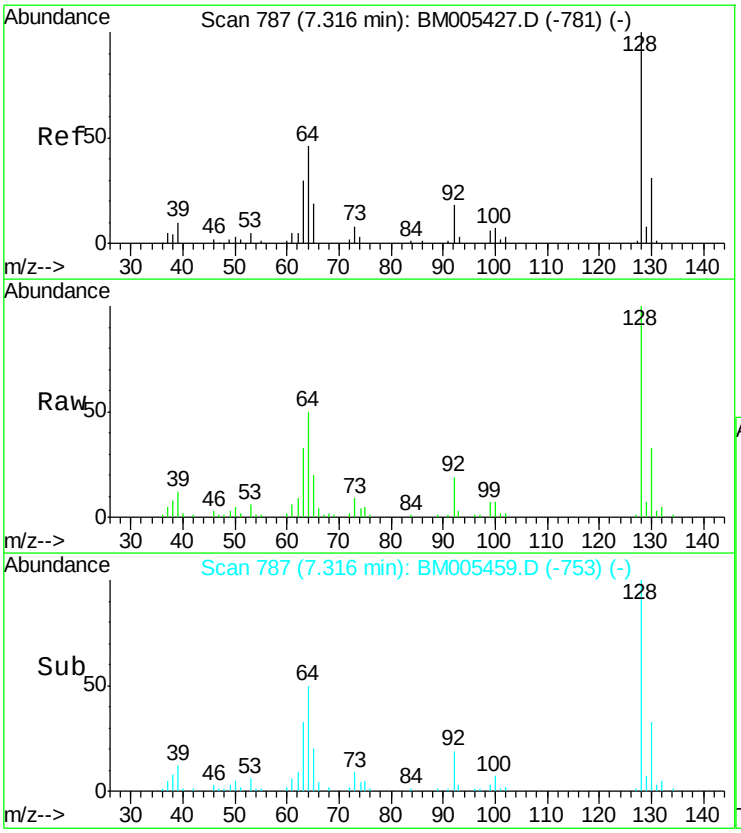
#8
Bis(2-Chloroethyl)ether
Concen: 0.05 ng/ul
RT: 7.18 min Scan# 764
Delta R.T. 0.01 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion: 93 Resp: 214

Ion	Ratio	Lower	Upper
93	100		
63	0.0	60.6	90.8#
95	0.0	24.2	36.4#

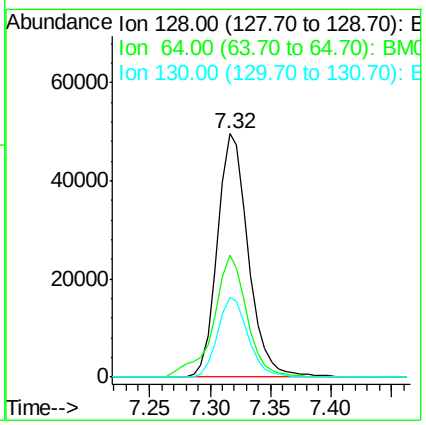


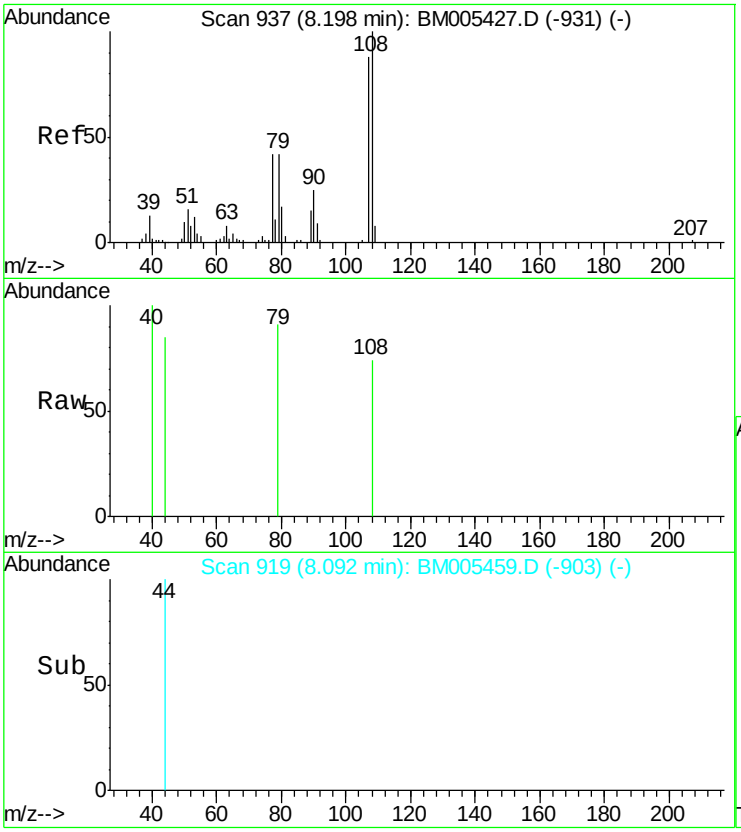


#10
2-Chlorophenol
Concen: 19.75 ng/ul
RT: 7.32 min Scan# 787
Delta R.T. -0.00 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:128 Resp: 87966

Ion	Ratio	Lower	Upper
128	100		
64	50.0	37.8	56.8
130	32.8	24.9	37.3



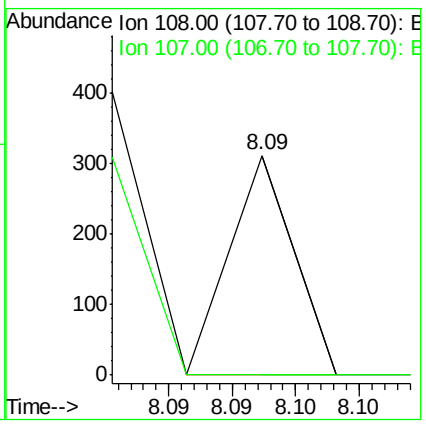


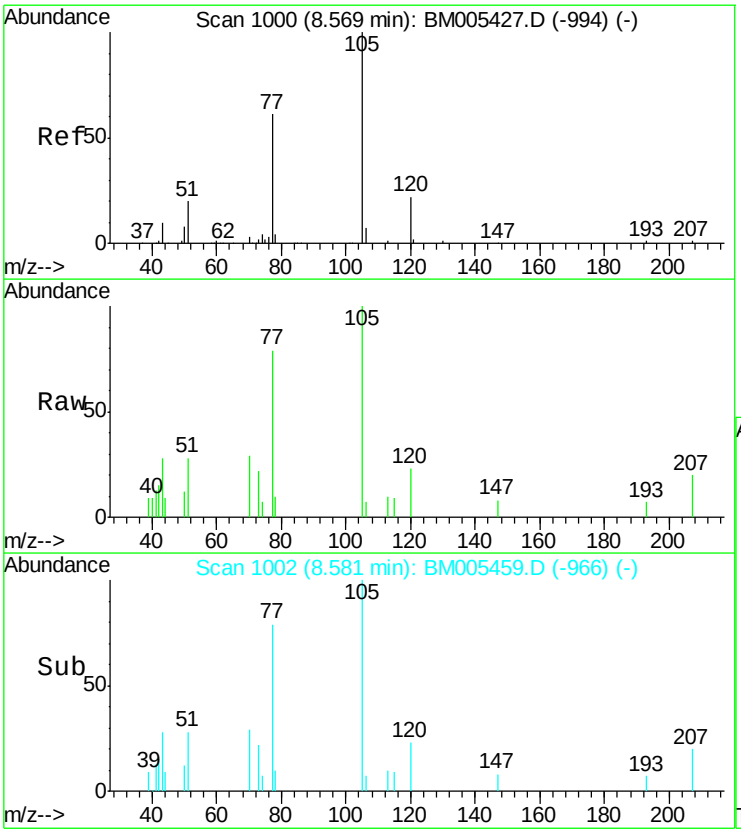
#11
2-Methylphenol
Concen: 0.02 ng/ul
RT: 8.09 min Scan# 919
Delta R.T. -0.11 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:108 Resp: 110

Ion	Ratio	Lower	Upper
108	100		
107	0.0	73.4	110.0#

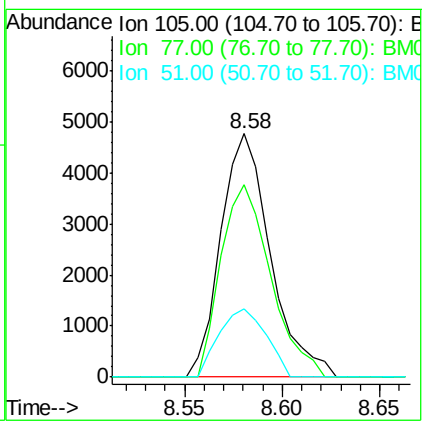


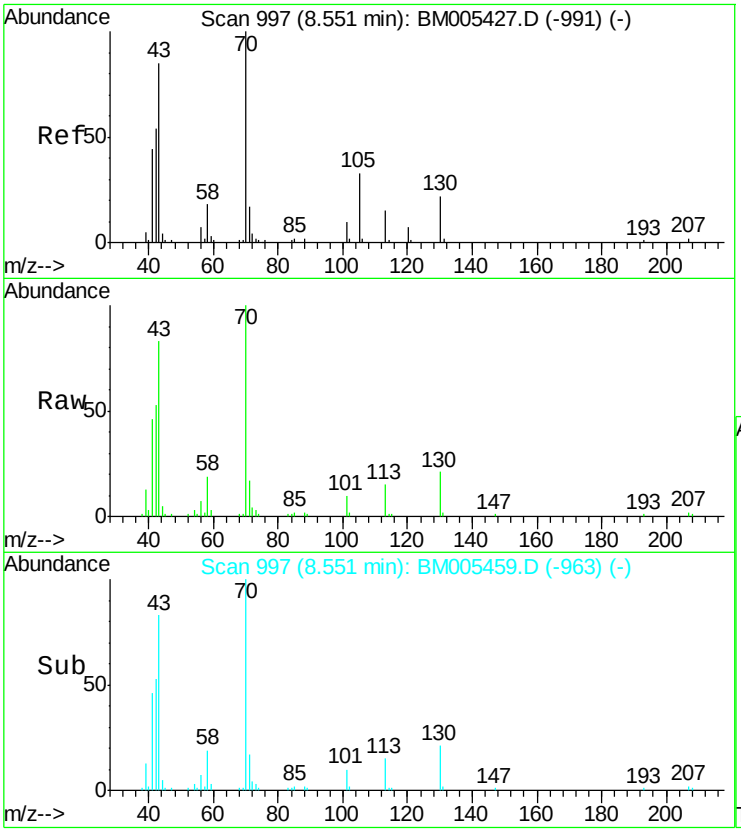


#14
Acetophenone
Concen: 1.19 ng/ul
RT: 8.58 min Scan# 1002
Delta R.T. 0.01 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:105 Resp: 8430

Ion	Ratio	Lower	Upper
105	100		
77	78.9	61.2	91.8
51	28.2	21.2	31.8



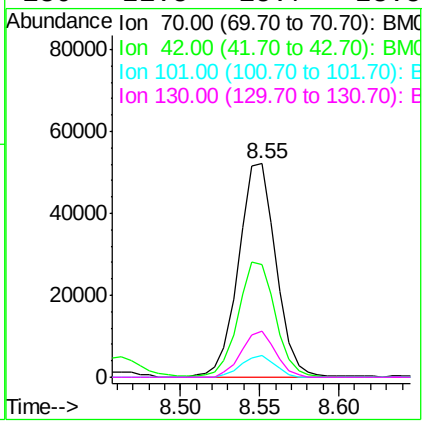


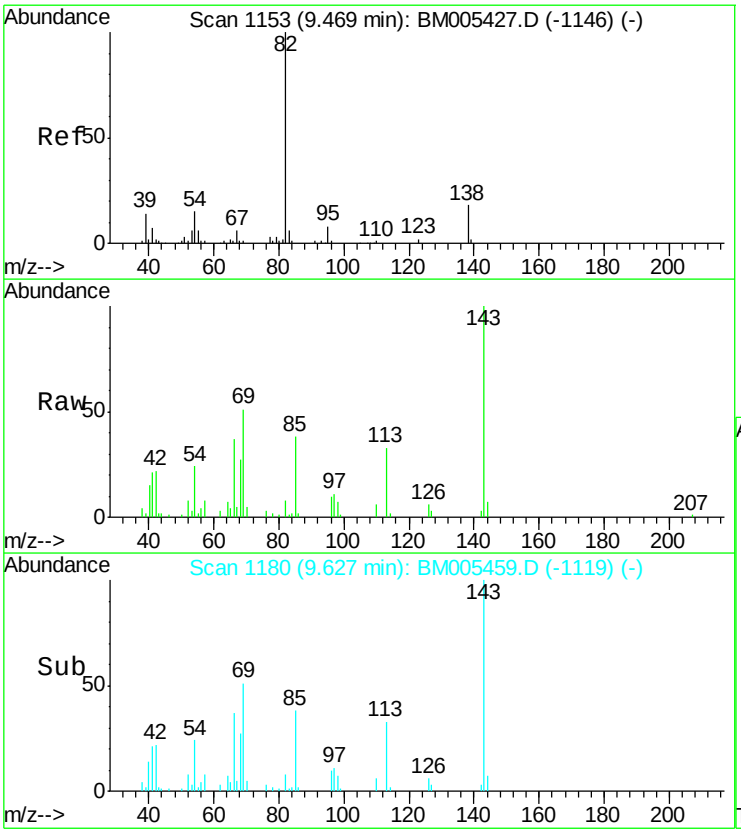
#15
N-Nitroso-di-n-propylamine
Concen: 23.28 ng/ul
RT: 8.55 min Scan# 997
Delta R.T. -0.00 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion: 70 Resp: 85877

Ion	Ratio	Lower	Upper
70	100		
42	53.0	42.8	64.2
101	9.9	7.8	11.6
130	21.5	15.7	23.5

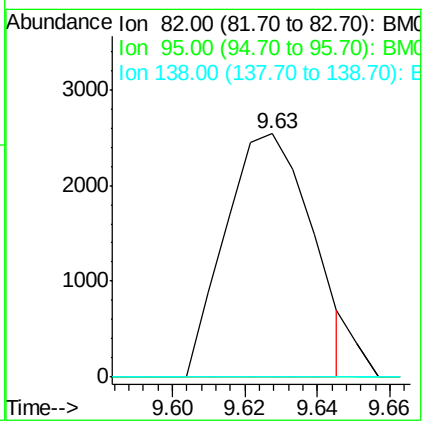


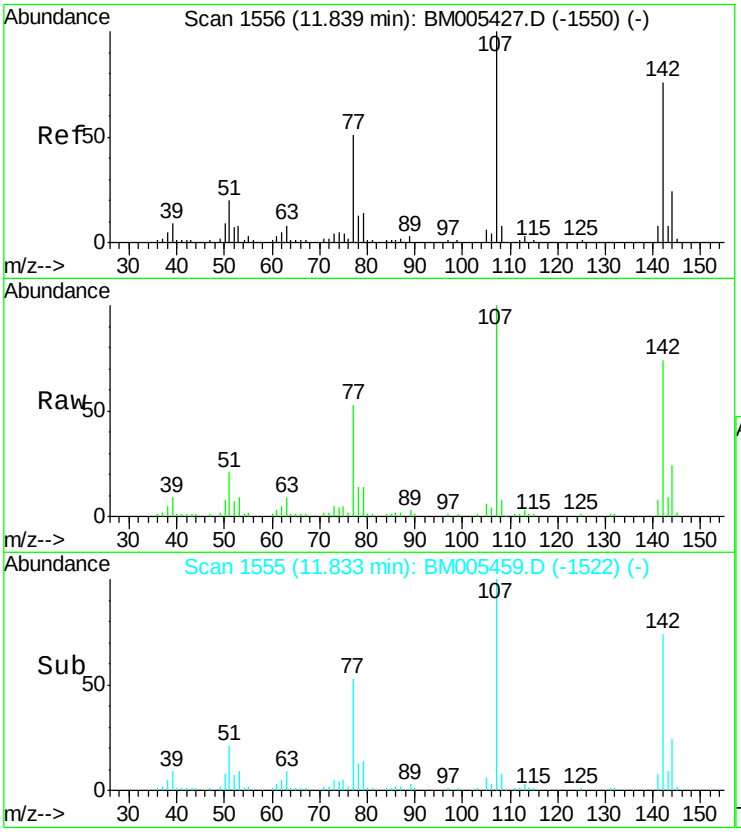


#21
Isophorone
Concen: 0.41 ng/ul
RT: 9.63 min Scan# 1180
Delta R.T. 0.16 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion: 82 Resp: 4208

Ion	Ratio	Lower	Upper
82	100		
95	0.0	5.4	8.0#
138	0.0	13.4	20.2#



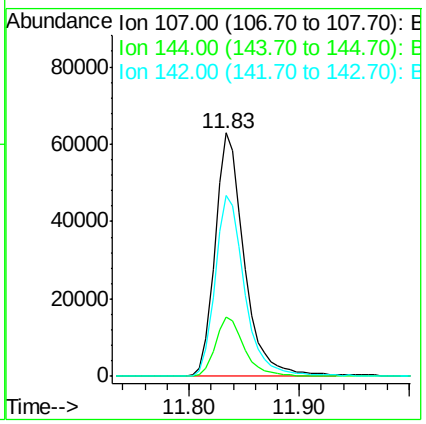


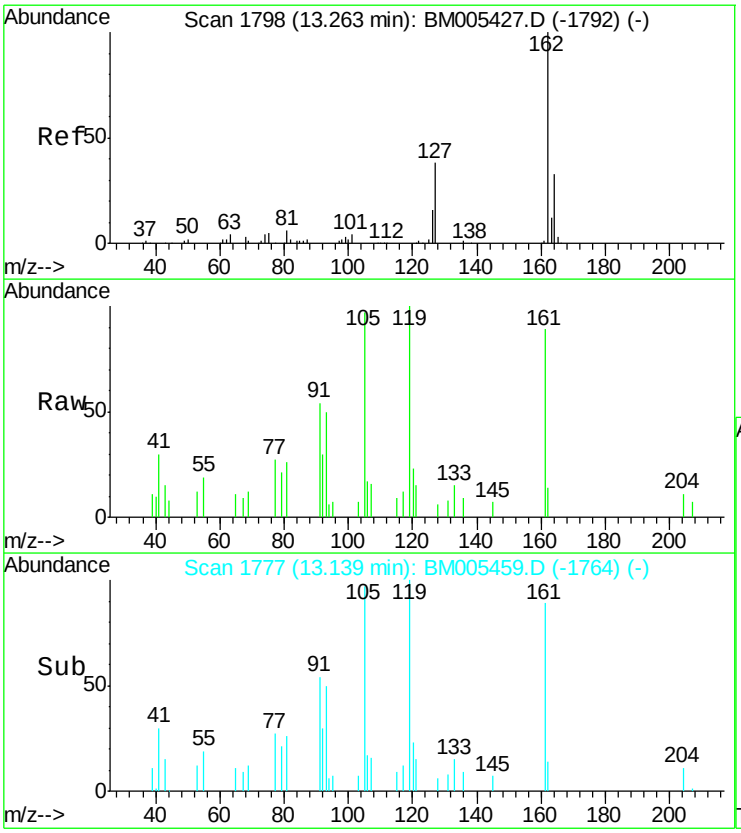
#33
4-Chloro-3-methylphenol
Concen: 21.10 ng/ul
RT: 11.83 min Scan# 1555
Delta R.T. -0.01 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:107 Resp: 115439

Ion	Ratio	Lower	Upper
107	100		
144	24.5	19.3	28.9
142	74.3	60.8	91.2

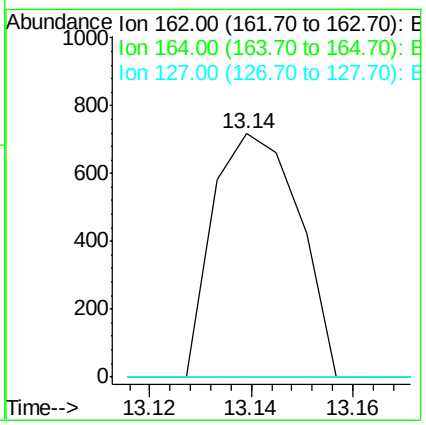


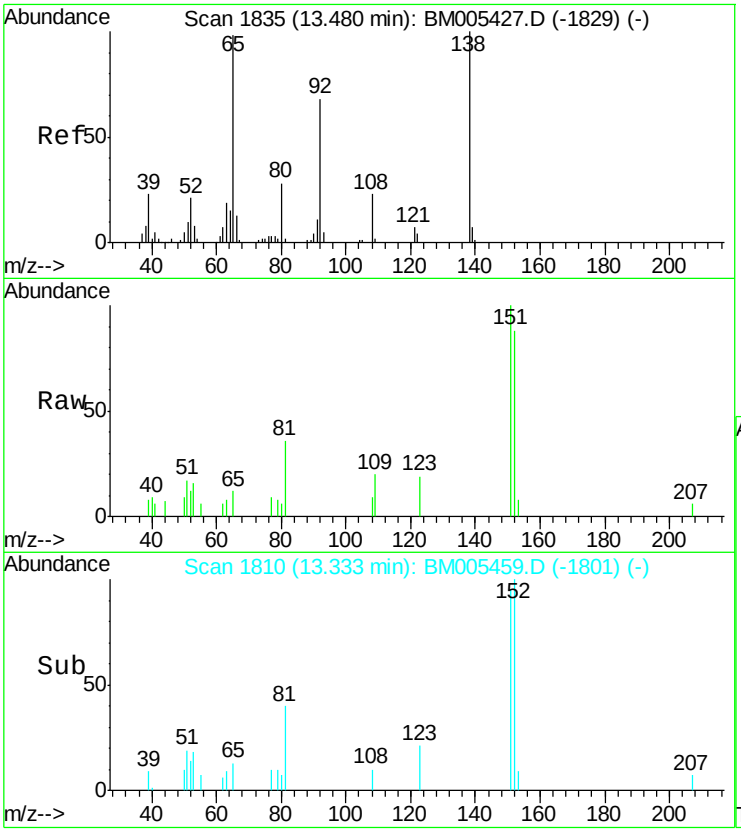


#41
2-Chloronaphthalene
Concen: 0.07 ng/ul
RT: 13.14 min Scan# 1777
Delta R.T. -0.12 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:162 Resp: 841

Ion	Ratio	Lower	Upper
162	100		
164	0.0	25.5	38.3#
127	0.0	31.9	47.9#



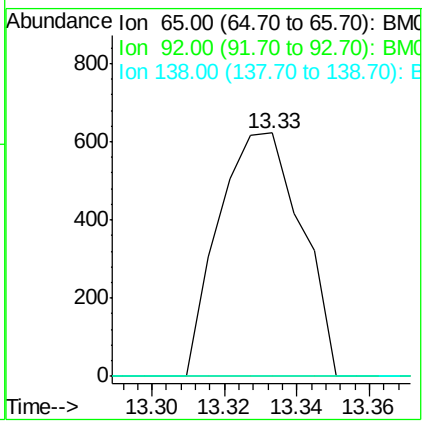


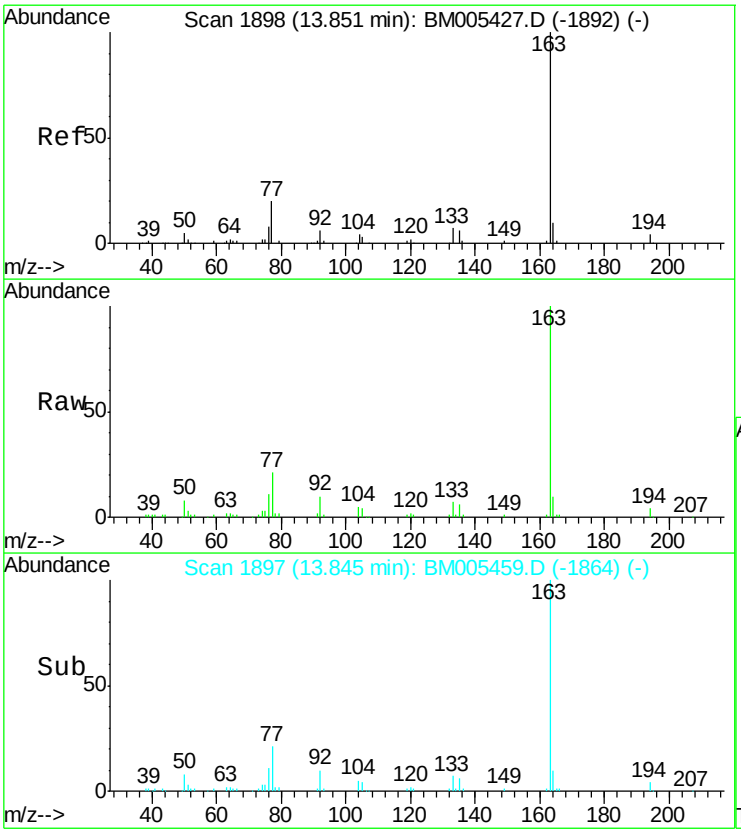
#42
2-Nitroaniline
Concen: 0.28 ng/ul
RT: 13.33 min Scan# 1810
Delta R.T. -0.15 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion: 65 Resp: 985

Ion	Ratio	Lower	Upper
65	100		
92	0.0	60.1	90.1#
138	0.0	84.0	126.0#

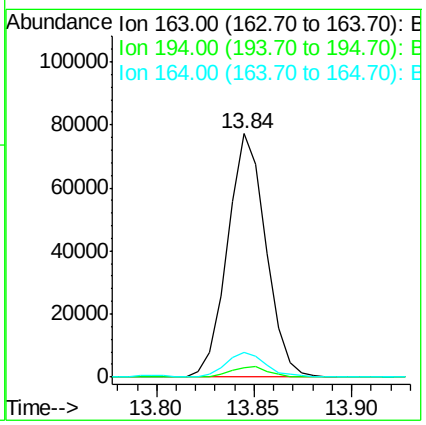


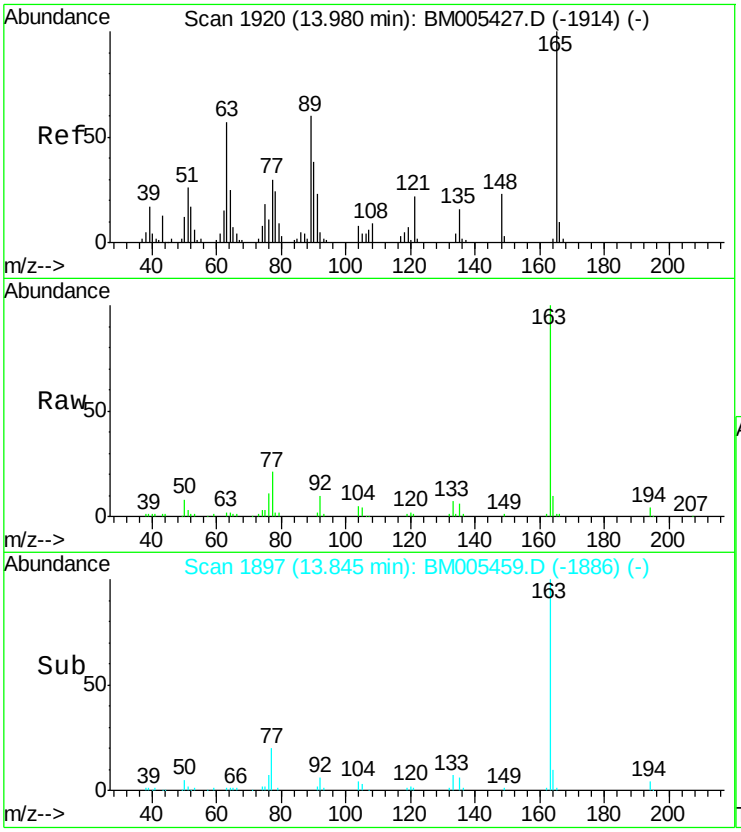


#44
Dimethylphthalate
Concen: 6.94 ng/ul
RT: 13.84 min Scan# 1897
Delta R.T. -0.01 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:163 Resp: 105097

Ion	Ratio	Lower	Upper
163	100		
194	3.8	3.4	5.0
164	10.4	7.9	11.9



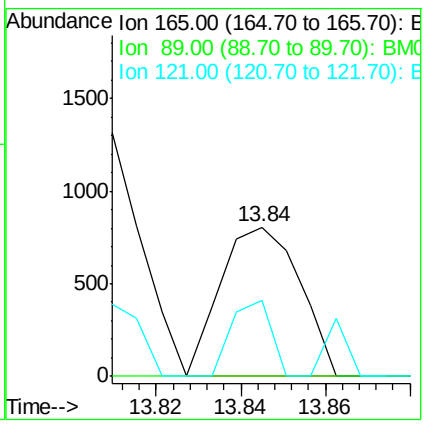


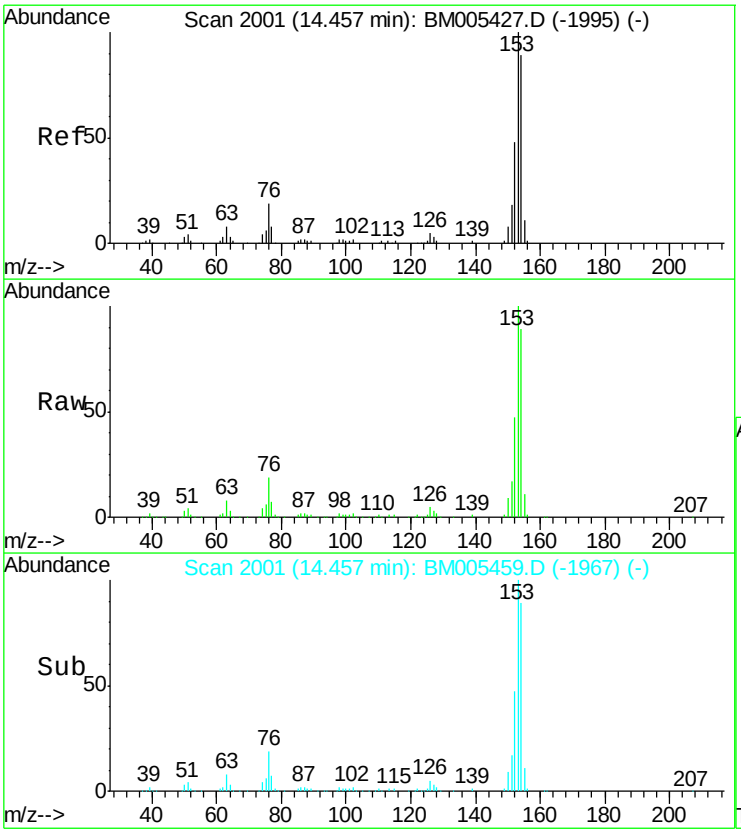
#45
2,6-Dinitrotoluene
Concen: 0.35 ng/ul
RT: 13.84 min Scan# 1897
Delta R.T. -0.14 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:165 Resp: 1055

Ion	Ratio	Lower	Upper
165	100		
89	0.0	52.2	78.4#
121	50.7	21.0	31.4#

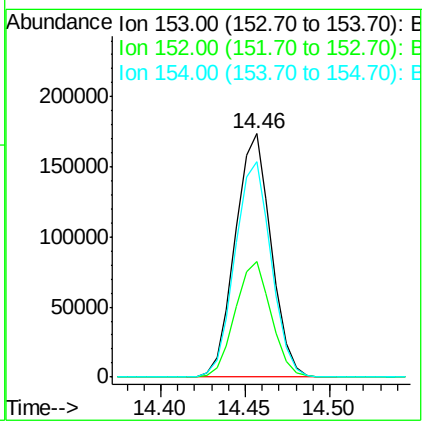


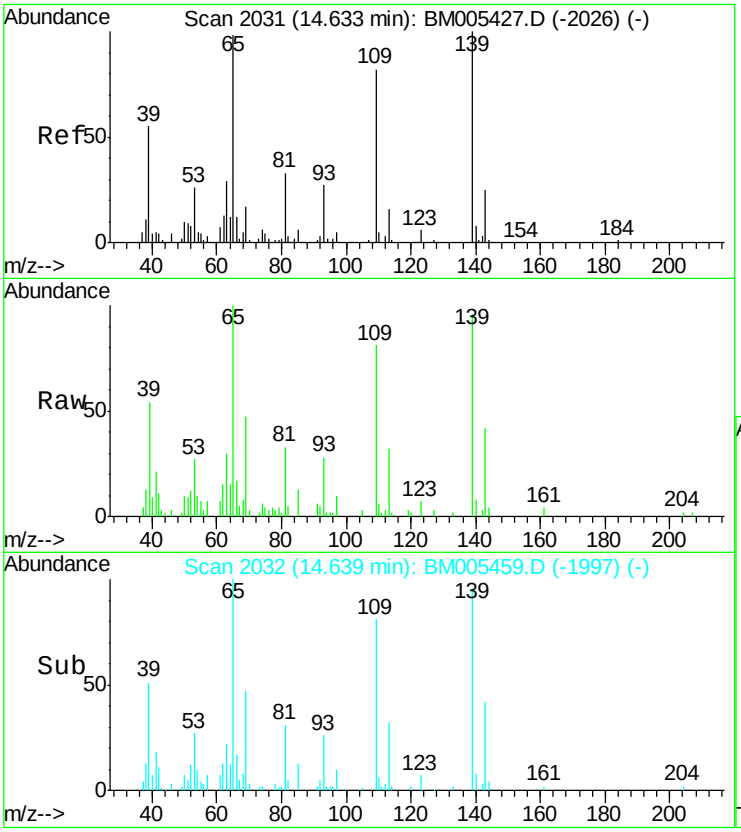


#49
Acenaphthene
Concen: 20.75 ng/ul
RT: 14.46 min Scan# 2001
Delta R.T. -0.00 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:153 Resp: 257384

Ion	Ratio	Lower	Upper
153	100		
152	47.3	38.9	58.3
154	88.7	70.3	105.5



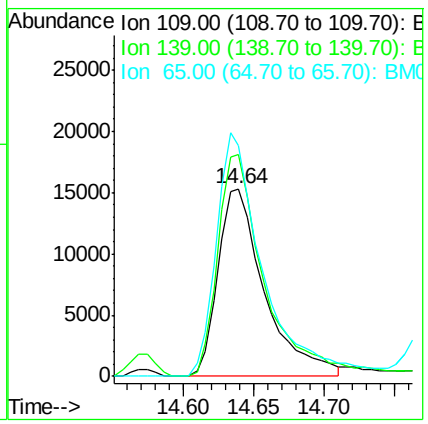


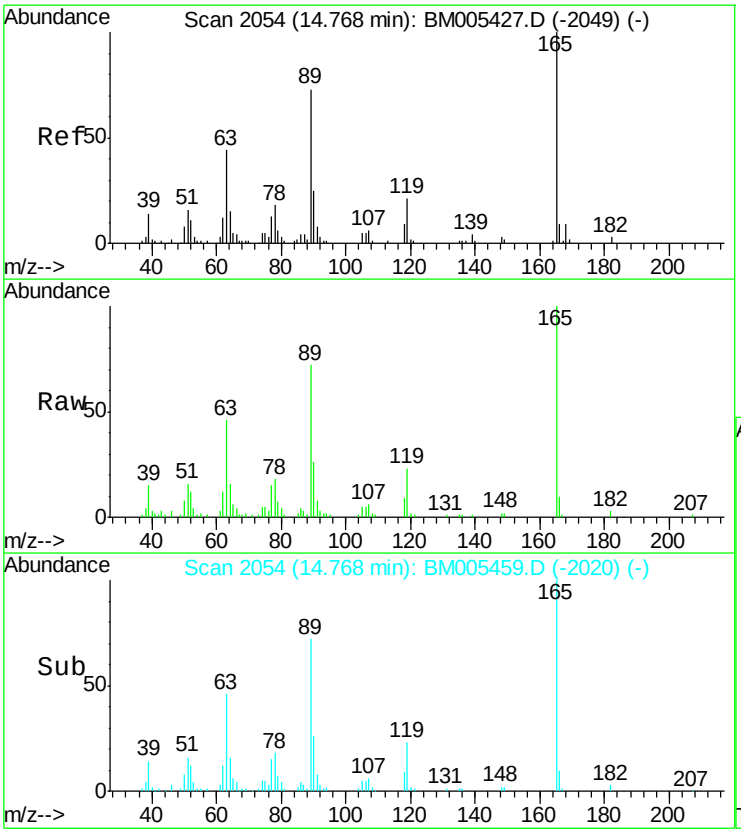
#52
4-Nitrophenol
Concen: 15.32 ng/ul
RT: 14.64 min Scan# 2032
Delta R.T. 0.01 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:109 Resp: 35270

Ion	Ratio	Lower	Upper
109	100		
139	118.3	103.6	155.4
65	123.0	104.7	157.1

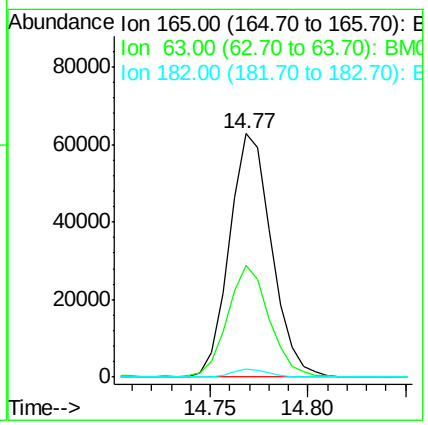


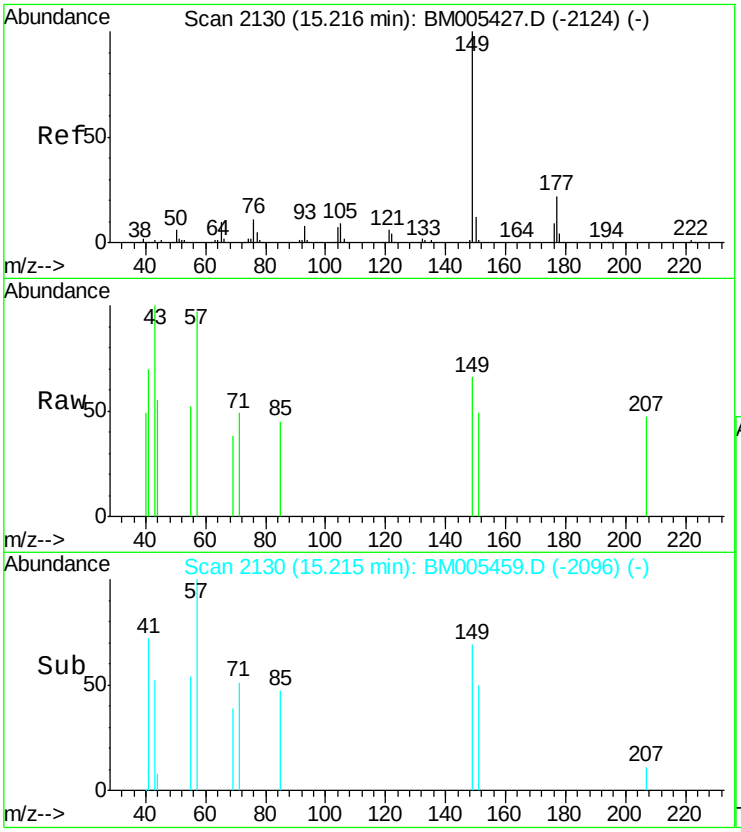


#54
2,4-Dinitrotoluene
Concen: 21.13 ng/ul
RT: 14.77 min Scan# 2054
Delta R.T. -0.00 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:165 Resp: 94155

Ion	Ratio	Lower	Upper
165	100		
63	46.1	36.2	54.4
182	3.1	2.5	3.7



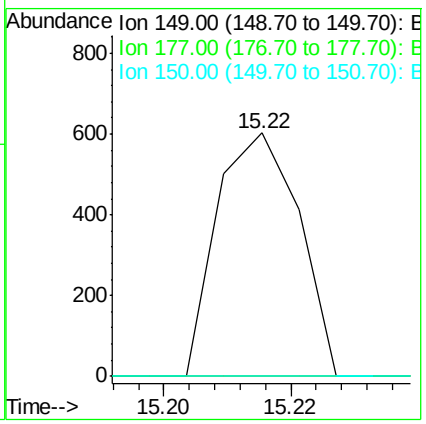


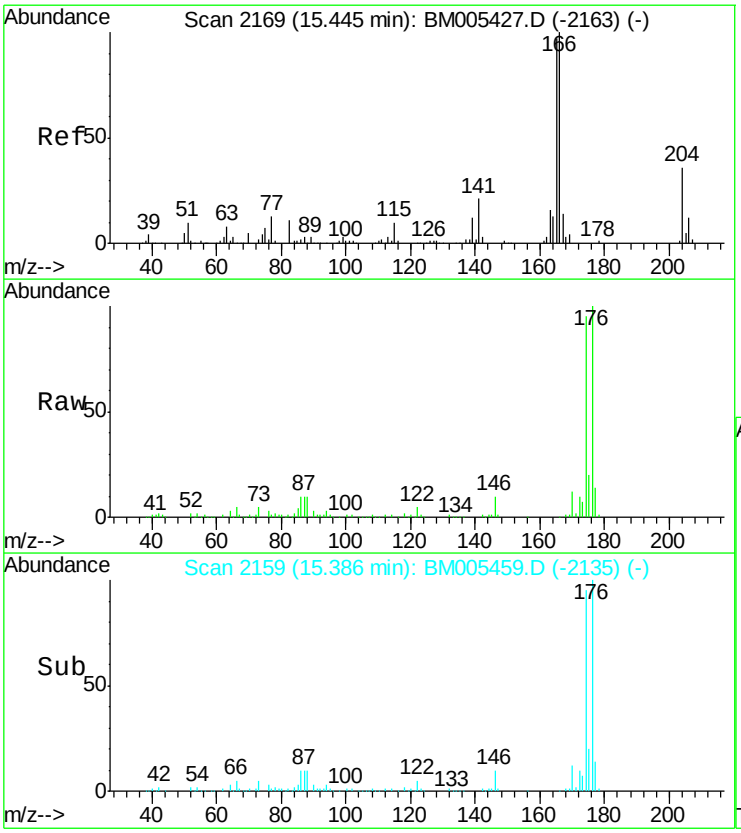
#56
Diethylphthalate
Concen: 0.03 ng/ul
RT: 15.22 min Scan# 2130
Delta R.T. -0.00 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:149 Resp: 535

Ion	Ratio	Lower	Upper
149	100		
177	0.0	17.6	26.4#
150	0.0	9.8	14.8#

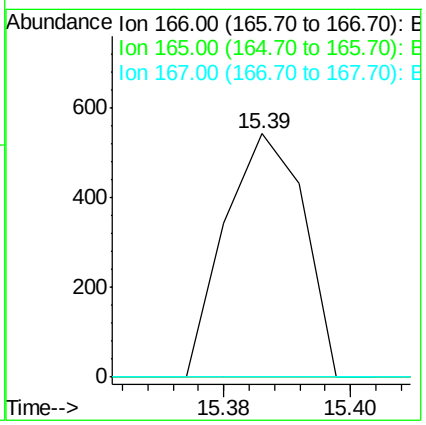


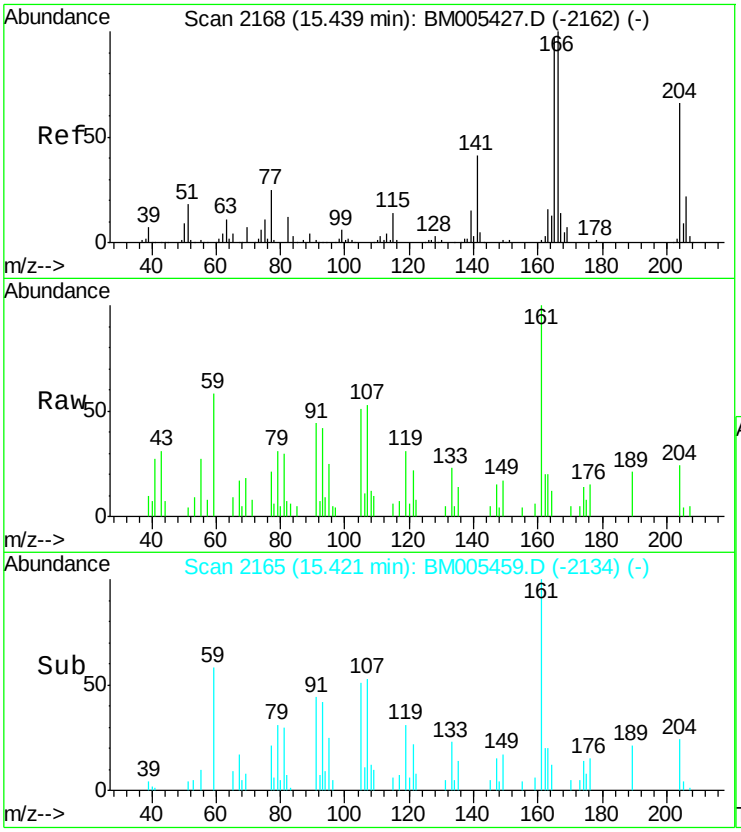


#58
Fluorene
Concen: 0.03 ng/ul
RT: 15.39 min Scan# 2159
Delta R.T. -0.06 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:166 Resp: 466

Ion	Ratio	Lower	Upper
166	100		
165	0.0	77.9	116.9#
167	0.0	10.6	16.0#



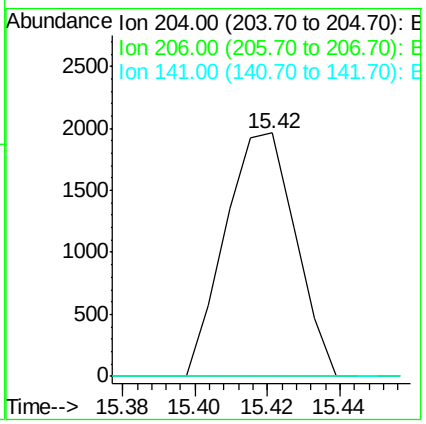


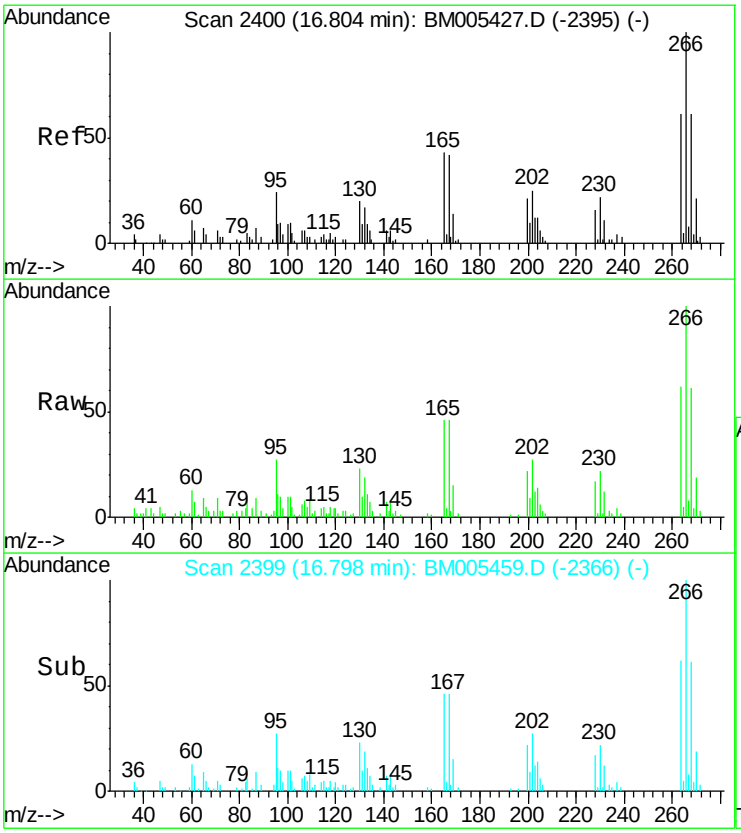
#59
4-Chlorophenyl-phenylether
Concen: 0.38 ng/ul
RT: 15.42 min Scan# 2165
Delta R.T. -0.02 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:204 Resp: 2641

Ion	Ratio	Lower	Upper
204	100		
206	0.0	25.8	38.6#
141	0.0	48.9	73.3#

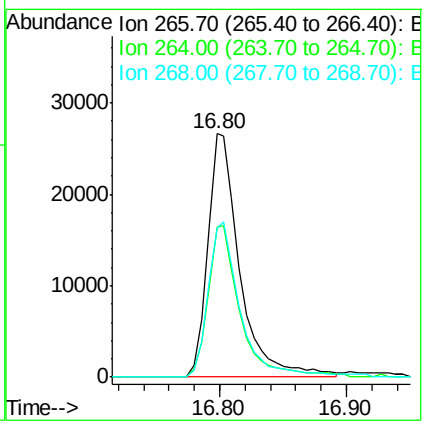


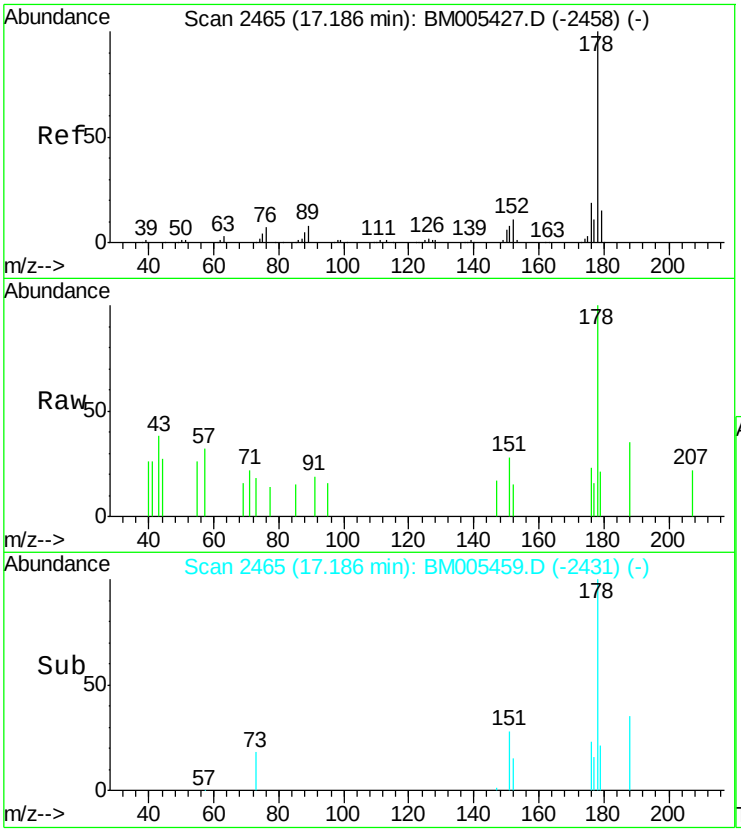


#68
Pentachlorophenol
Concen: 17.69 ng/ul
RT: 16.80 min Scan# 2399
Delta R.T. -0.01 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:266 Resp: 46960

Ion	Ratio	Lower	Upper
266	100		
264	61.7	52.0	78.0
268	61.4	53.0	79.6



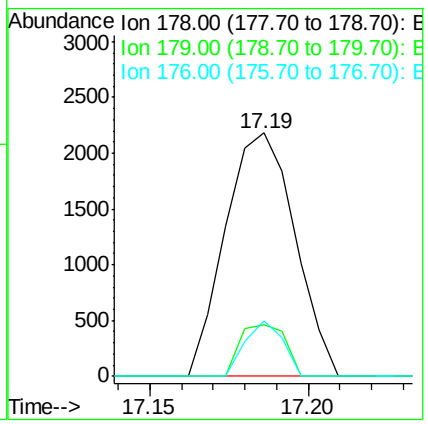


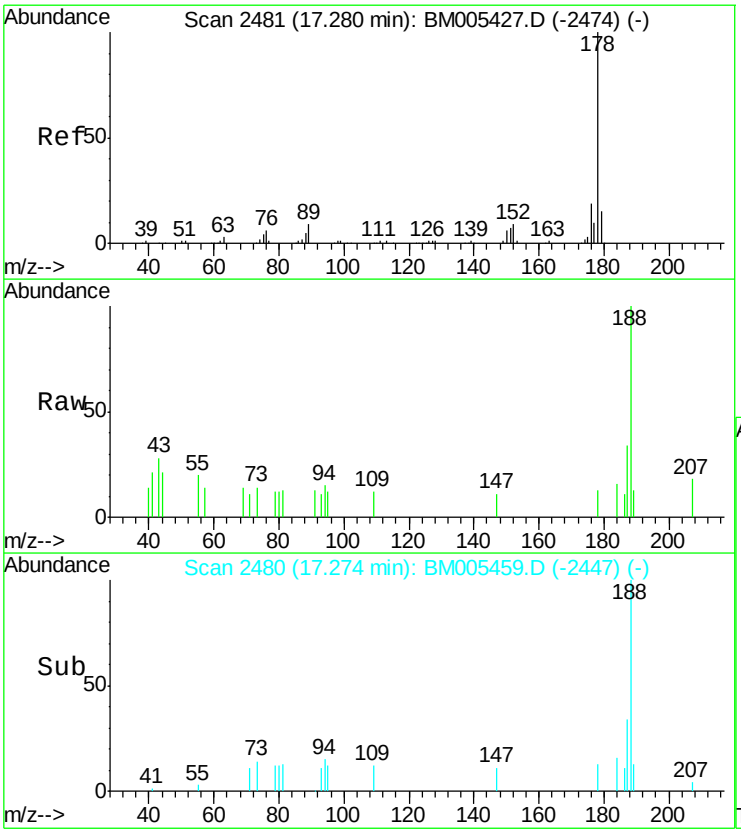
#69
Phenanthrene
Concen: 0.14 ng/ul
RT: 17.19 min Scan# 2465
Delta R.T. -0.00 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:178 Resp: 3313

Ion	Ratio	Lower	Upper
178	100		
179	21.3	12.3	18.5#
176	23.0	15.2	22.8#

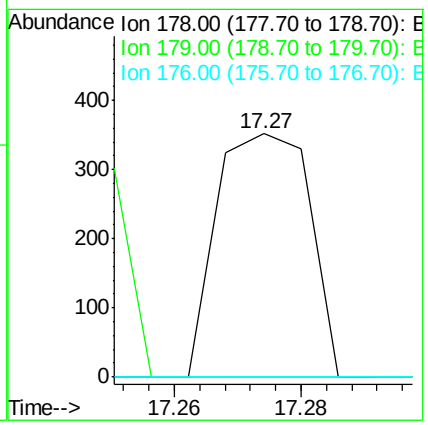


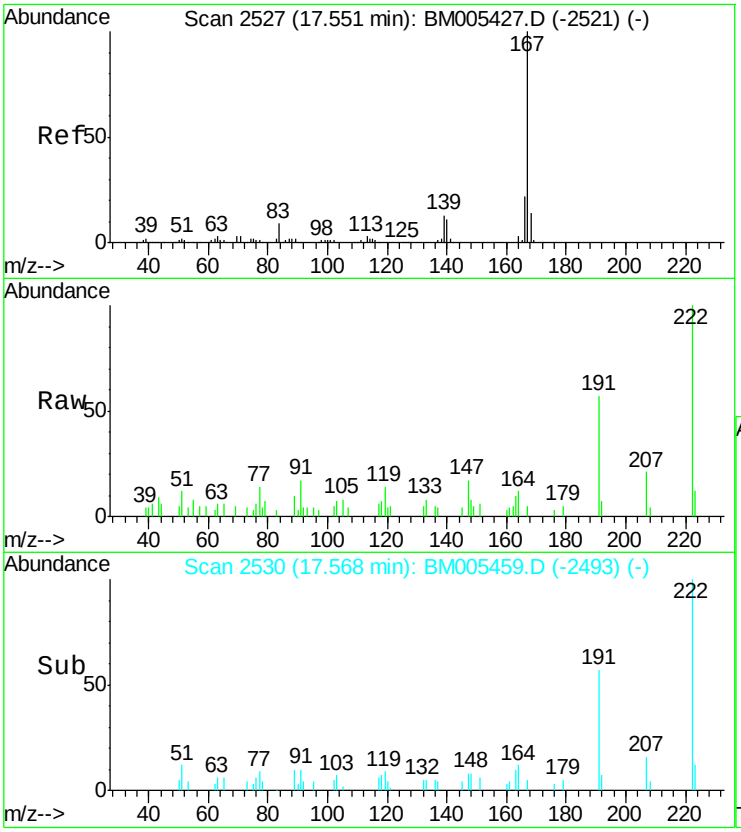


#71
Anthracene
Concen: 0.02 ng/ul
RT: 17.27 min Scan# 2480
Delta R.T. -0.01 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:178 Resp: 355

Ion	Ratio	Lower	Upper
178	100		
179	0.0	12.4	18.6#
176	0.0	15.1	22.7#



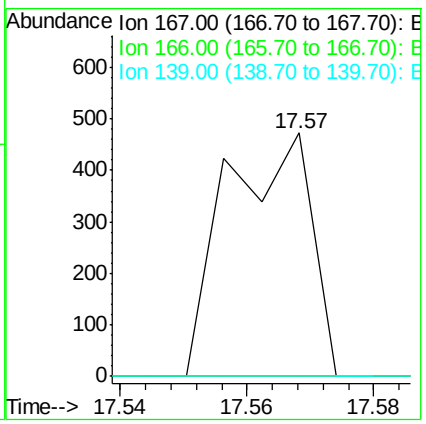


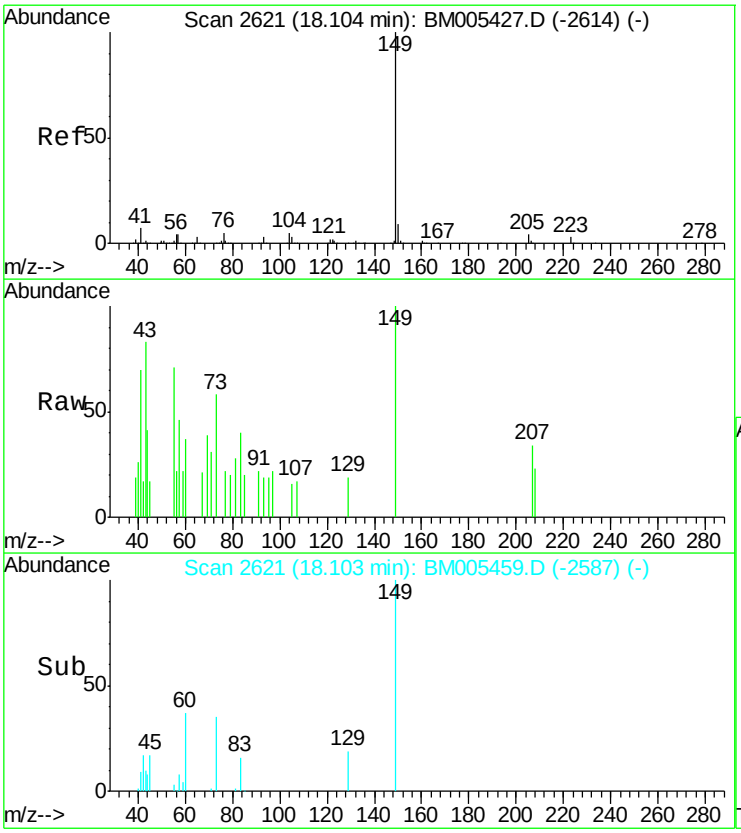
#72
Carbazole
Concen: 0.02 ng/ul
RT: 17.57 min Scan# 2530
Delta R.T. 0.02 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:167 Resp: 436

Ion	Ratio	Lower	Upper
167	100		
166	0.0	17.1	25.7#
139	0.0	10.2	15.2#

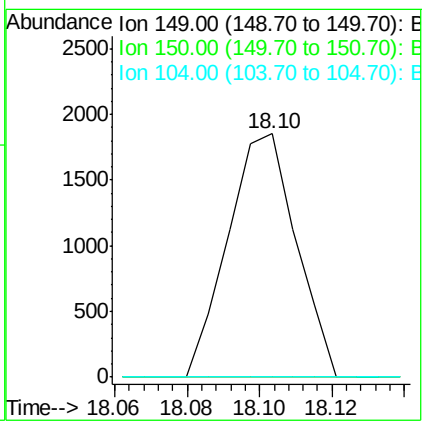


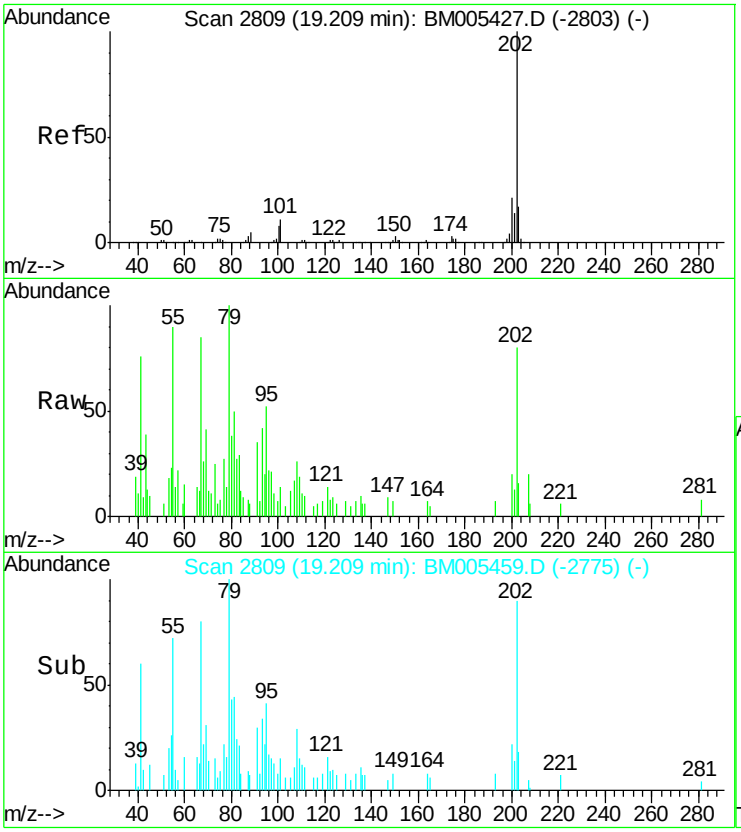


#73
Di-n-butylphthalate
Concen: 0.10 ng/ul
RT: 18.10 min Scan# 2621
Delta R.T. -0.00 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:149 Resp: 2443

Ion	Ratio	Lower	Upper
149	100		
150	0.0	7.3	10.9#
104	0.0	4.1	6.1#



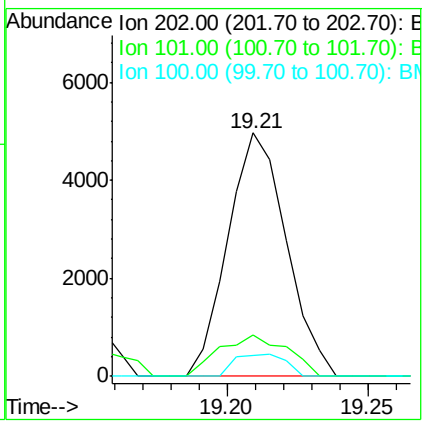


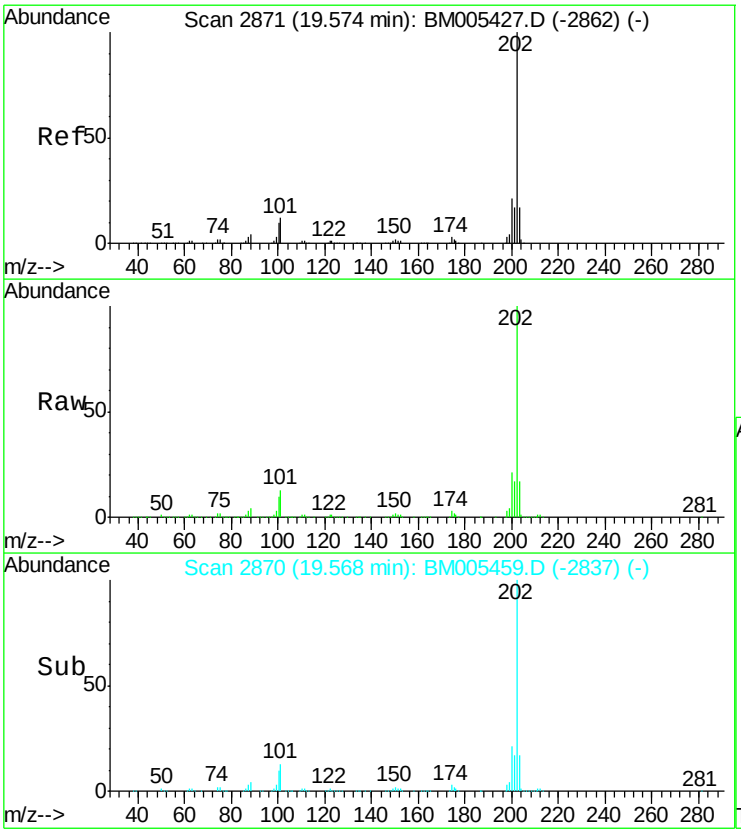
#74
Fluoranthene
Concen: 0.28 ng/ul
RT: 19.21 min Scan# 2809
Delta R.T. -0.00 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:202 Resp: 7125

Ion	Ratio	Lower	Upper
202	100		
101	16.9	9.2	13.8#
100	8.7	7.1	10.7

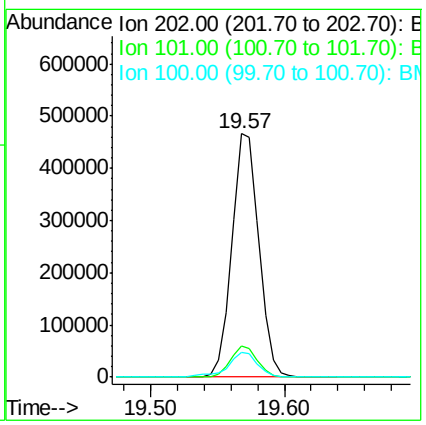


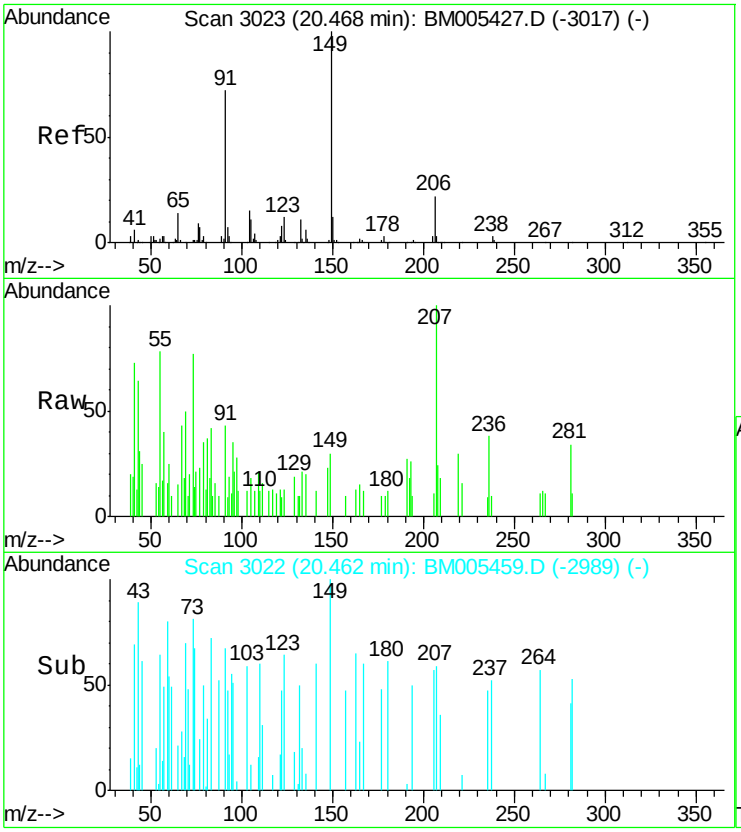


#77
Pyrene
Concen: 21.82 ng/ul
RT: 19.57 min Scan# 2870
Delta R.T. -0.01 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:202 Resp: 655834

Ion	Ratio	Lower	Upper
202	100		
101	12.7	10.8	16.2
100	10.3	8.4	12.6



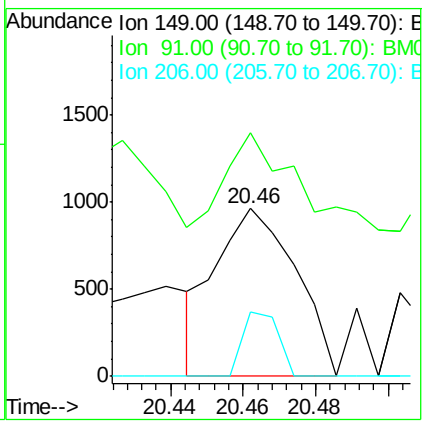


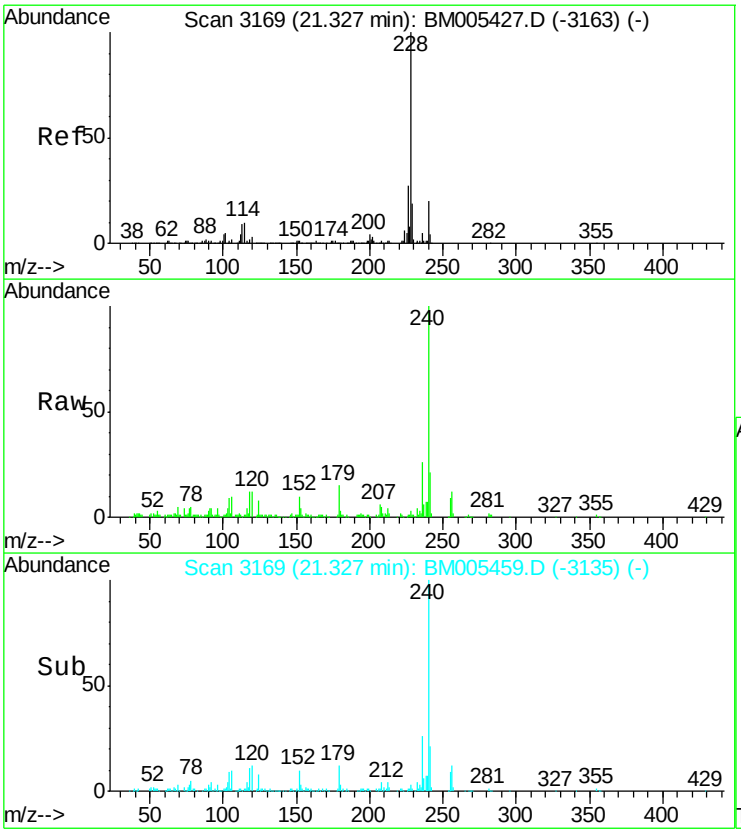
#78
Butylbenzylphthalate
Concen: 0.12 ng/ul
RT: 20.46 min Scan# 3022
Delta R.T. -0.01 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:149 Resp: 1475

Ion	Ratio	Lower	Upper
149	100		
91	145.0	58.4	87.6#
206	38.7	17.3	25.9#

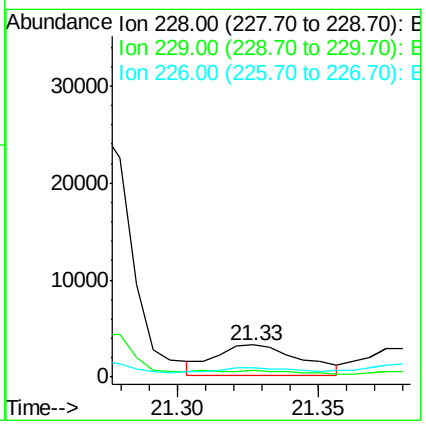


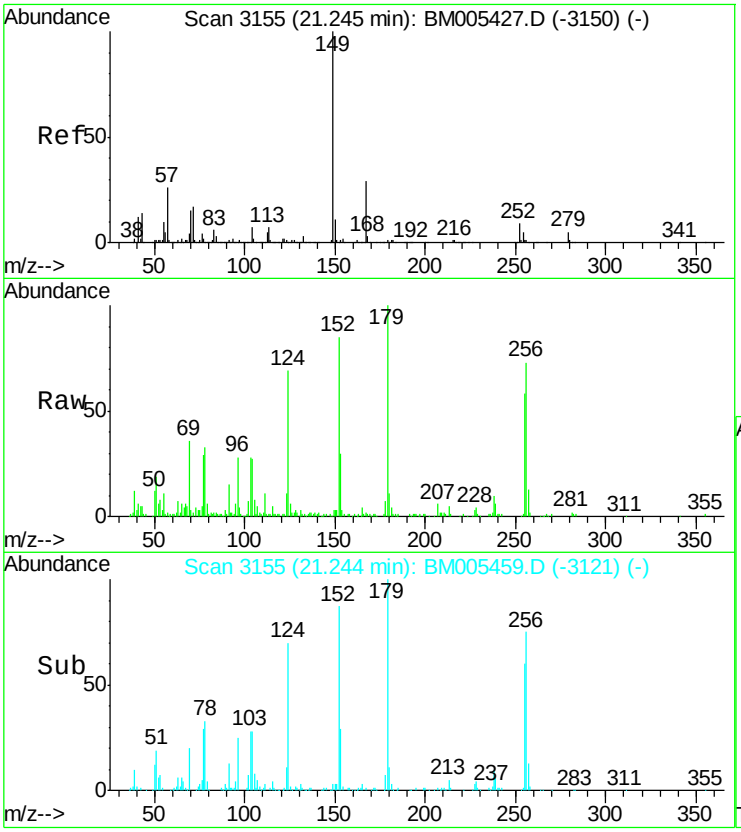


#80
Benzo(a)anthracene
Concen: 0.23 ng/ul
RT: 21.33 min Scan# 3169
Delta R.T. -0.00 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:228 Resp: 6742

Ion	Ratio	Lower	Upper
228	100		
229	22.5	15.5	23.3
226	30.7	21.8	32.8



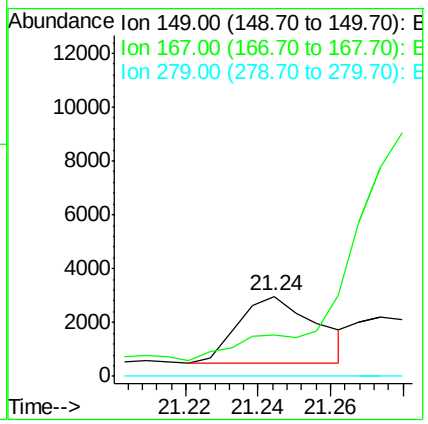


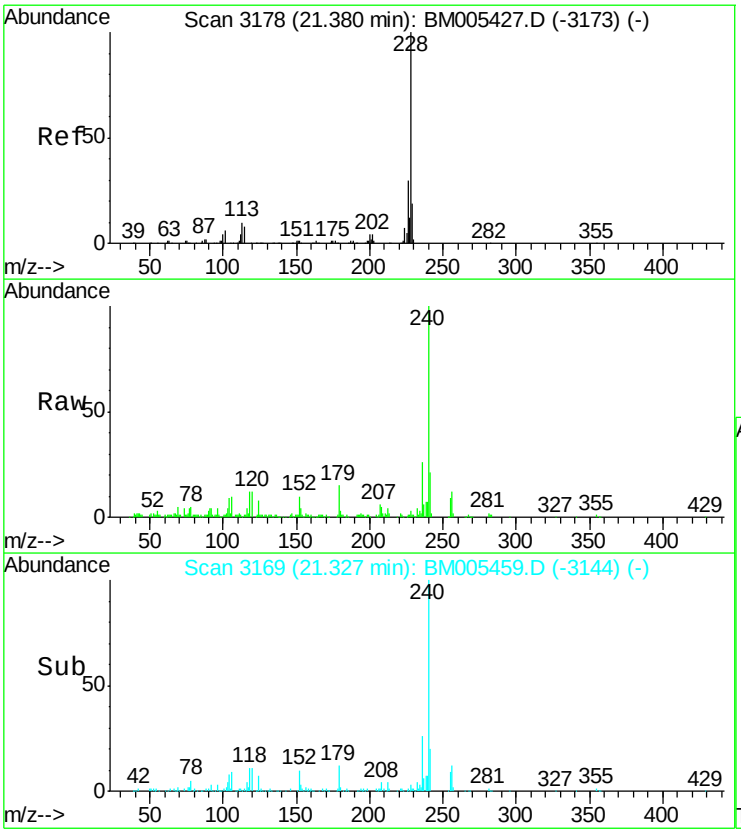
#81
Bis(2-ethylhexyl)phthalate
Concen: 0.21 ng/ul
RT: 21.24 min Scan# 3155
Delta R.T. -0.00 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:149 Resp: 3727

Ion	Ratio	Lower	Upper
149	100		
167	51.0	21.9	32.9#
279	0.0	3.0	4.4#

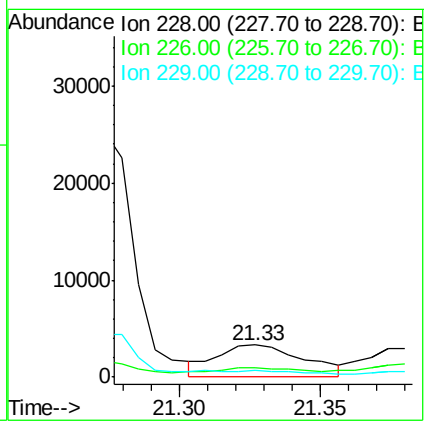


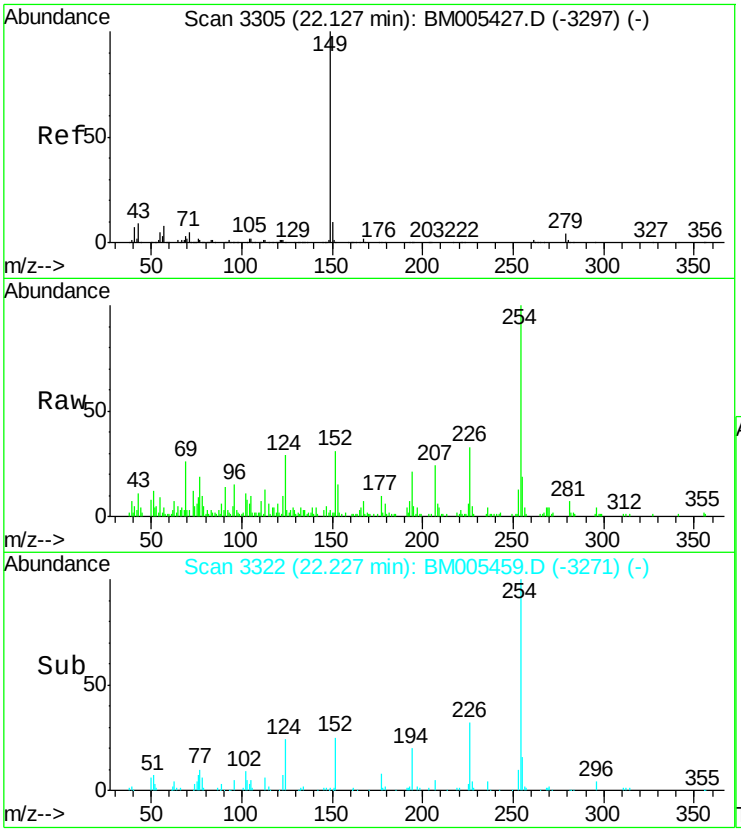


#82
Chrysene
Concen: 0.26 ng/ul
RT: 21.33 min Scan# 3169
Delta R.T. -0.05 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:228 Resp: 7217

Ion	Ratio	Lower	Upper
228	100		
226	30.7	23.6	35.4
229	22.5	15.4	23.0



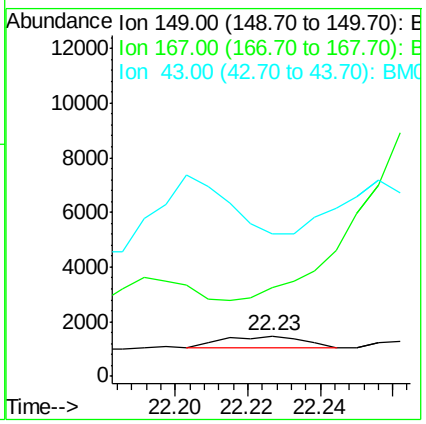


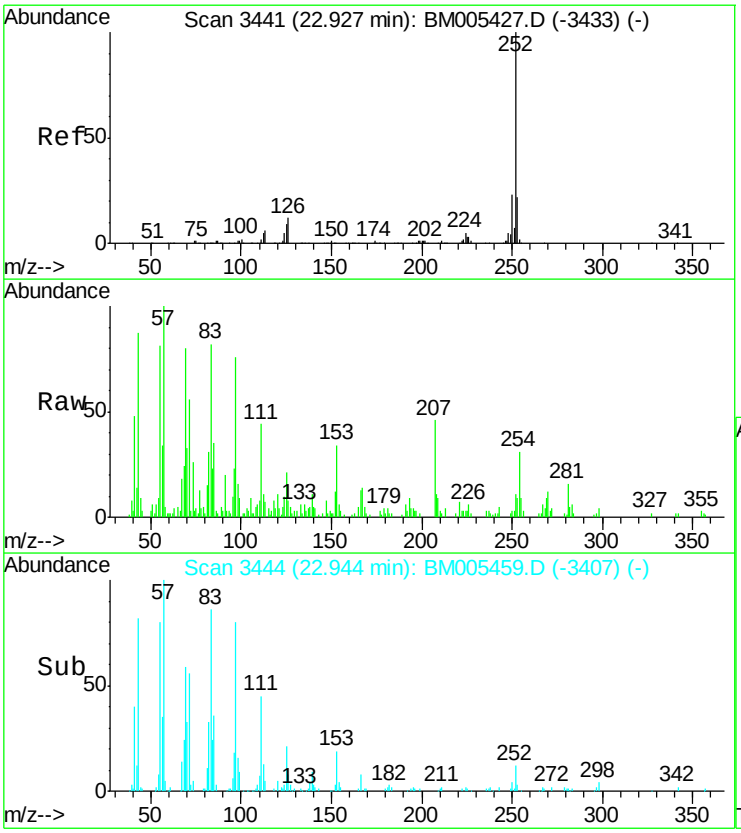
#84
Di-n-octyl phthalate
Concen: 0.03 ng/ul
RT: 22.23 min Scan# 3322
Delta R.T. 0.10 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:149 Resp: 665

Ion	Ratio	Lower	Upper
149	100		
167	219.0	1.3	1.9#
43	354.3	7.4	11.0#

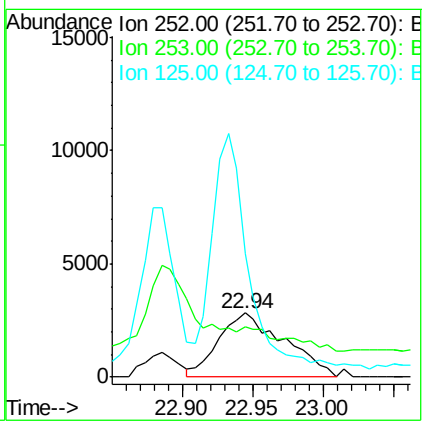


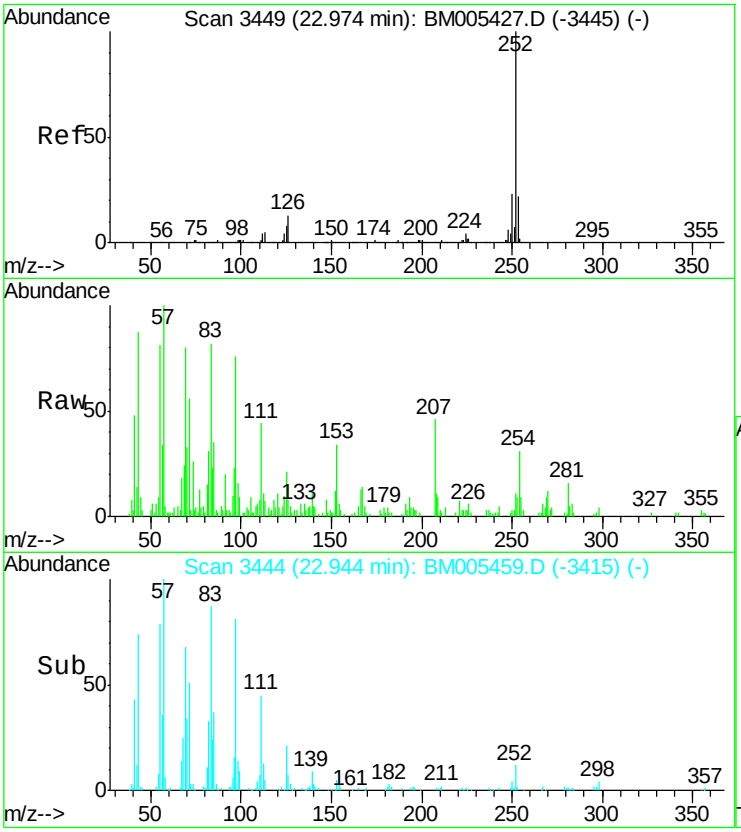


#85
Benzo(b)fluoranthene
Concen: 0.36 ng/ul
RT: 22.94 min Scan# 3444
Delta R.T. 0.02 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:252 Resp: 9192

Ion	Ratio	Lower	Upper
252	100		
253	78.6	17.4	26.2#
125	192.0	8.4	12.6#



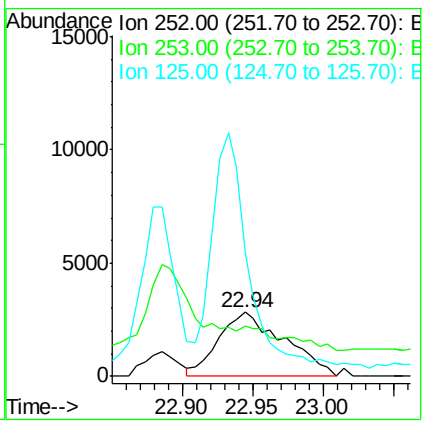


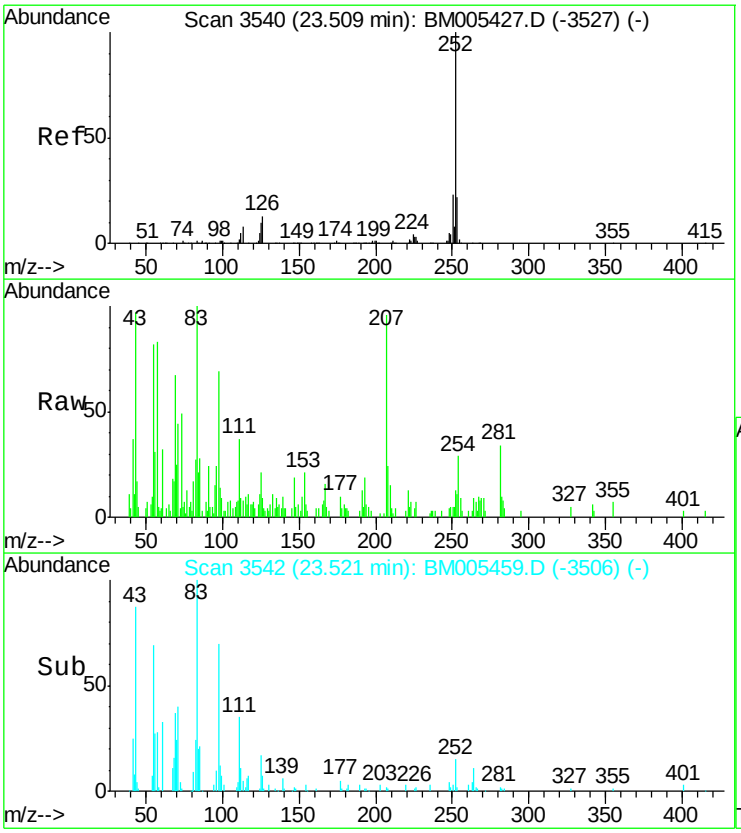
#86
Benzo(k)fluoranthene
Concen: 0.38 ng/ul
RT: 22.94 min Scan# 3444
Delta R.T. -0.03 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:252 Resp: 9192

Ion	Ratio	Lower	Upper
252	100		
253	78.6	17.3	25.9#
125	192.0	8.0	12.0#

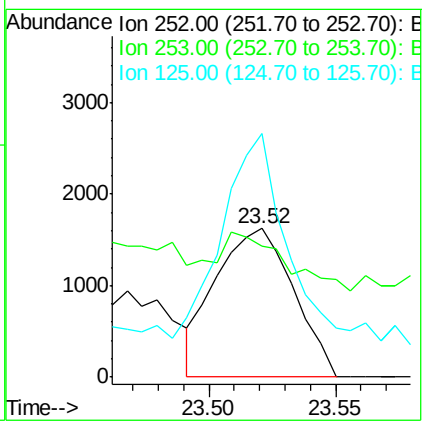


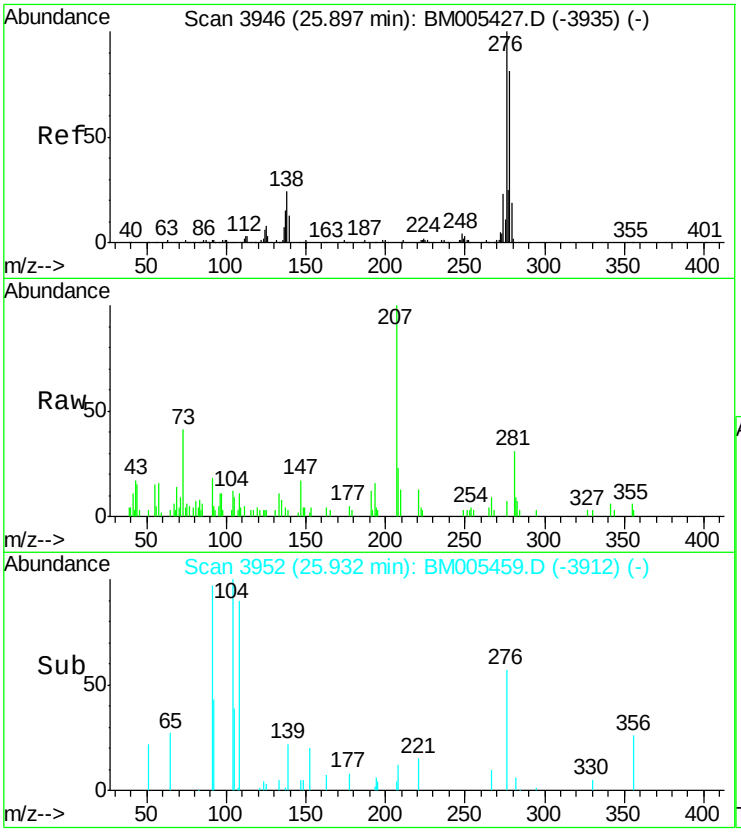


#88
Benzo(a)pyrene
Concen: 0.14 ng/ul
RT: 23.52 min Scan# 3542
Delta R.T. 0.01 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:252 Resp: 3464

Ion	Ratio	Lower	Upper
252	100		
253	88.1	17.5	26.3#
125	164.1	8.7	13.1#



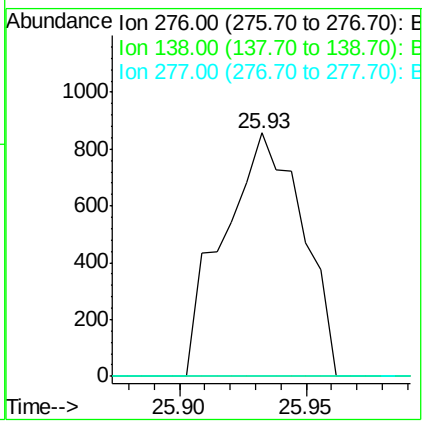


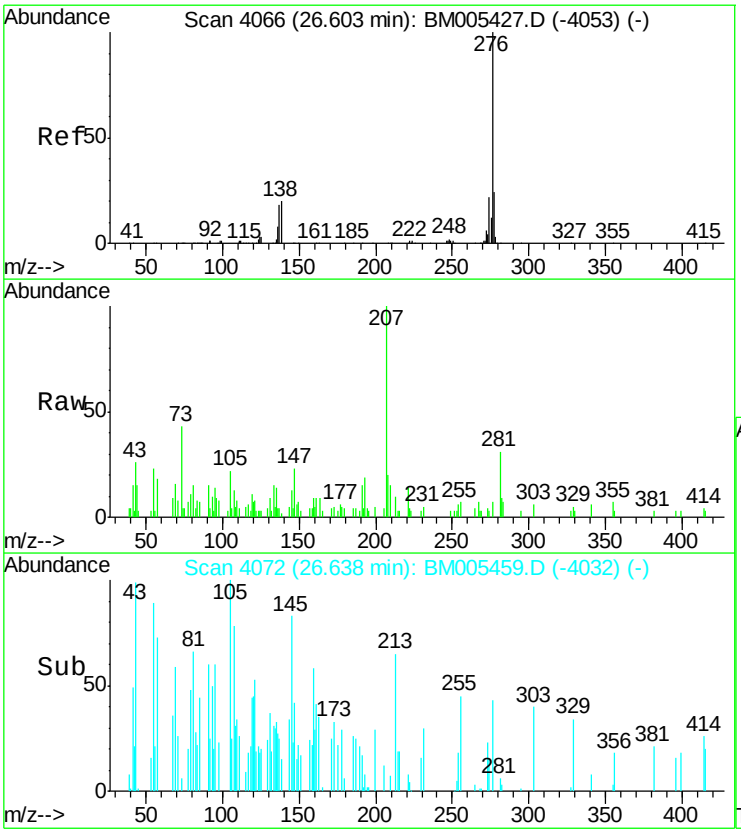
#89
Indeno(1,2,3-cd)pyrene
Concen: 0.07 ng/ul
RT: 25.93 min Scan# 3952
Delta R.T. 0.04 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Instrument :
BNA_M
ClientSampleId :
H4061MS

Tgt Ion:276 Resp: 1852

Ion	Ratio	Lower	Upper
276	100		
138	0.0	21.0	31.6#
277	0.0	19.9	29.9#





#91
Benzo(g,h,i)perylene
Concen: 0.07 ng/ul
RT: 26.64 min Scan# 4072
Delta R.T. 0.04 min
Lab File: BM005459.D
Acq: 14 May 2016 10:36

Tgt Ion:276 Resp: 1542

Ion	Ratio	Lower	Upper
276	100		
138	35.5	18.2	27.4#
277	0.0	19.4	29.2#