

Data Path : Z:\HPCHEM1\BNA E\DATA\BE080416\
 Data File : BE092211.D
 Acq On : 5 Aug 2016 9:34
 Operator : UM/SJ
 Sample : H4288-23MSD
 Misc :
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :
 GW-64-9.0-15.0MSD

Manual Integrations
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Quant Time: Aug 05 17:52:03 2016
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-PAH-BE080216.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Tue Aug 02 16:59:37 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.17	152	11232	5.00	ng	0.00
6) Naphthalene-d8	10.98	136	50636	5.00	ng	-0.02
10) Acenaphthene-d10	14.83	164	28266	5.00	ng	-0.02
16) Phenanthrene-d10	17.56	188	64720	5.00	ng	-0.02
22) Chrysene-d12	21.73	240	77584	5.00	ng	-0.02
28) Perylene-d12	24.14	264	81007	5.00	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.69	112	8393	2.91	ng	0.00
5) Phenol-d6	7.35	99	7091	1.85	ng	0.00
7) Nitrobenzene-d5	9.34	82	11450	2.87	ng	-0.01
11) 2,4,6-Tribromophenol	16.32	330	6438	7.01	ng	-0.01
12) 2-Fluorobiphenyl	13.46	172	24900	2.78	ng	0.00
24) Terphenyl-d14	20.19	244	38087	3.42	ng	-0.02
Target Compounds						Qvalue
2) 1,4-Dioxane	3.44	88	2612	1.71	ng	# 30
3) n-Nitrosodimethylamine	3.78	42	3191	1.57	ng	94
8) Naphthalene	11.03	128	31125	2.86	ng	95
9) 2-Methylnaphthalene	12.64	142	21072	2.93	ng	87
13) Acenaphthylene	14.54	152	139080	2.79	ng	98
14) Acenaphthene	14.90	154	21307	2.68	ng	# 90
15) Fluorene	15.88	166	28588	2.84	ng	99
17) Hexachlorobenzene	16.89	284	7351	2.32	ng	# 38
18) Pentachlorophenol	17.24	266	7094	6.01	ng	# 83
19) Phenanthrene	17.60	178	54872	3.10	ng	99
20) Anthracene	17.70	178	49267	2.86	ng	98
21) Fluoranthene	19.63	202	230978	2.92	ng	96
23) Pyrene	19.99	202	253879	3.13	ng	97
25) Benzo(a)anthracene	21.72	228	272784	3.20	ng	98
26) Chrysene	21.77	228	238379m	2.79	ng	
27) Indeno(1,2,3-cd)pyrene	26.63	276	291974	3.15	ng	99
29) Benzo(b)fluoranthene	23.40	252	69159	3.12	ng	96
30) Benzo(k)fluoranthene	23.45	252	63430	2.98	ng	97
31) Benzo(a)pyrene	24.02	252	61030	3.00	ng	95
32) Dibenzo(a,h)anthracene	26.65	278	61460	3.16	ng	95
33) Benzo(g,h,i)perylene	27.42	276	249169	3.00	ng	# 93

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

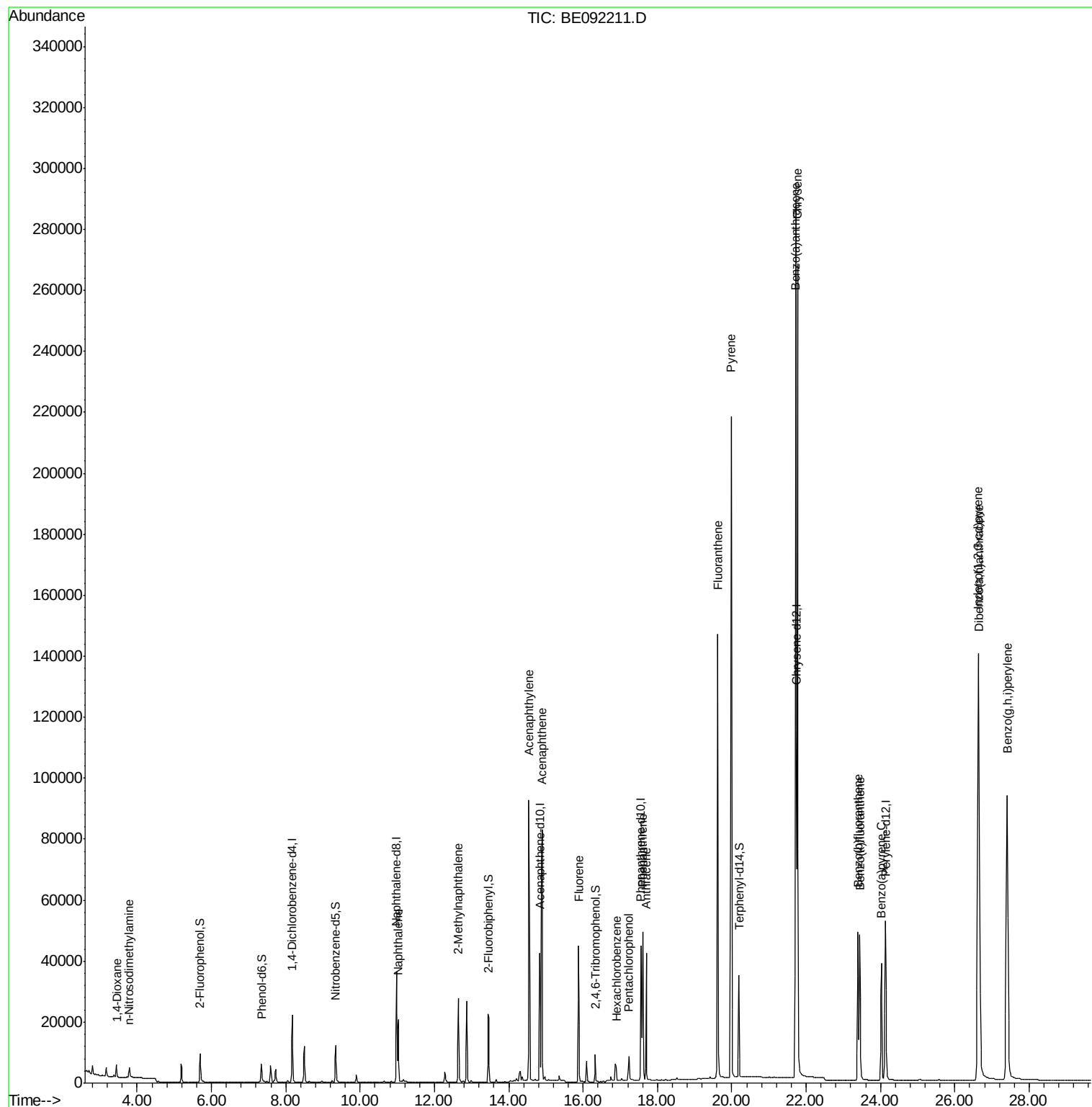
Data Path : Z:\HPCHEM1\BNA E\DATA\BE080416\
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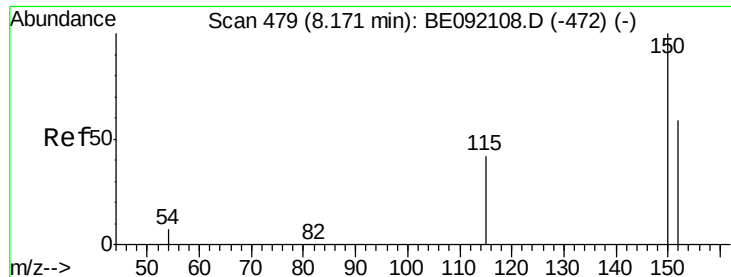
Instrument :
BNA_E
ClientSampleId :
GW-64-9.0-15.0MSD

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Quant Time: Aug 05 17:52:03 2016
Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-PAH-BE080216.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Aug 02 16:59:37 2016
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 8.17 min Scan# 479

Delta R.T. -0.00 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Instrument :

BNA_E

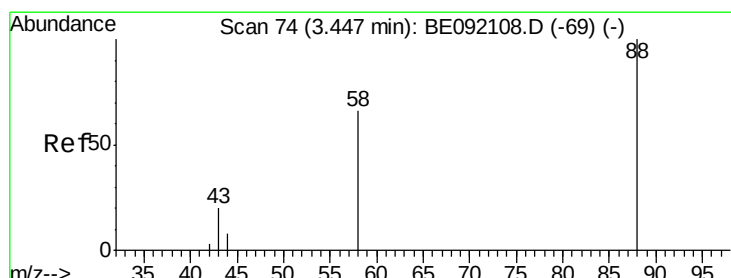
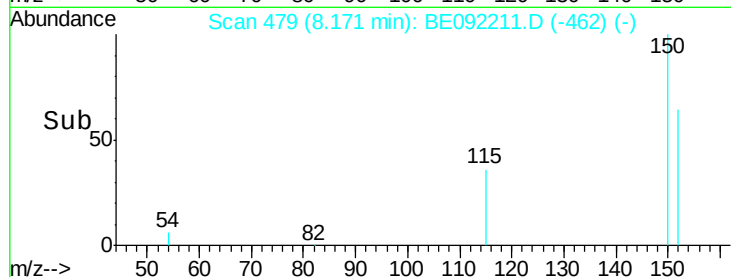
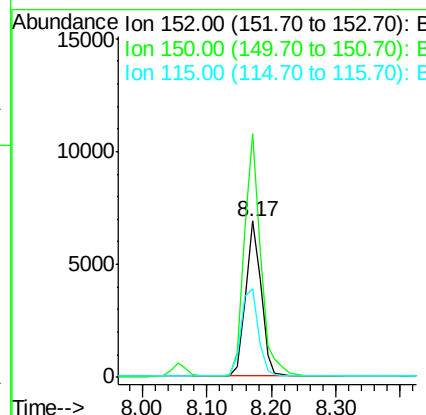
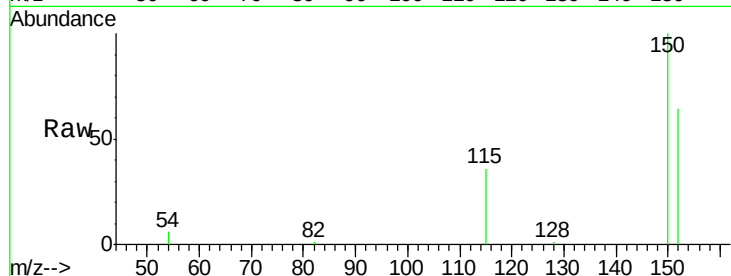
ClientSampleId :

GW-64-9.0-15.0MSD

Tot Ion	Ratio	Lower	Upper
152	100		
150	156.0	106.0	159.0
115	56.8	36.9	55.3

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#2

1,4-Dioxane

Concen: 1.71 ng

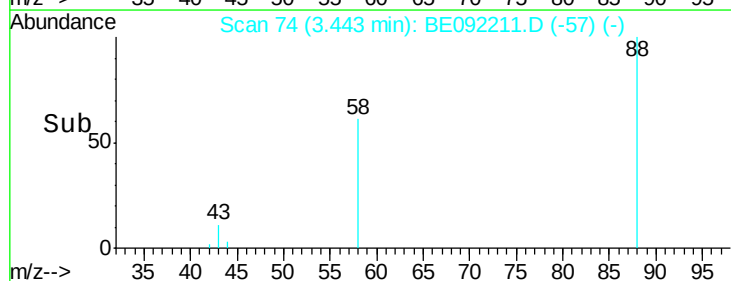
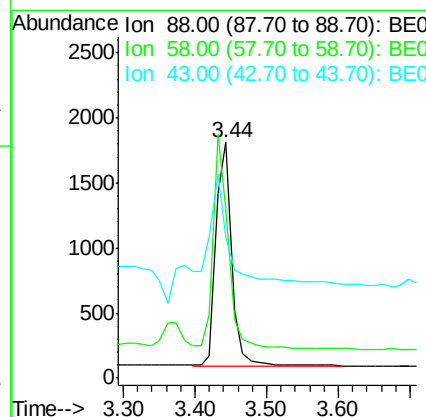
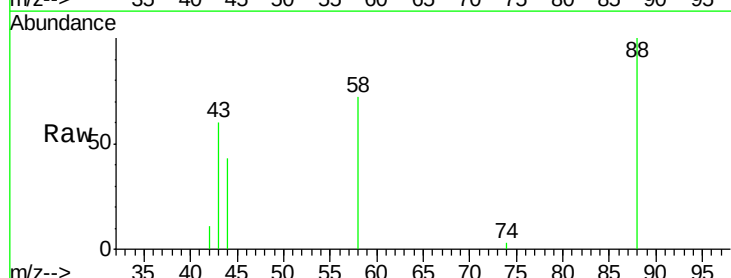
RT: 3.44 min Scan# 74

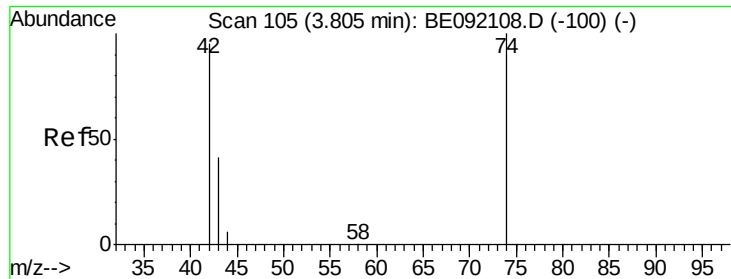
Delta R.T. -0.00 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Tgt Ion	Ratio	Lower	Upper
88	100		
58	90.2	62.1	93.1
43	147.4	27.2	40.8





#3

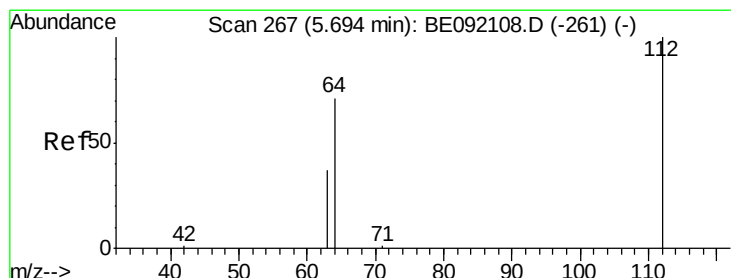
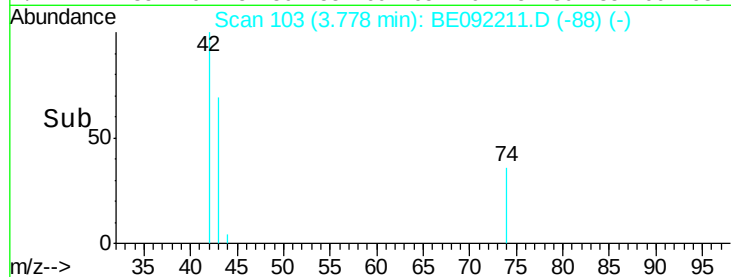
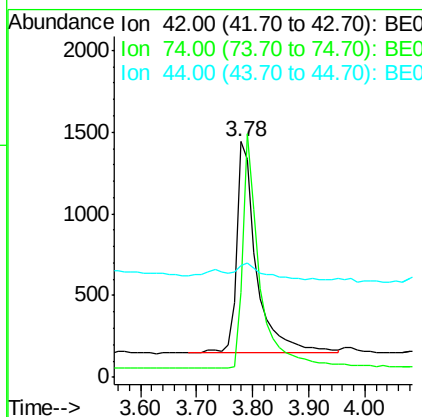
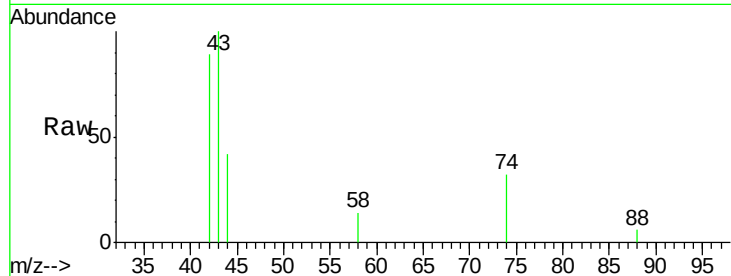
n-Nitrosodimethylamine
 Concen: 1.57 ng
 RT: 3.78 min Scan# 103
 Delta R.T. -0.03 min
 Lab File: BE092211.D
 Acq: 5 Aug 2016 9:34

Instrument :
 BNA_E
 ClientSampleId :
 GW-64-9.0-15.0MSD

Tot Ion:	42	Resp:	3191
Ion	Ratio	Lower	Upper
42	100		
74	96.8	82.8	124.2
44	9.7	9.0	13.4

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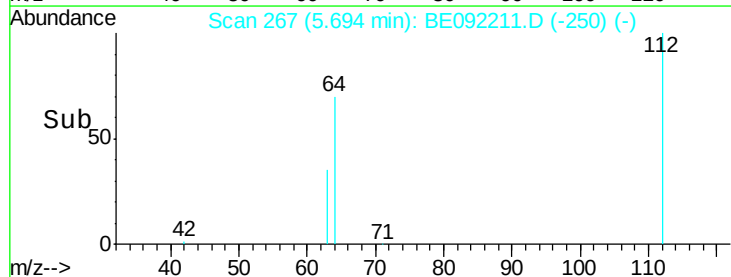
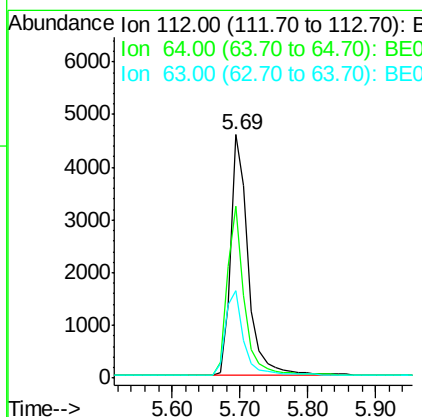
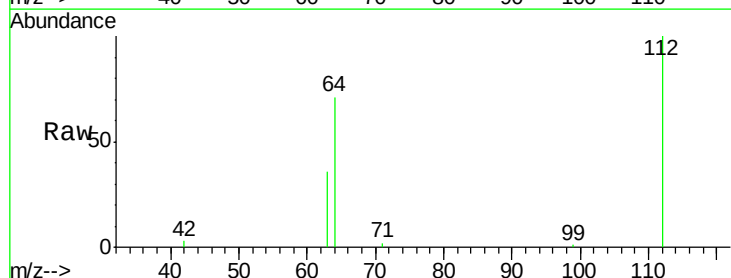
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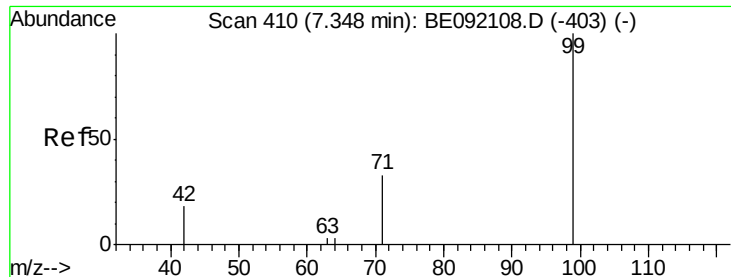


#4

2-Fluorophenol
 Concen: 2.91 ng
 RT: 5.69 min Scan# 267
 Delta R.T. -0.00 min
 Lab File: BE092211.D
 Acq: 5 Aug 2016 9:34

Tgt Ion:	112	Resp:	8393
Ion	Ratio	Lower	Upper
112	100		
64	67.9	55.9	83.9
63	36.2	31.1	46.7





#5

Phenol-d6

Concen: 1.85 ng

RT: 7.35 min Scan# 410

Delta R.T. -0.00 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Instrument :

BNA_E

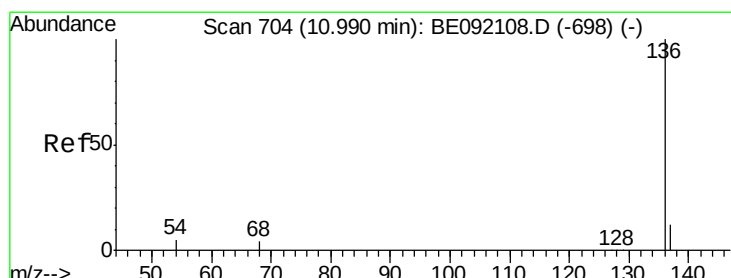
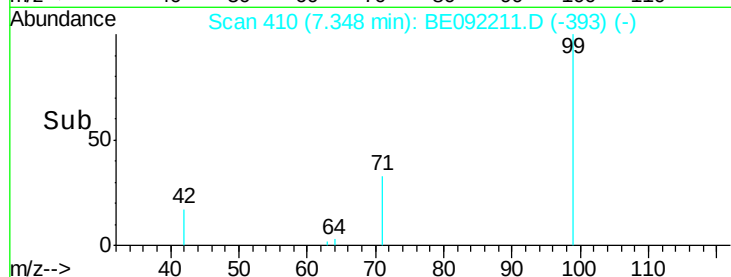
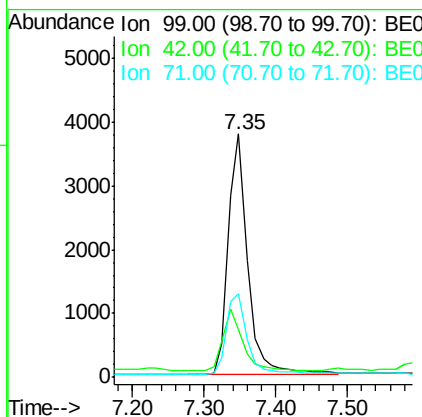
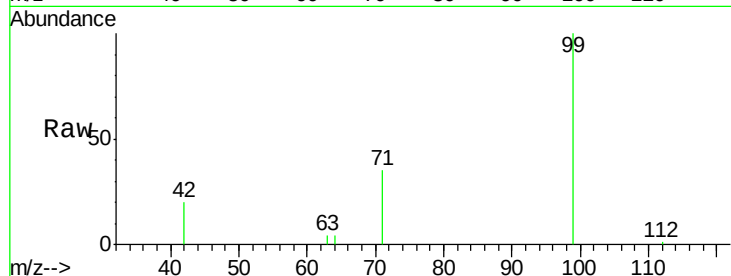
ClientSampleId :

GW-64-9.0-15.0MSD

Tot Ion:	99	Resp:	7091
Ion	Ratio	Lower	Upper
99	100		
42	25.3	22.4	33.6
71	36.1	28.9	43.3

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#6

Naphthalene-d8

Concen: 5.00 ng

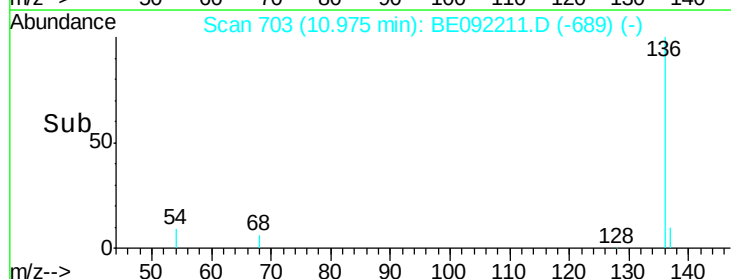
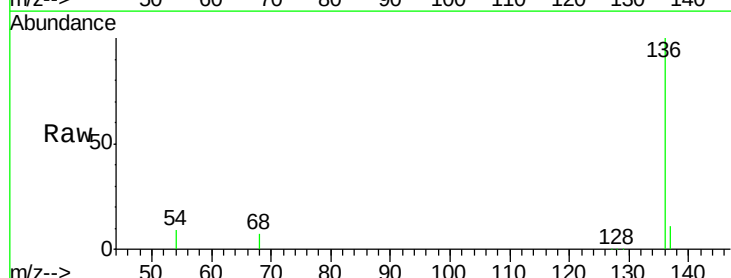
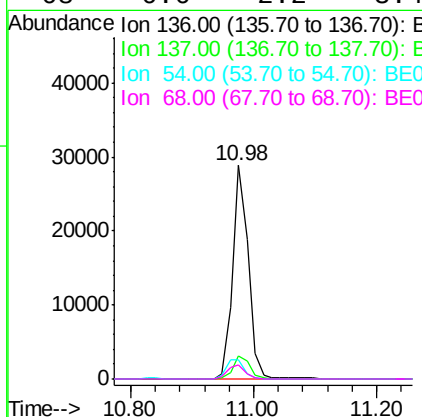
RT: 10.98 min Scan# 703

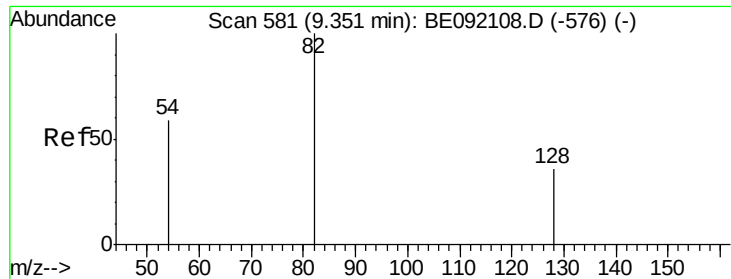
Delta R.T. -0.02 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Tgt Ion:	136	Resp:	50636
Ion	Ratio	Lower	Upper
136	100		
137	10.6	9.1	13.7
54	9.2	2.7	4.1#
68	6.6	2.2	3.4#





#7

Nitrobenzene-d5

Concen: 2.87 ng

RT: 9.34 min Scan# 580

Delta R.T. -0.01 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Instrument :

BNA_E

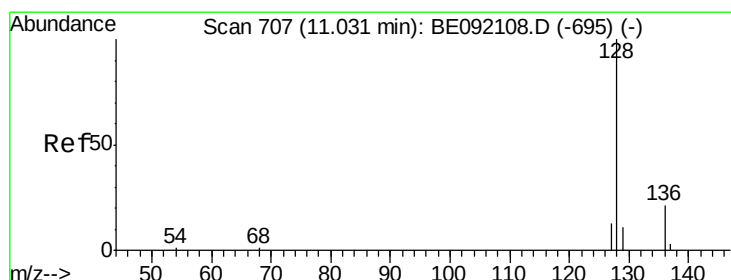
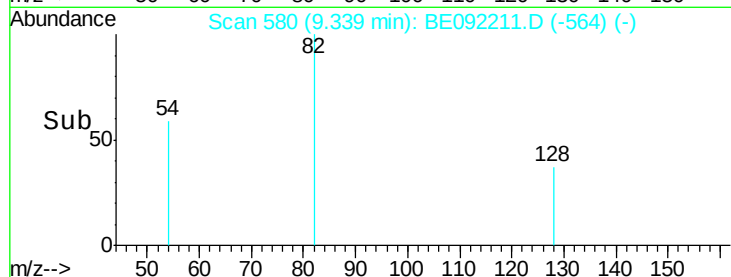
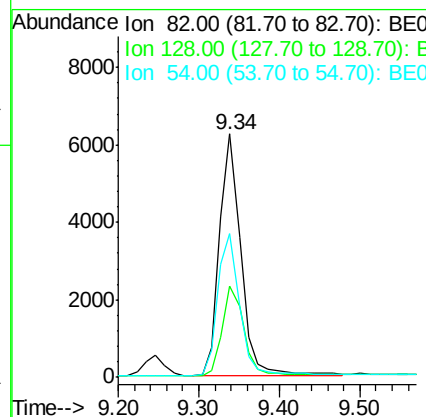
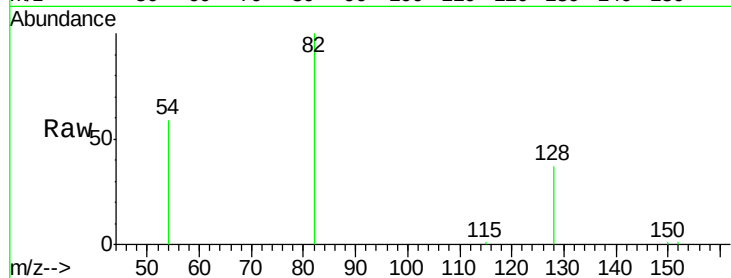
ClientSampleId :

GW-64-9.0-15.0MSD

Tot Ion:	82	Resp:	11450
Ion Ratio	Lower	Upper	
82	100		
128	37.3	33.0	49.4
54	59.3	42.6	63.8

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#8

Naphthalene

Concen: 2.86 ng

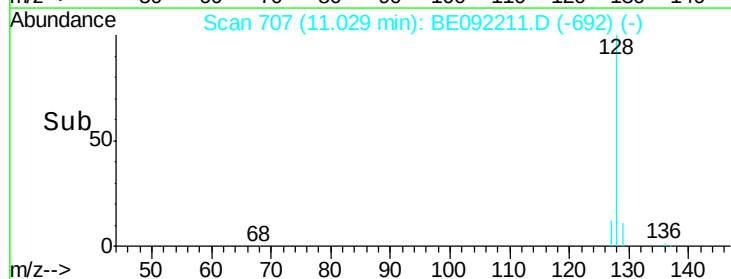
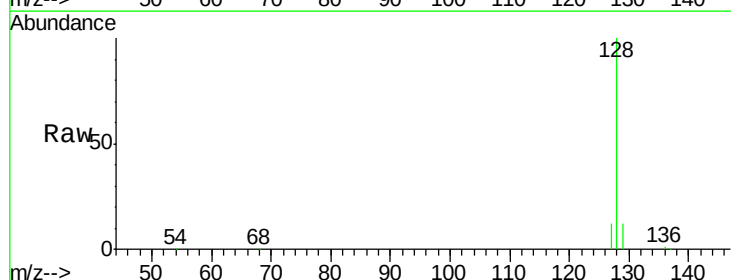
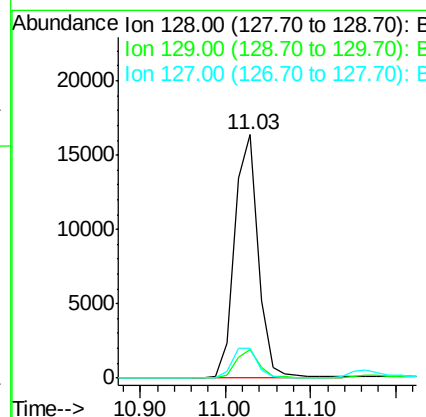
RT: 11.03 min Scan# 707

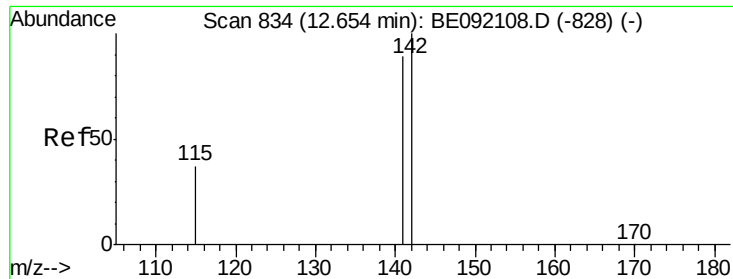
Delta R.T. -0.00 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Tgt Ion:	128	Resp:	31125
Ion Ratio	Lower	Upper	
128	100		
129	11.7	11.1	16.7
127	12.1	11.3	16.9





#9

2-Methylnaphthalene

Concen: 2.93 ng

RT: 12.64 min Scan# 833

Delta R.T. -0.01 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Instrument :

BNA_E

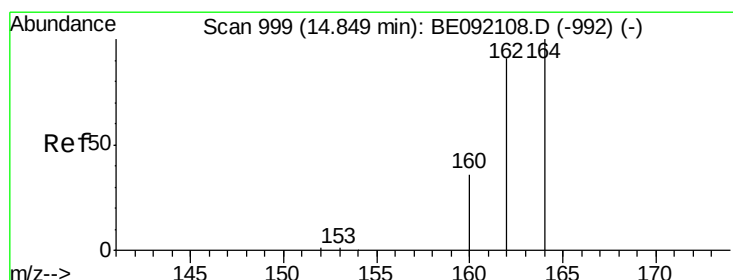
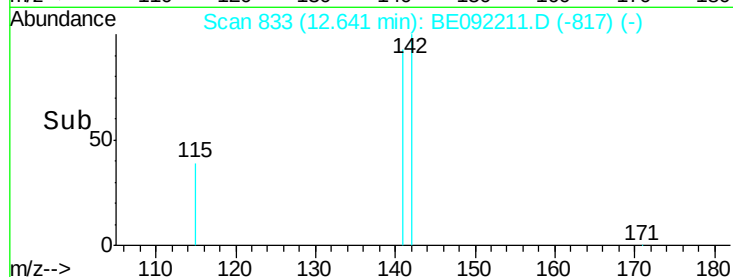
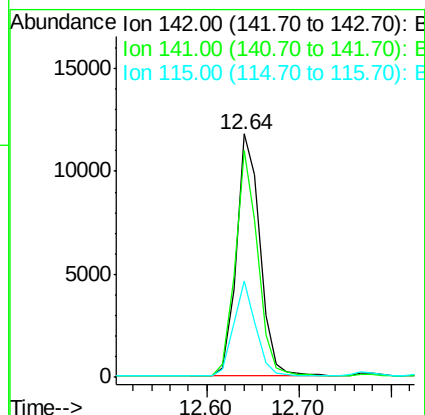
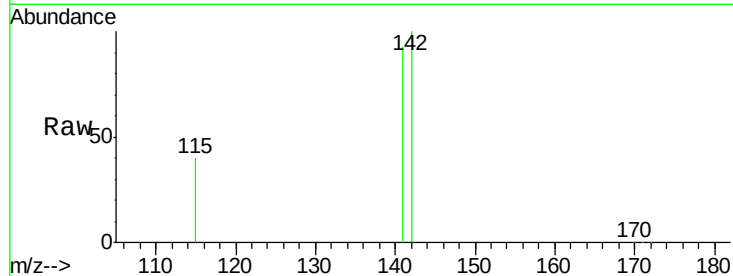
ClientSampleId :

GW-64-9.0-15.0MSD

Tot Ion:	142	Resp:	21072
Ion Ratio	Lower	Upper	
142	100		
141	93.3	65.1	97.7
115	39.8	27.0	40.4

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#10

Acenaphthene-d10

Concen: 5.00 ng

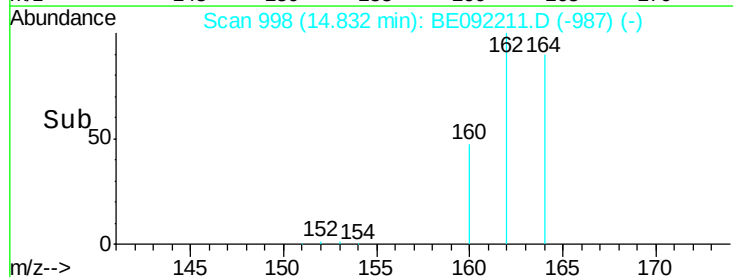
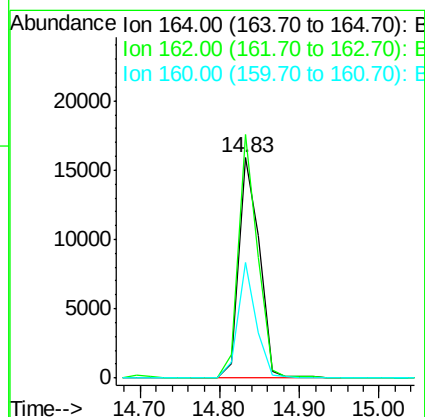
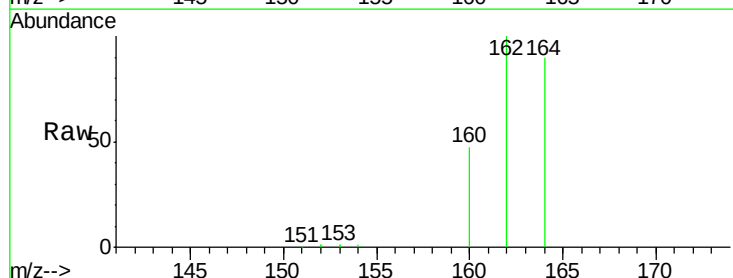
RT: 14.83 min Scan# 998

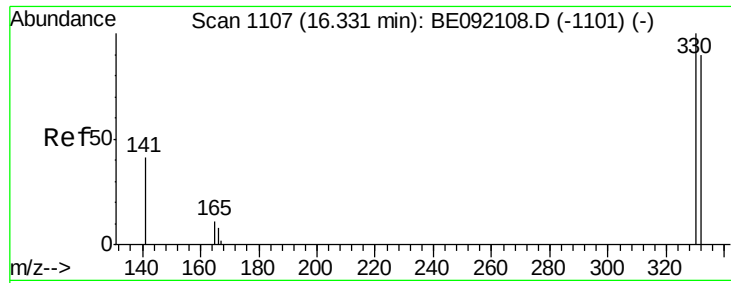
Delta R.T. -0.02 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Tgt Ion:	164	Resp:	28266
Ion Ratio	Lower	Upper	
164	100		
162	110.6	69.5	104.3#
160	52.3	27.6	41.4#





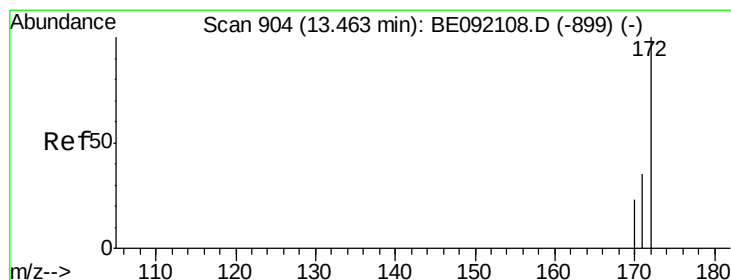
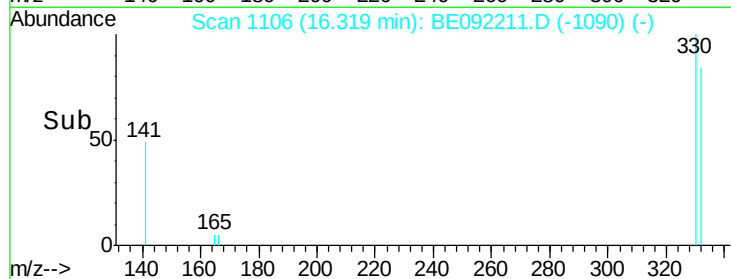
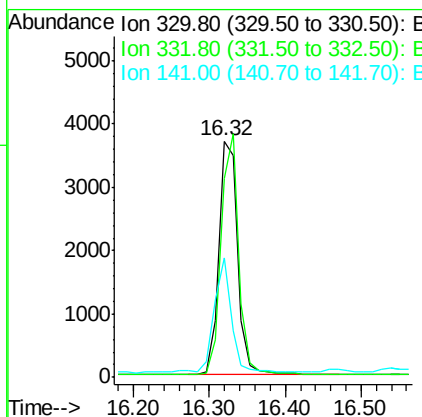
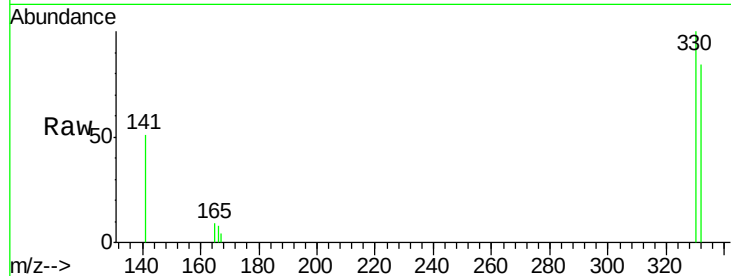
#11
 2,4,6-Tribromophenol
 Concen: 7.01 ng
 RT: 16.32 min Scan# 1106
 Delta R.T. -0.01 min
 Lab File: BE092211.D
 Acq: 5 Aug 2016 9:34

Instrument :
 BNA_E
 ClientSampleId :
 GW-64-9.0-15.0MSD

Tot Ion	Ratio	Lower	Upper
330	100		
332	97.0	74.2	111.4
141	45.2	139.8	209.8#

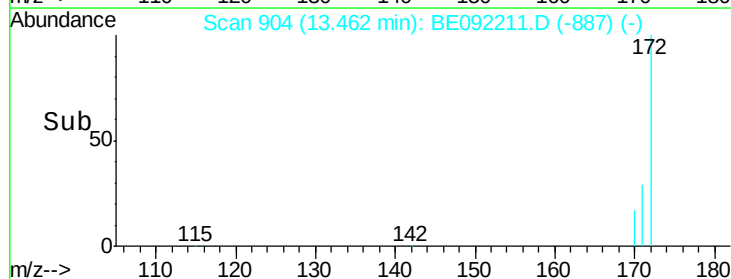
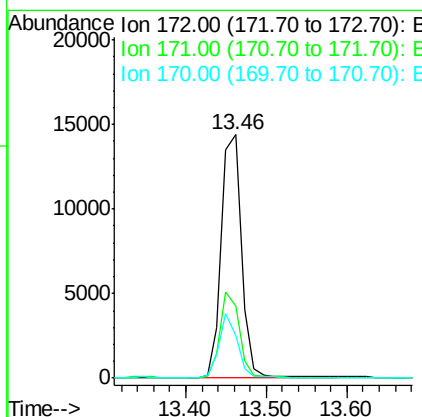
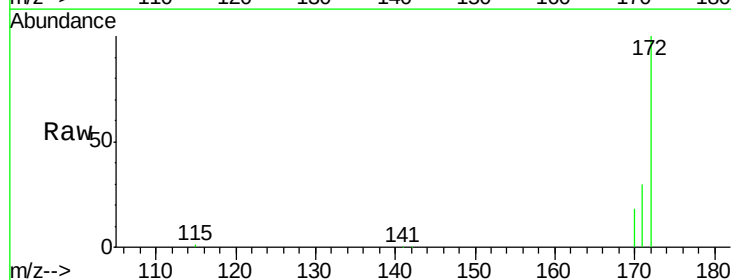
Manual Integrations
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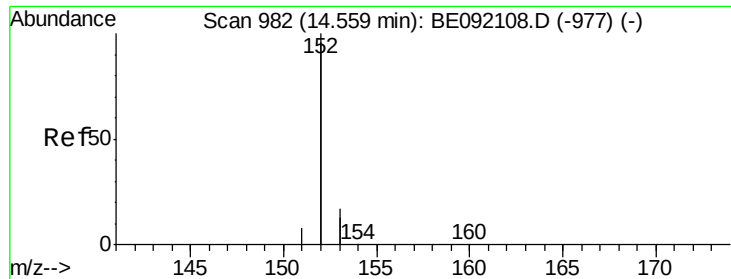
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#12
 2-Fluorobiphenyl
 Concen: 2.78 ng
 RT: 13.46 min Scan# 904
 Delta R.T. -0.00 min
 Lab File: BE092211.D
 Acq: 5 Aug 2016 9:34

Tgt Ion	Ratio	Lower	Upper
172	100		
171	29.7	30.3	45.5#
170	17.7	21.6	32.4#





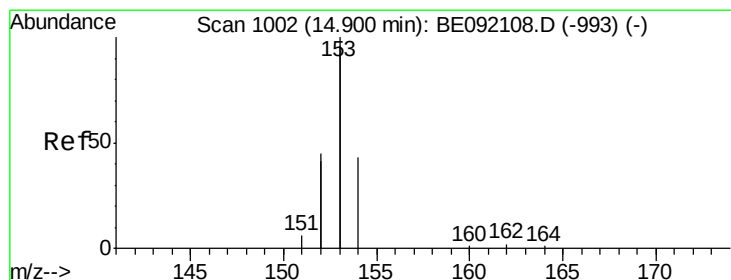
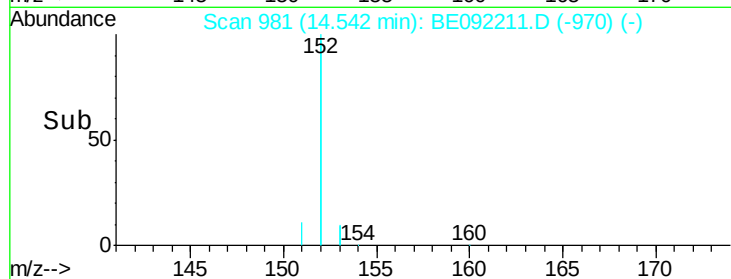
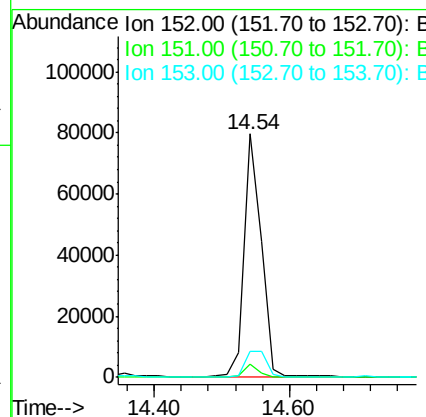
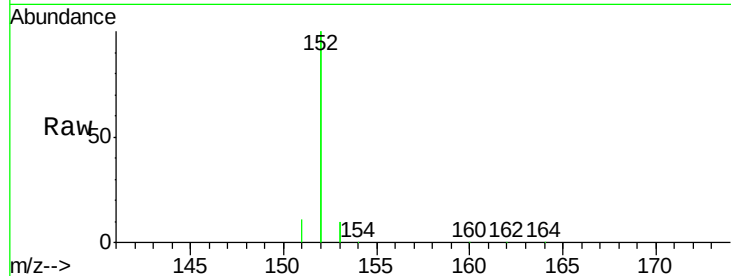
#13
Acenaphthylene
Concen: 2.79 ng
RT: 14.54 min Scan# 981
Delta R.T. -0.02 min
Lab File: BE092211.D
Acq: 5 Aug 2016 9:34

Instrument :
BNA_E
ClientSampleId :
GW-64-9.0-15.0MSD

Tot Ion	Ratio	Resp	Lower	Upper
152	100	139080		
151	5.0		4.0	6.0
153	13.0		9.6	14.4

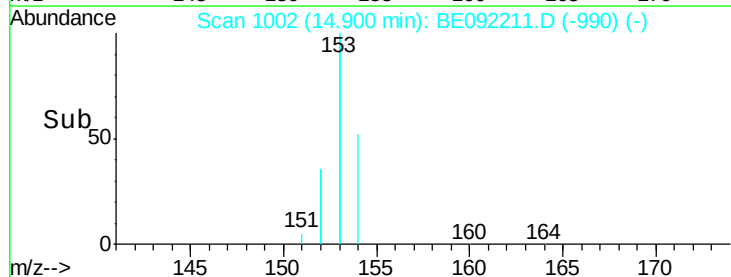
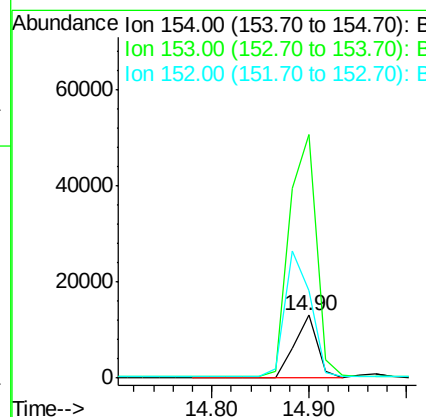
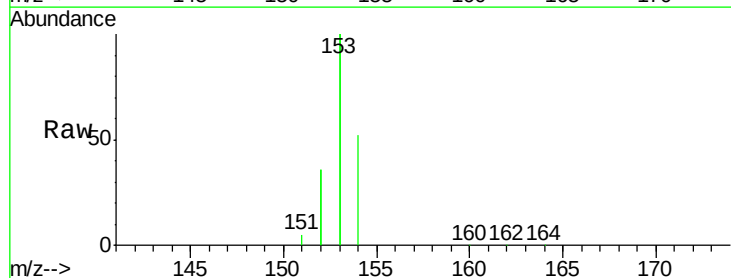
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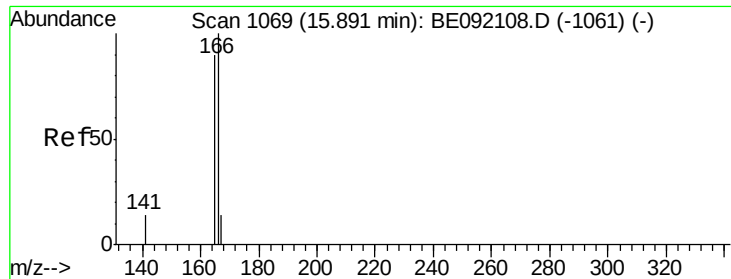
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#14
Acenaphthene
Concen: 2.68 ng
RT: 14.90 min Scan# 1002
Delta R.T. -0.00 min
Lab File: BE092211.D
Acq: 5 Aug 2016 9:34

Tgt Ion	Ratio	Resp	Lower	Upper
154	100	21307		
153	456.0		345.1	517.7
152	224.4		0.0	0.0#





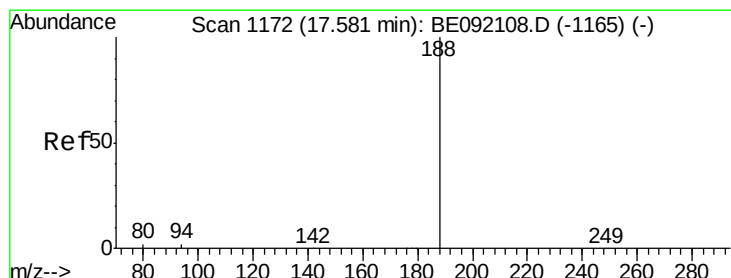
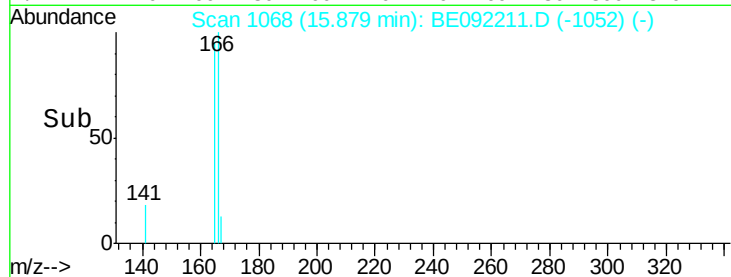
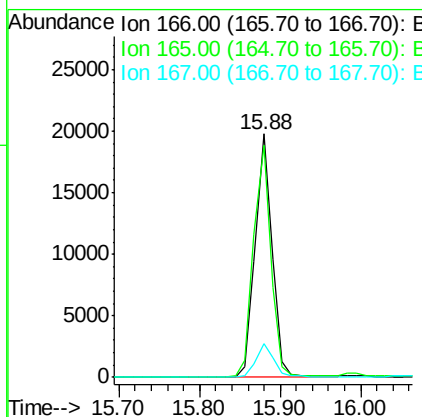
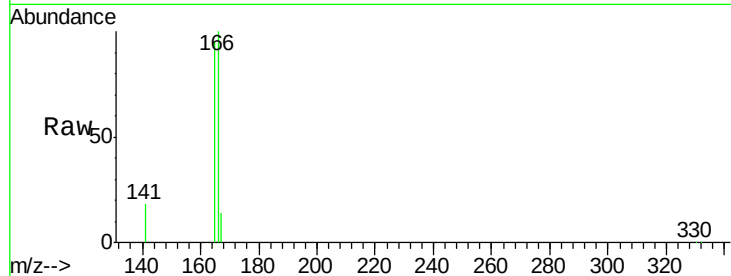
#15
Fluorene
 Concen: 2.84 ng
 RT: 15.88 min Scan# 1068
 Delta R.T. -0.01 min
 Lab File: BE092211.D
 Acq: 5 Aug 2016 9:34

Instrument :
 BNA_E
 ClientSampleId :
 GW-64-9.0-15.0MSD

Tot Ion	Ratio	Lower	Upper
166	100		
165	97.3	78.6	118.0
167	13.6	11.1	16.7

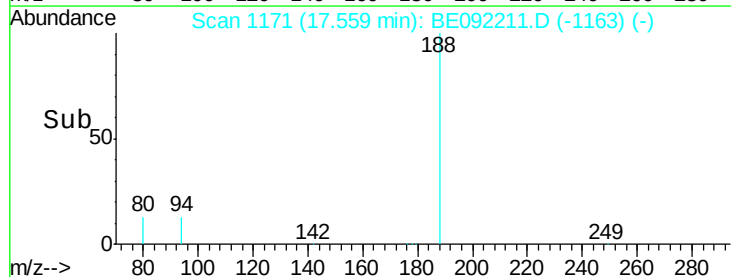
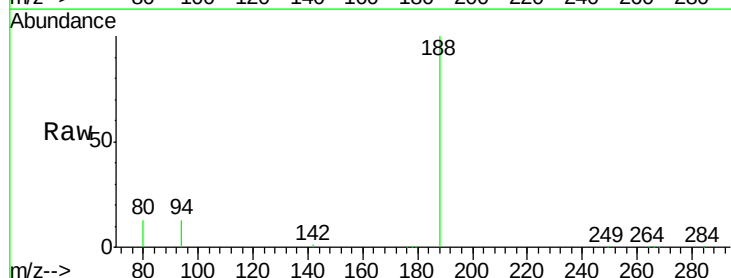
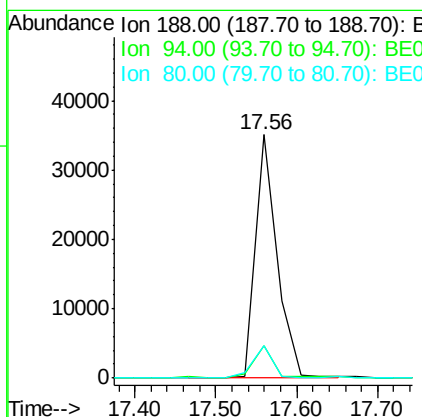
Manual Integrations
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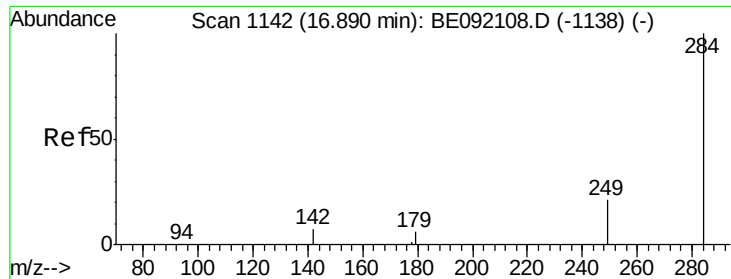
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#16
Phenanthrene-d10
 Concen: 5.00 ng
 RT: 17.56 min Scan# 1171
 Delta R.T. -0.02 min
 Lab File: BE092211.D
 Acq: 5 Aug 2016 9:34

Tgt Ion	Ratio	Lower	Upper
188	100		
94	13.1	3.9	5.9#
80	13.3	3.4	5.0#





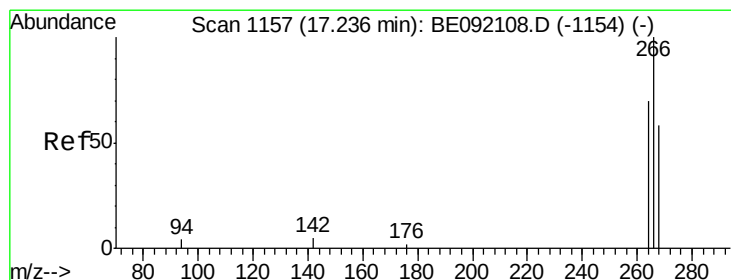
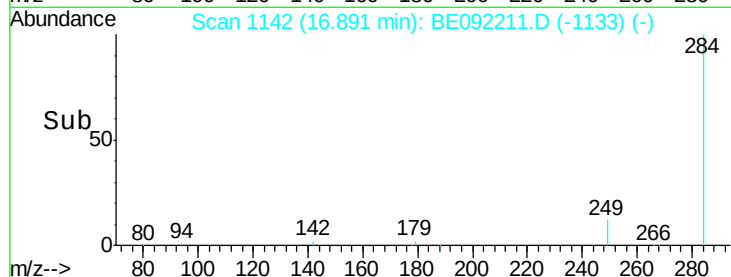
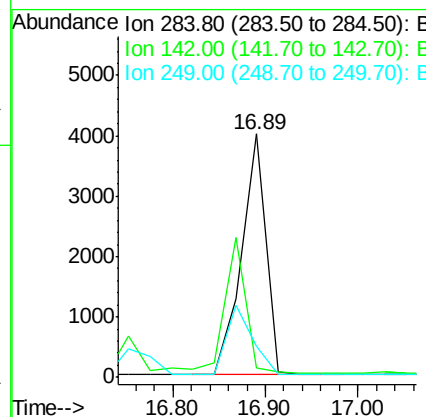
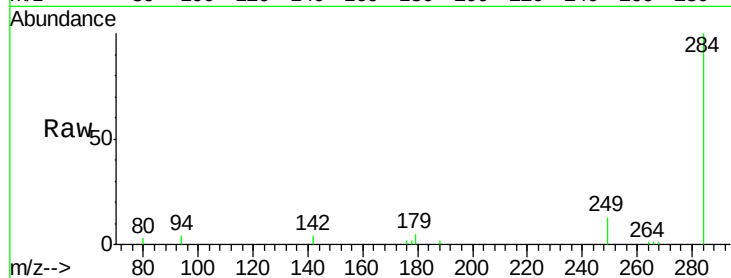
#17
Hexachlorobenzene
Concen: 2.32 ng
RT: 16.89 min Scan# 1142
Delta R.T. 0.00 min
Lab File: BE092211.D
Acq: 5 Aug 2016 9:34

Instrument :
BNA_E
ClientSampleId :
GW-64-9.0-15.0MSD

Tot Ion	Ratio	Lower	Upper
284	100		
142	0.0	33.3	49.9#
249	0.0	25.4	38.0#

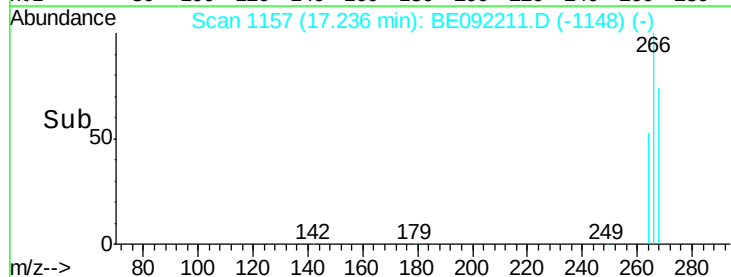
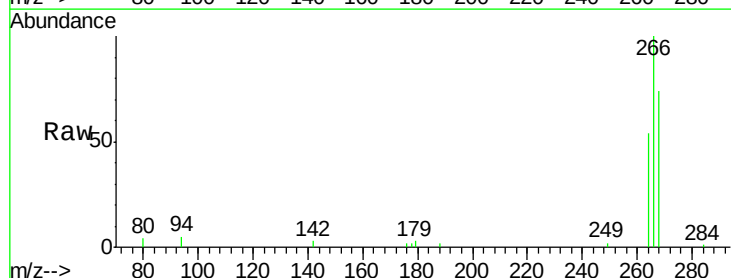
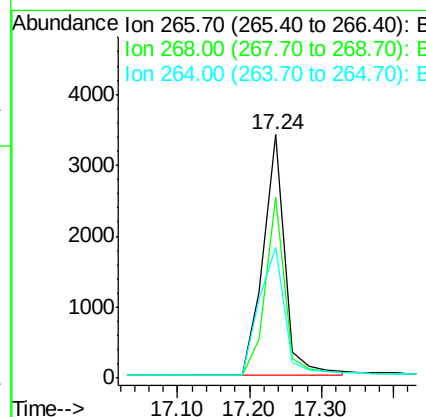
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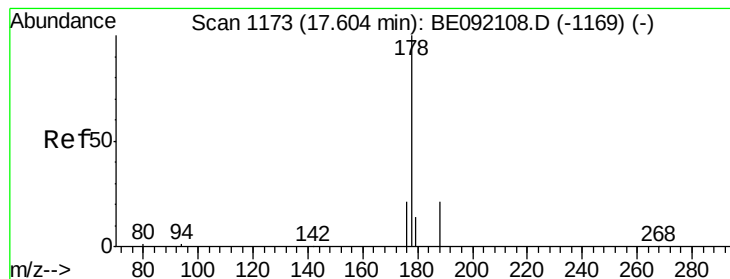
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#18
Pentachlorophenol
Concen: 6.01 ng
RT: 17.24 min Scan# 1157
Delta R.T. 0.00 min
Lab File: BE092211.D
Acq: 5 Aug 2016 9:34

Tgt Ion	Ratio	Lower	Upper
266	100		
268	74.2	62.7	94.1
264	53.8	63.5	95.3#





#19

Phenanthrene

Concen: 3.10 ng

RT: 17.60 min Scan# 1173

Delta R.T. 0.00 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Instrument :

BNA_E

ClientSampleId :

GW-64-9.0-15.0MSD

Tot Ion:178 Resp: 54872

Ion Ratio Lower Upper

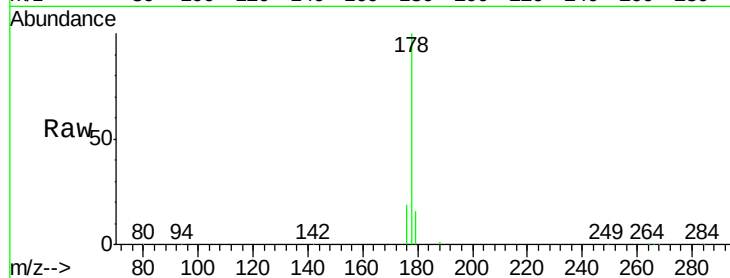
178 100

176 19.3 15.4 23.0

179 15.5 12.7 19.1

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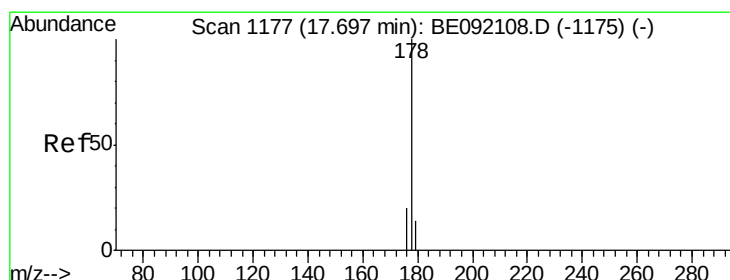
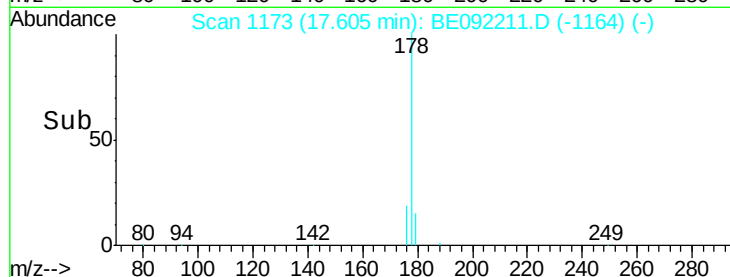
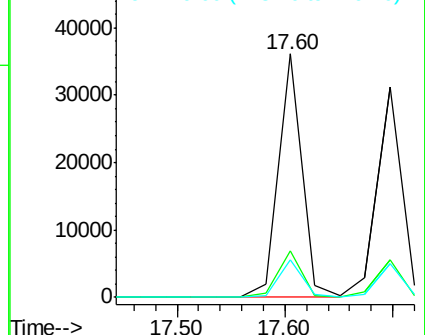


Abundance

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



#20

Anthracene

Concen: 2.86 ng

RT: 17.70 min Scan# 1177

Delta R.T. 0.00 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Tgt Ion:178 Resp: 49267

Ion Ratio Lower Upper

178 100

176 18.3 15.2 22.8

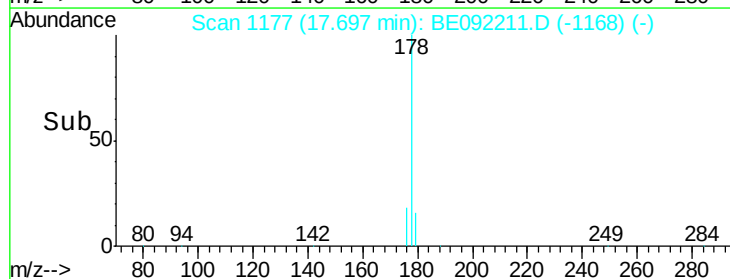
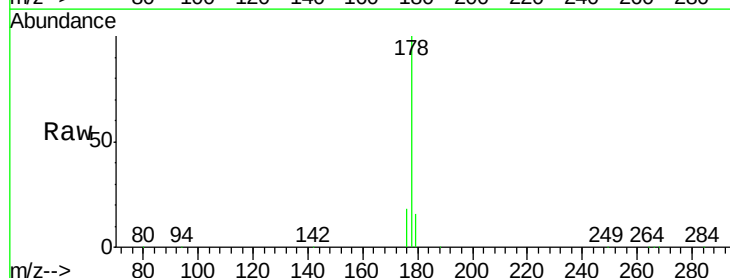
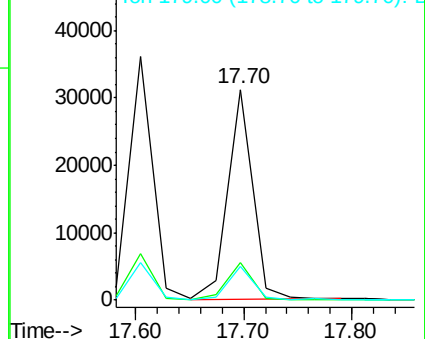
179 16.1 12.2 18.4

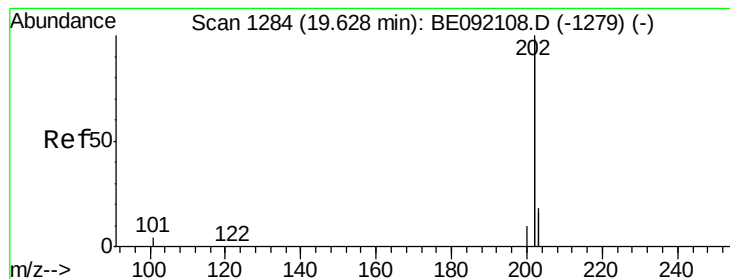
Abundance

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





#21

Fluoranthene

Concen: 2.92 ng

RT: 19.63 min Scan# 1284

Delta R.T. 0.00 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Instrument :

BNA_E

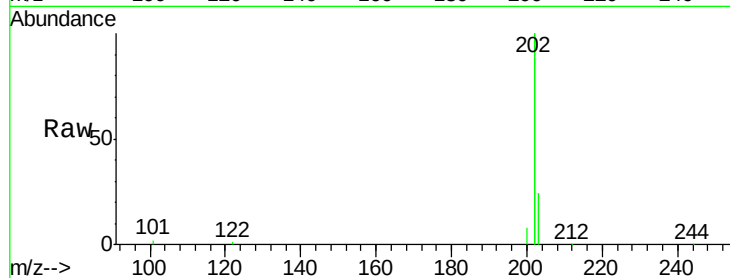
ClientSampleId :

GW-64-9.0-15.0MSD

Tot Ion:	202	Resp:	230978
Ion Ratio	Lower	Upper	
202	100		
101	3.1	2.2	3.2
203	17.9	13.0	19.4

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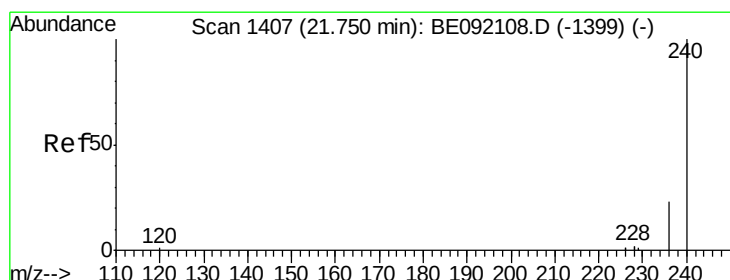
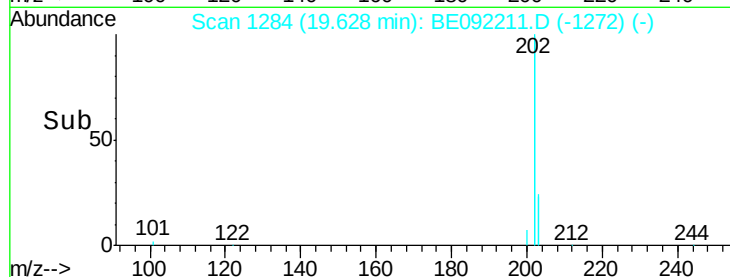
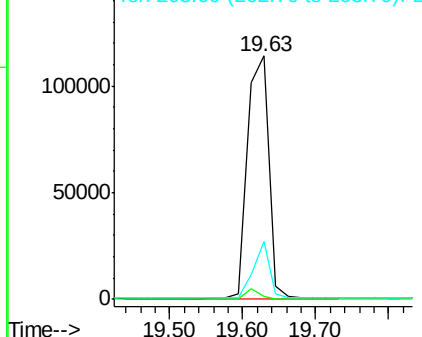
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Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



#22

Chrysene-d12

Concen: 5.00 ng

RT: 21.73 min Scan# 1406

Delta R.T. -0.02 min

Lab File: BE092211.D

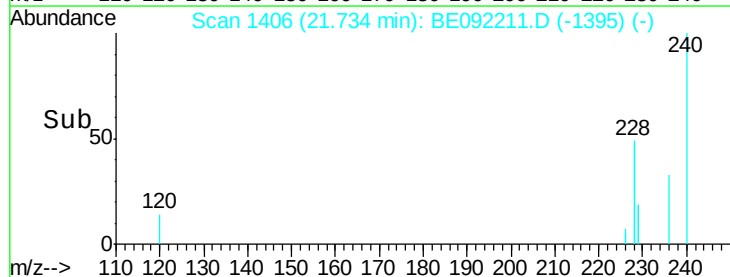
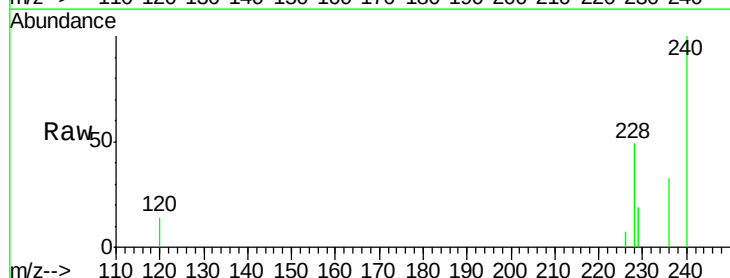
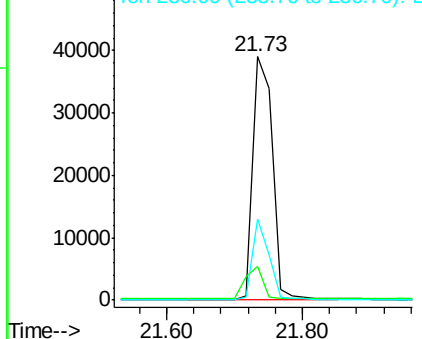
Acq: 5 Aug 2016 9:34

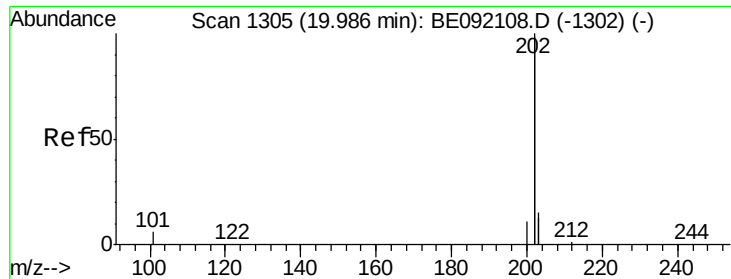
Tgt Ion:	240	Resp:	77584
Ion Ratio	Lower	Upper	
240	100		
120	14.0	0.6	1.0#
236	33.3	18.2	27.4#

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





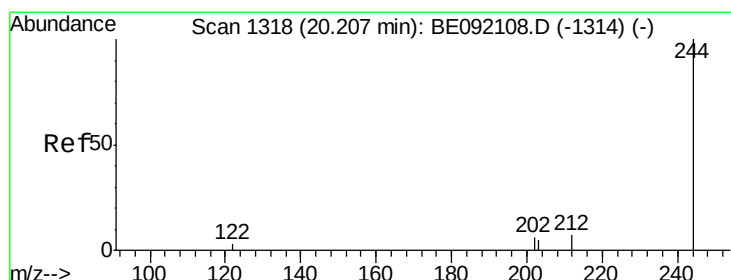
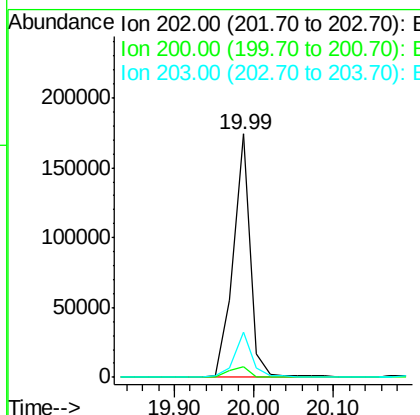
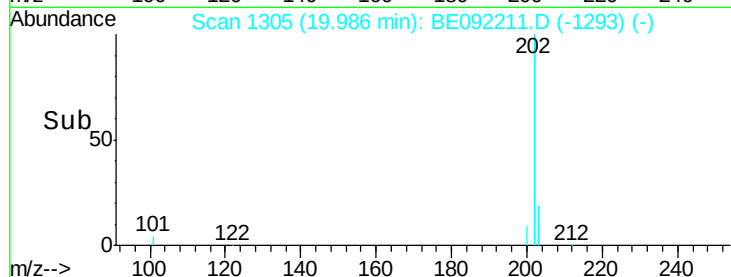
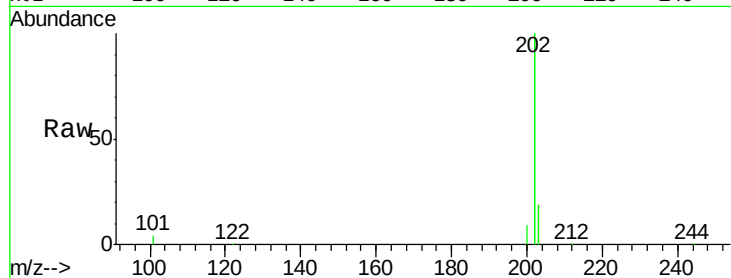
#23
Pvrene
Concen: 3.13 ng
RT: 19.99 min Scan# 1305
Delta R.T. 0.00 min
Lab File: BE092211.D
Acq: 5 Aug 2016 9:34

Instrument :
BNA_E
ClientSampleId :
GW-64-9.0-15.0MSD

Tot Ion	Ratio	Resp	Lower	Upper
202	100	253879		
200	5.2		4.4	6.6
203	18.1		13.4	20.0

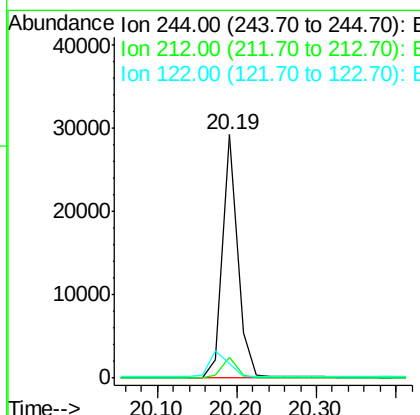
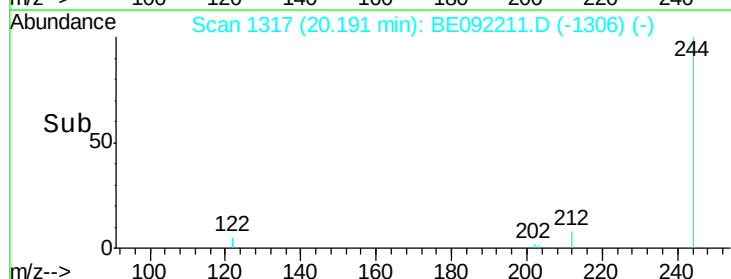
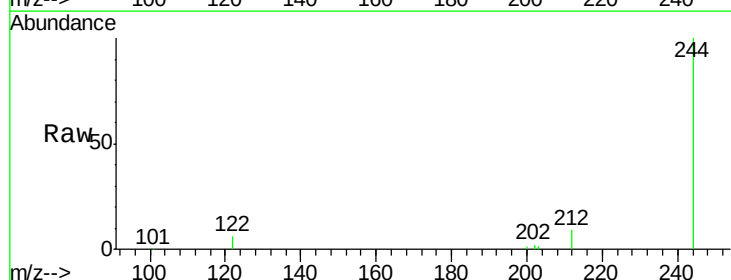
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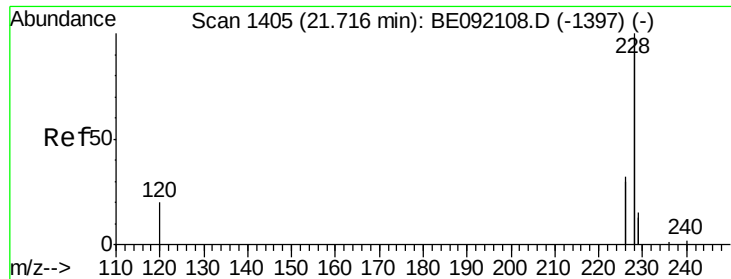
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#24
Terphenyl-d14
Concen: 3.42 ng
RT: 20.19 min Scan# 1317
Delta R.T. -0.02 min
Lab File: BE092211.D
Acq: 5 Aug 2016 9:34

Tgt Ion	Ratio	Resp	Lower	Upper
244	100	38087		
212	8.6		9.1	13.7#
122	6.1		11.0	16.4#





#25

Benzo(a)anthracene

Concen: 3.20 ng

RT: 21.72 min Scan# 1405

Delta R.T. 0.00 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Instrument :

BNA_E

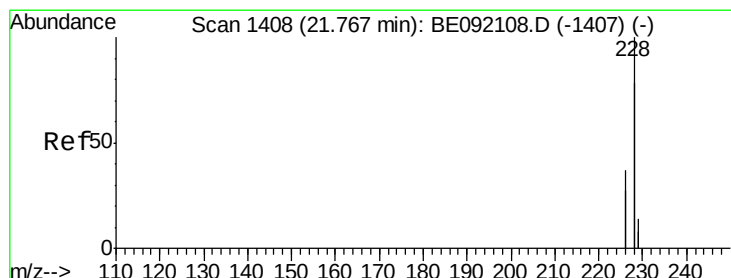
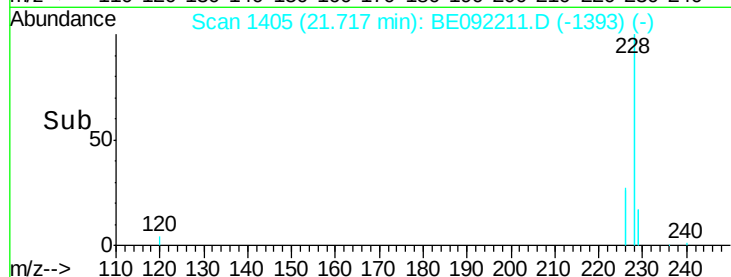
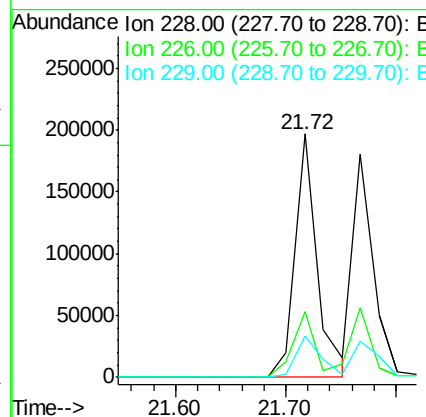
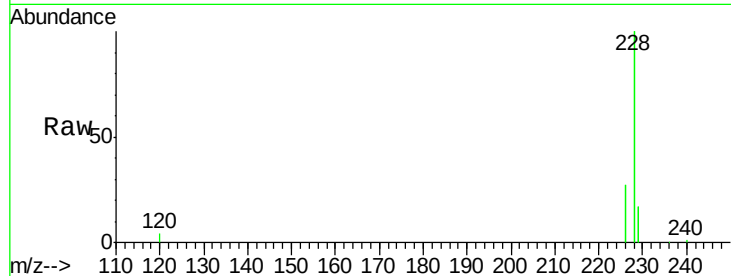
ClientSampleId :

GW-64-9.0-15.0MSD

Tot Ion:	228	Resp:	272784
Ion Ratio	Lower	Upper	
228	100		
226	26.9	22.1	33.1
229	17.2	15.1	22.7

Manual Integrations
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#26

Chrysene

Concen: 2.79 ng m

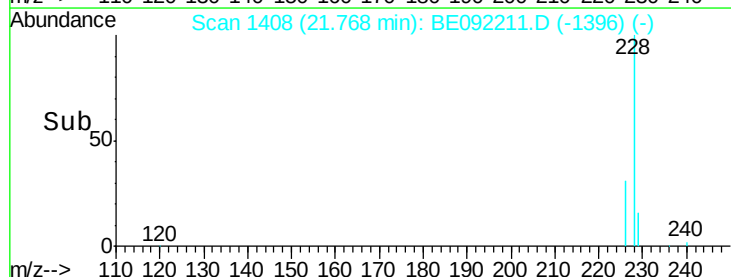
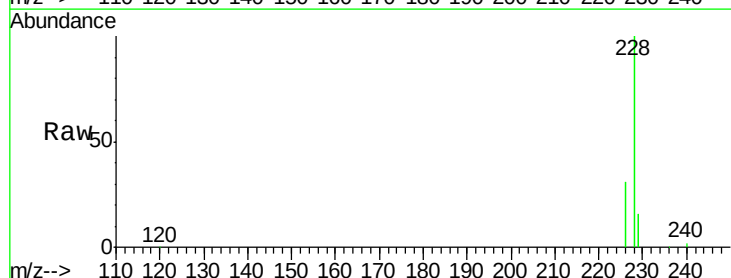
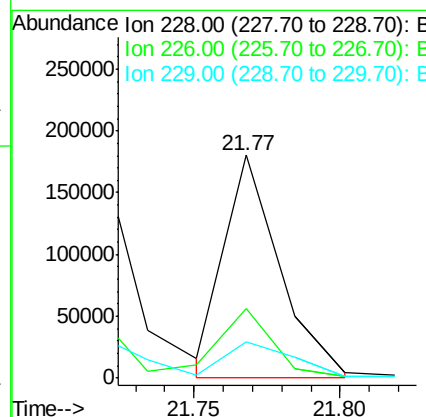
RT: 21.77 min Scan# 1408

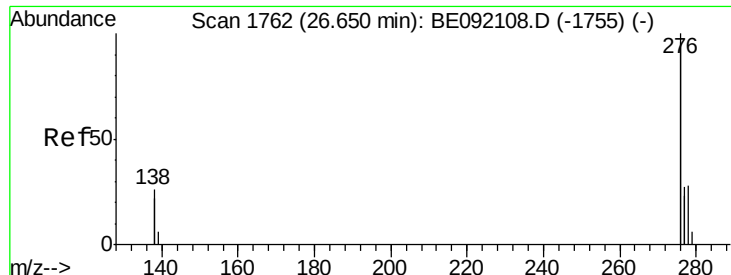
Delta R.T. 0.00 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Tgt Ion:	228	Resp:	238379
Ion Ratio	Lower	Upper	
228	100		
226	31.3	22.3	33.5
229	16.4	16.9	25.3#





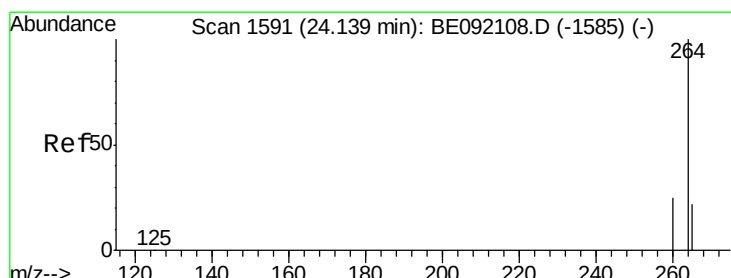
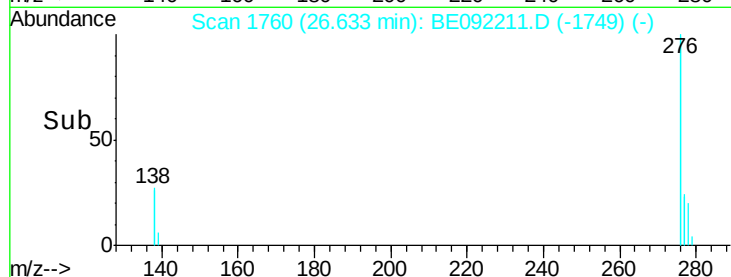
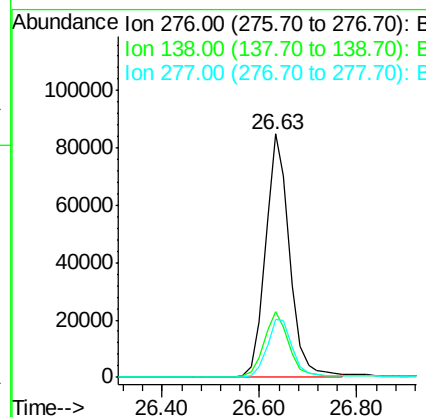
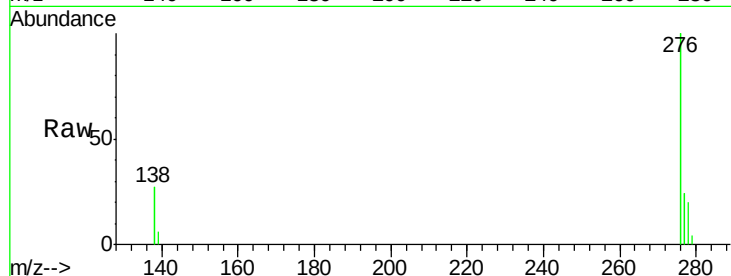
#27
Indeno(1,2,3-cd)pyrene
Concen: 3.15 ng
RT: 26.63 min Scan# 1760
Delta R.T. -0.02 min
Lab File: BE092211.D
Acq: 5 Aug 2016 9:34

Instrument :
BNA_E
ClientSampleId :
GW-64-9.0-15.0MSD

Tot Ion	Ratio	Lower	Upper
276	100		
138	27.0	21.2	31.8
277	24.9	19.8	29.8

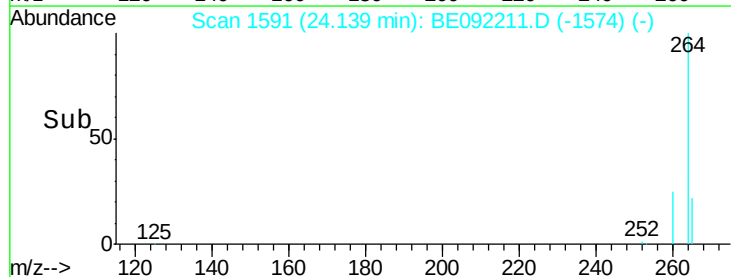
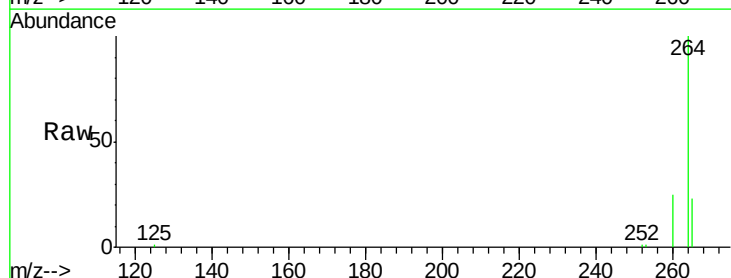
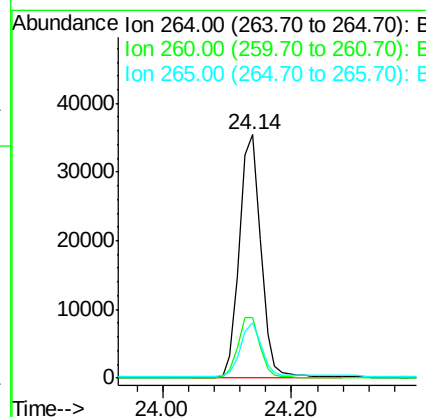
Manual Integrations
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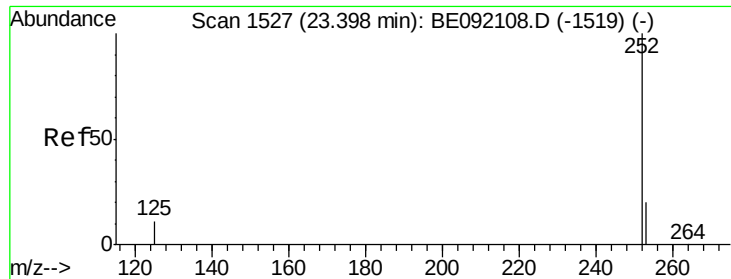
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#28
Perylene-d12
Concen: 5.00 ng
RT: 24.14 min Scan# 1591
Delta R.T. 0.00 min
Lab File: BE092211.D
Acq: 5 Aug 2016 9:34

Tgt Ion	Ratio	Lower	Upper
264	100		
260	24.7	20.8	31.2
265	22.6	16.6	25.0





#29

Benzo(b)fluoranthene

Concen: 3.12 ng

RT: 23.40 min Scan# 1527

Delta R.T. 0.00 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Instrument :

BNA_E

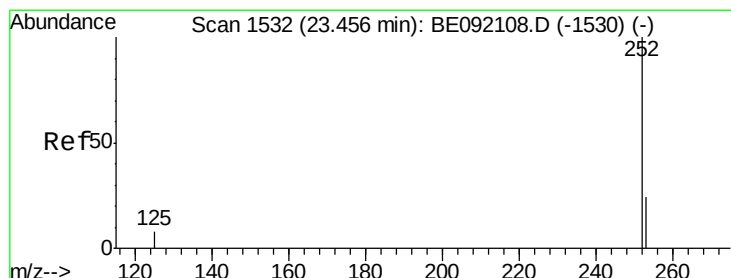
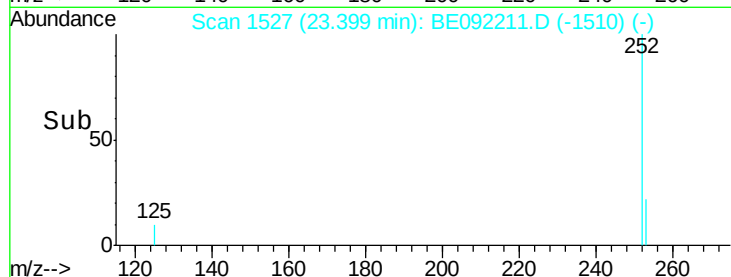
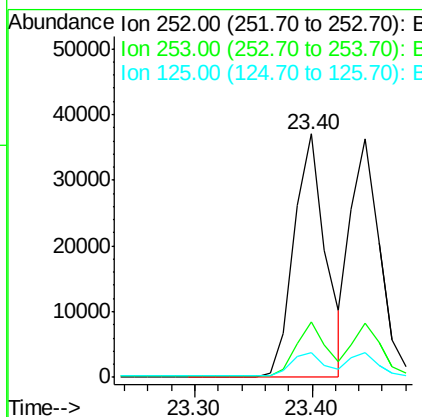
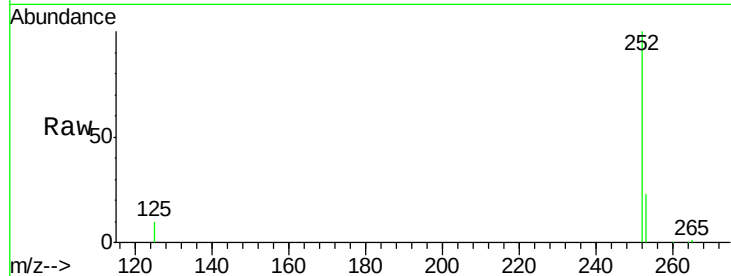
ClientSampleId :

GW-64-9.0-15.0MSD

Tot Ion:	252	Resp:	69159
Ion Ratio	Lower	Upper	
252	100		
253	22.6	17.4	26.0
125	10.2	10.2	15.2

Manual Integrations
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#30

Benzo(k)fluoranthene

Concen: 2.98 ng

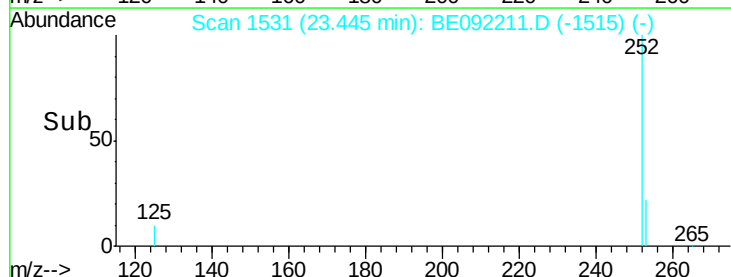
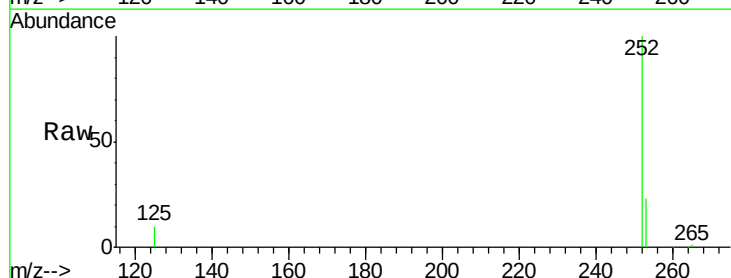
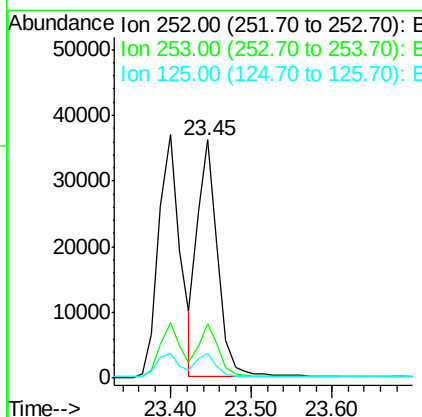
RT: 23.45 min Scan# 1531

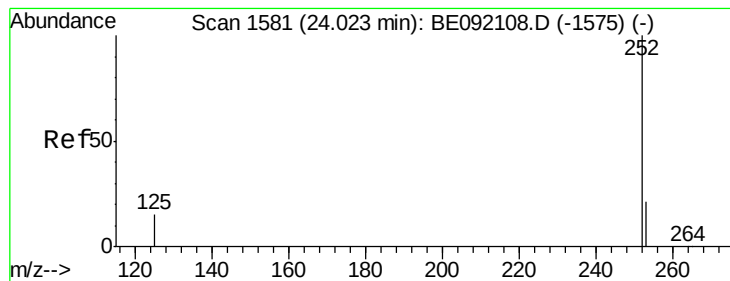
Delta R.T. -0.01 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Tgt Ion:	252	Resp:	63430
Ion Ratio	Lower	Upper	
252	100		
253	22.6	19.4	29.0
125	10.2	8.9	13.3





#31

Benzo(a)pyrene

Concen: 3.00 ng

RT: 24.02 min Scan# 1581

Delta R.T. 0.00 min

Lab File: BE092211.D

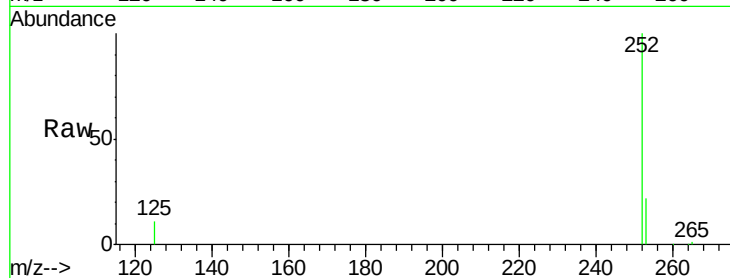
Acq: 5 Aug 2016 9:34

Instrument :

BNA_E

ClientSampleId :

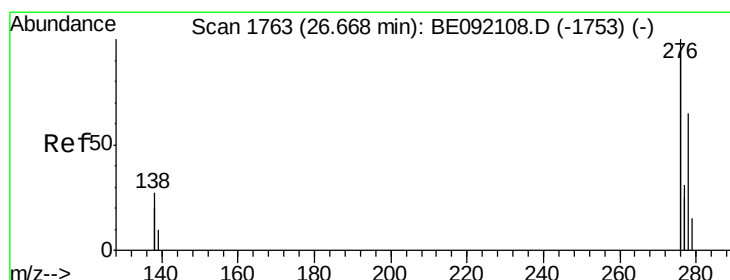
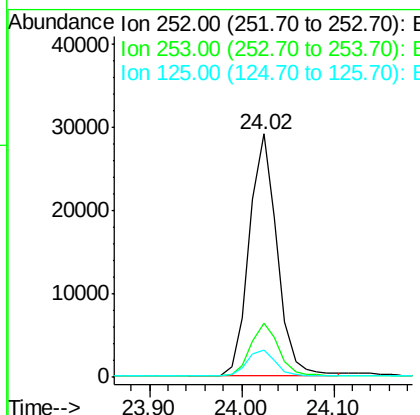
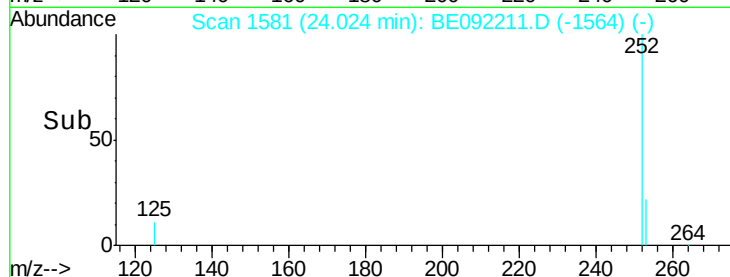
GW-64-9.0-15.0MSD



Tot Ion:	252	Resp:	61030
Ion Ratio	Lower	Upper	
252	100		
253	22.1	19.8	29.8
125	11.3	10.4	15.6

Manual Integrations
APPROVED

umangi
8/5/2016 7:04:20 PM



#32

Dibenzo(a,h)anthracene

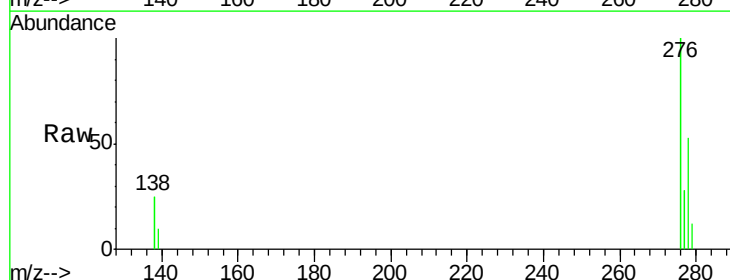
Concen: 3.16 ng

RT: 26.65 min Scan# 1761

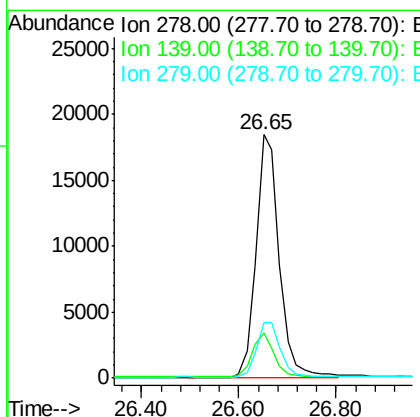
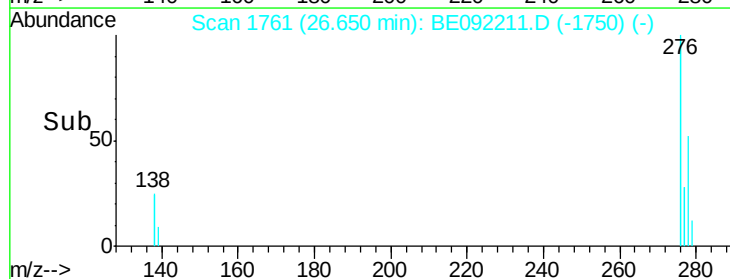
Delta R.T. -0.02 min

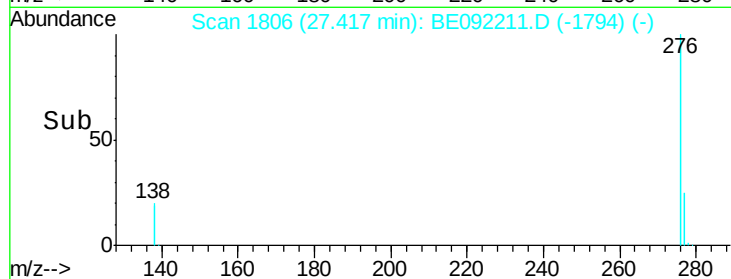
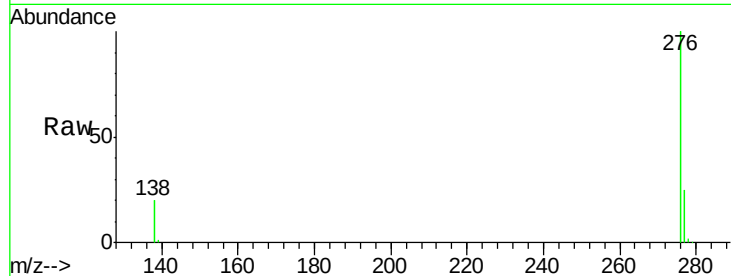
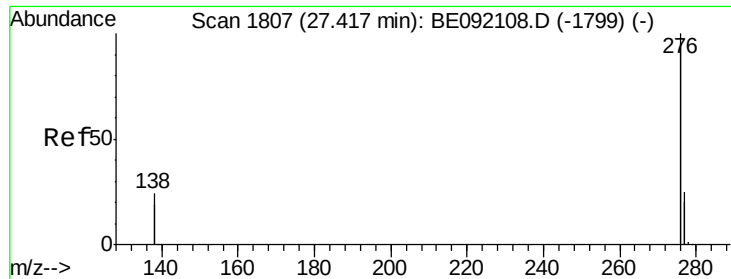
Lab File: BE092211.D

Acq: 5 Aug 2016 9:34



Tgt Ion:	278	Resp:	61460
Ion Ratio	Lower	Upper	
278	100		
139	18.4	16.7	25.1
279	22.6	20.3	30.5





#33

Benzo(a,h,i)perylene

Concen: 3.00 ng

RT: 27.42 min Scan# 1806

Delta R.T. -0.00 min

Lab File: BE092211.D

Acq: 5 Aug 2016 9:34

Instrument :

BNA_E

ClientSampleId :

GW-64-9.0-15.0MSD

Tot Ion:	276	Resp:	249169
Ion Ratio	Lower	Upper	
276	100		
277	25.4	19.5	29.3
138	20.5	20.8	31.2#

Manual Integrations
APPROVED

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8/5/2016 7:04:20 PM

