

Data Path : Z:\svoasrv\HPCHEM1\BNA_G\Data\BG041924\
 Data File : BG060967.D
 Acq On : 19 Apr 2024 20:20
 Operator : MA/JU
 Sample : P2195-01 2X
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 BNA_G
 ClientSampleId :
 OK-01-041824

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 04/22/2024
 Supervised By :mohammad ahmed 04/22/2024

Quant Time: Apr 19 22:44:13 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_G\Methods\8270-BG041724.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Apr 18 02:02:19 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.943	152	28832	20.000	ng	0.00
21) Naphthalene-d8	10.739	136	101507	20.000	ng	# 0.00
39) Acenaphthene-d10	14.570	164	75338	20.000	ng	0.00
64) Phenanthrene-d10	17.320	188	166775	20.000	ng	# 0.00
76) Chrysene-d12	21.580	240	164036	20.000	ng	# 0.00
86) Perylene-d12	24.717	264	177442	20.000	ng	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	5.534	112	75033	45.203	ng	0.00
7) Phenol-d6	7.114	99	106129	44.383	ng	0.00
23) Nitrobenzene-d5	9.094	82	76829	34.361	ng	0.00
42) 2,4,6-Tribromophenol	16.063	330	74356	59.742	ng	0.00
45) 2-Fluorobiphenyl	13.195	172	190711	37.147	ng	0.00
79) Terphenyl-d14	19.940	244	324445	34.519	ng	0.00
Target Compounds						Qvalue
31) Naphthalene	10.786	128	48502	8.835	ng	98
37) 2-Methylnaphthalene	12.396	142	16496	3.972	ng	94
38) 1-Methylnaphthalene	12.614	142	12549	3.201	ng	# 100
52) Acenaphthene	14.635	154	18701	4.651	ng	84
55) Dibenzofuran	14.970	168	25887	3.811	ng	# 93
58) Fluorene	15.616	166	42663	7.573	ng	94
71) Phenanthrene	17.361	178	338575	40.108	ng	97
72) Anthracene	17.449	178	98240m	11.329	ng	
73) Carbazole	17.719	167	22216	2.941	ng	# 93
75) Fluoranthene	19.376	202	541330	50.381	ng	95
78) Pyrene	19.735	202	493485	43.855	ng	98
81) Benzo(a)anthracene	21.562	228	278197	24.017	ng	96
83) Chrysene	21.627	228	237494m	21.474	ng	
87) Indeno(1,2,3-cd)pyrene	28.260	276	97201m	7.922	ng	
88) Benzo(b)fluoranthene	23.736	252	275209	27.413	ng	# 95
89) Benzo(k)fluoranthene	23.783	252	114764m	11.174	ng	
90) Benzo(a)pyrene	24.570	252	218221	22.047	ng	# 93
92) Benzo(g,h,i)perylene	29.370	276	78086m	7.908	ng	

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

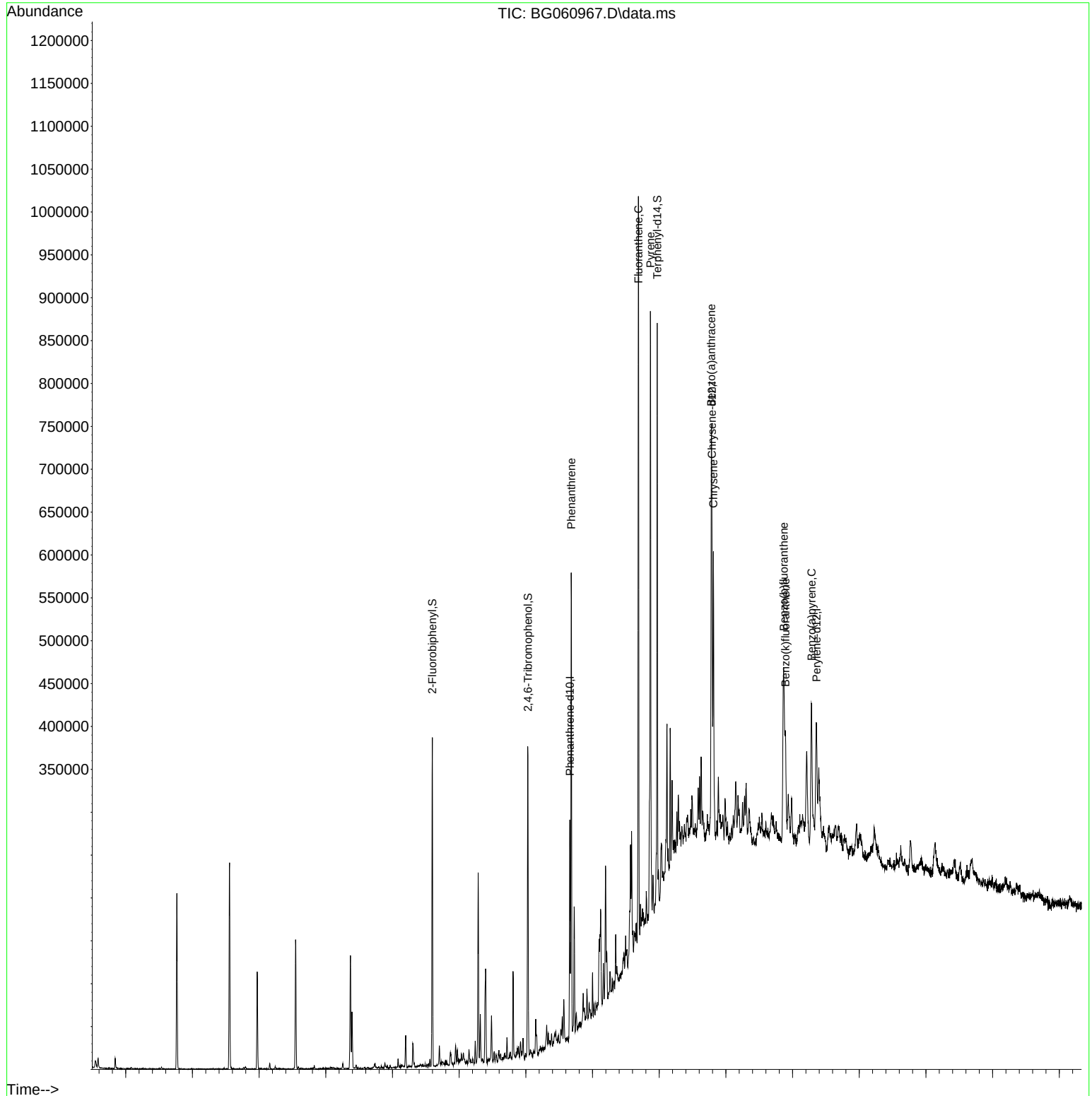
Data Path : Z:\svoasrv\HPCHEM1\BNA_G\Data\BG041924\
Data File : BG060967.D
Acq On : 19 Apr 2024 20:20
Operator : MA/JU
Sample : P2195-01 2X
Misc :
ALS Vial : 14 Sample Multiplier: 1

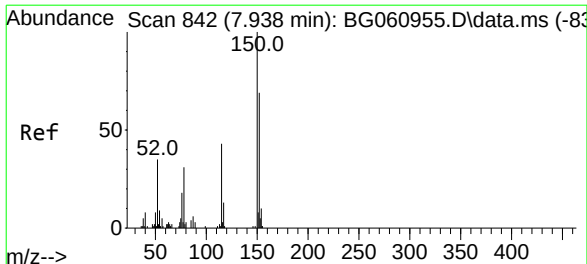
Instrument :
BNA_G
ClientSampleId :
OK-01-041824

Quant Time: Apr 19 22:44:13 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_G\Methods\8270-BG041724.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 18 02:02:19 2024
Response via : Initial Calibration

Manual Integrations
APPROVED

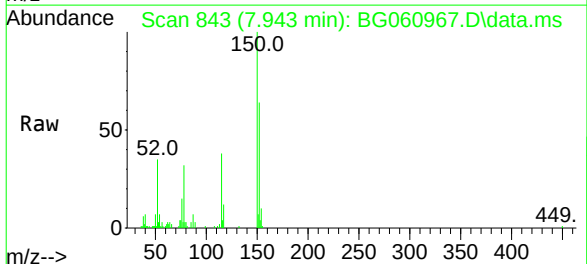
Reviewed By :Yogesh Patel 04/22/2024
Supervised By :mohammad ahmed 04/22/2024





#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 7.943 min Scan# 841
Delta R.T. 0.001 min
Lab File: BG060967.D
Acq: 19 Apr 2024 20:20

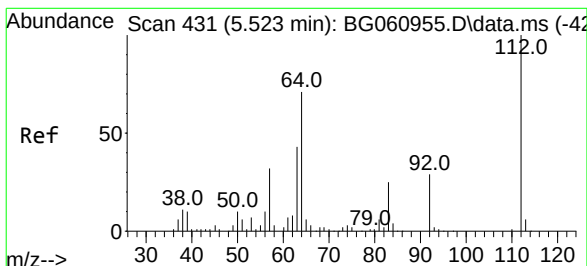
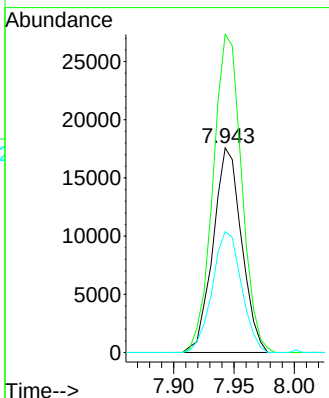
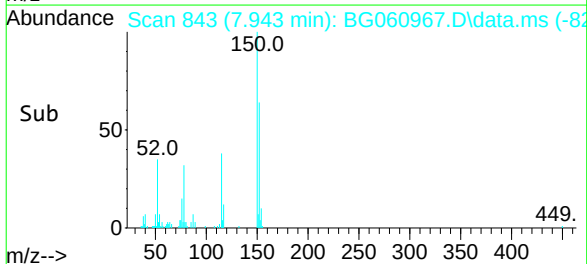
Instrument :
BNA_G
ClientSampleId :
OK-01-041824



Tgt Ion:152 Resp: 28832
Ion Ratio Lower Upper
152 100
150 155.5 125.6 188.4
115 59.1 47.1 70.7

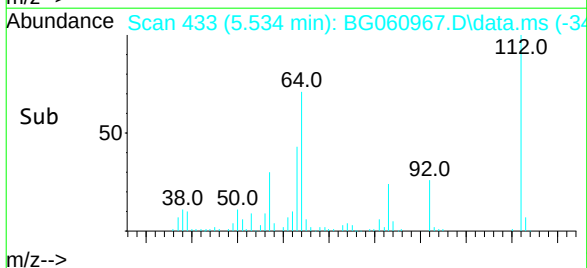
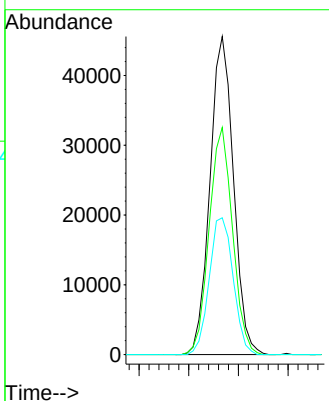
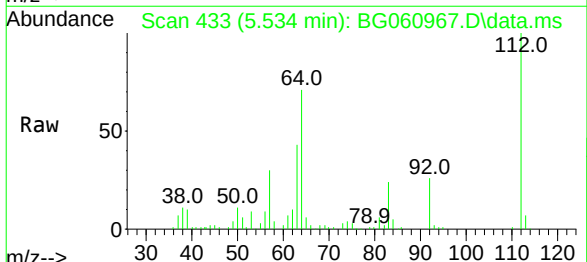
Manual Integrations
APPROVED

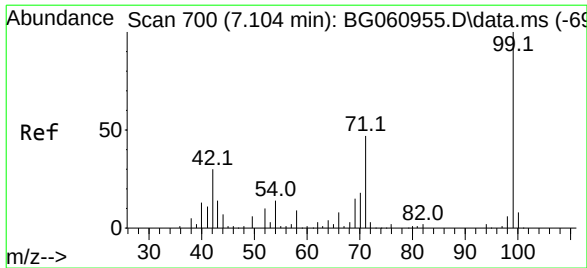
Reviewed By :Yogesh Patel 04/22/2024
Supervised By :mohammad ahmed 04/22/2024



#5
2-Fluorophenol
Concen: 45.203 ng
RT: 5.534 min Scan# 433
Delta R.T. 0.007 min
Lab File: BG060967.D
Acq: 19 Apr 2024 20:20

Tgt Ion:112 Resp: 75033
Ion Ratio Lower Upper
112 100
64 71.4 58.9 88.3
63 43.0 32.1 48.1





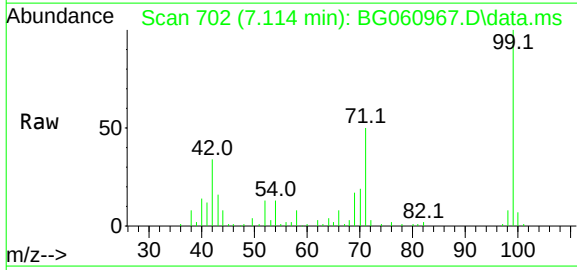
#7
Phenol-d6
Concen: 44.383 ng
RT: 7.114 min Scan# 70
Delta R.T. 0.007 min
Lab File: BG060967.D
Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

ClientSampleId :

OK-01-041824



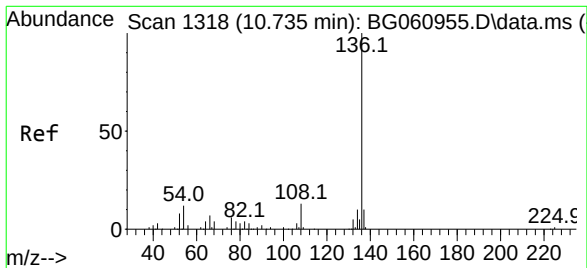
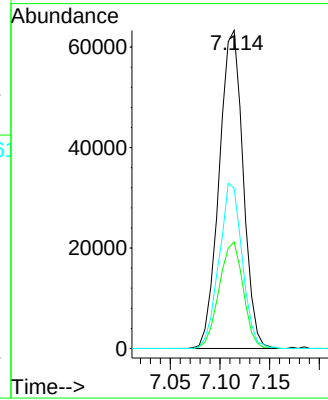
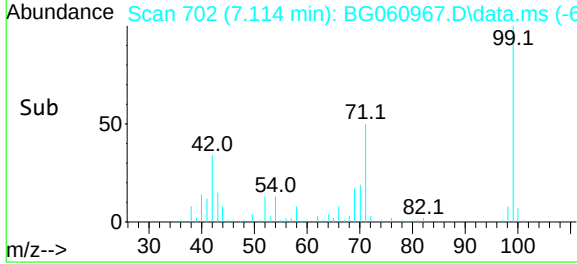
Tgt Ion: 99 Resp: 106129
Ion Ratio Lower Upper
99 100
42 33.5 22.2 33.2#
71 50.5 30.5 45.7#

Manual Integrations

APPROVED

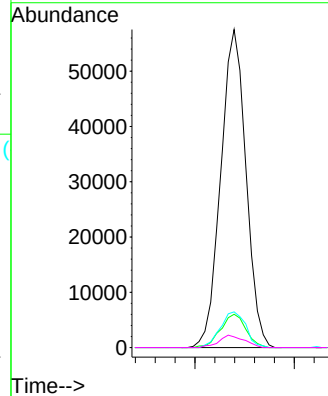
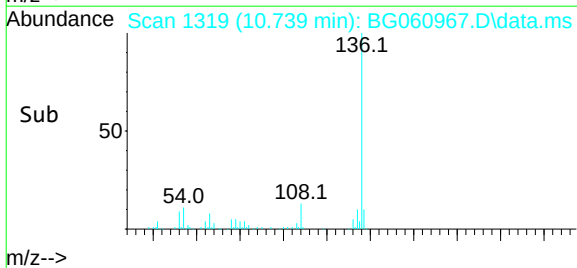
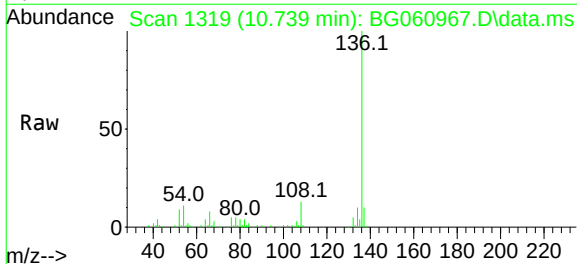
Reviewed By :Yogesh Patel 04/22/2024

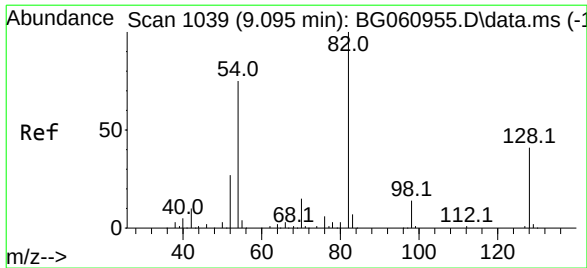
Supervised By :mohammad ahmed 04/22/2024



#21
Naphthalene-d8
Concen: 20.000 ng
RT: 10.739 min Scan# 1319
Delta R.T. 0.001 min
Lab File: BG060967.D
Acq: 19 Apr 2024 20:20

Tgt Ion:136 Resp: 101507
Ion Ratio Lower Upper
136 100
137 10.5 8.8 13.2
54 11.2 9.8 14.8
68 3.4 5.0 7.4#





#23

Nitrobenzene-d5

Concen: 34.361 ng

RT: 9.094 min Scan# 1039

Delta R.T. -0.005 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

ClientSampleId :

OK-01-041824

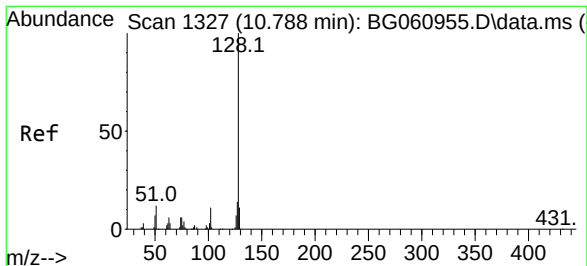
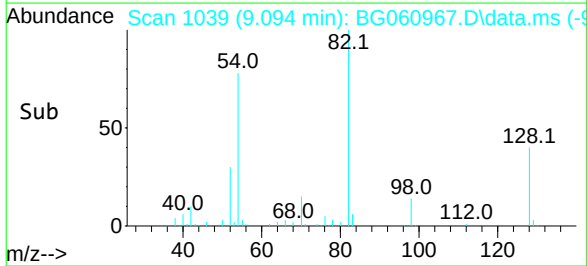
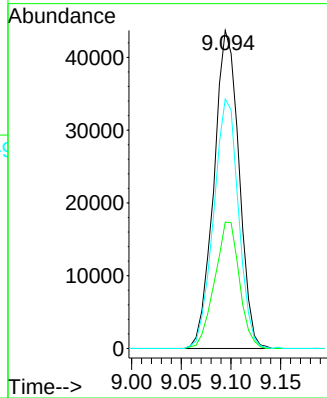
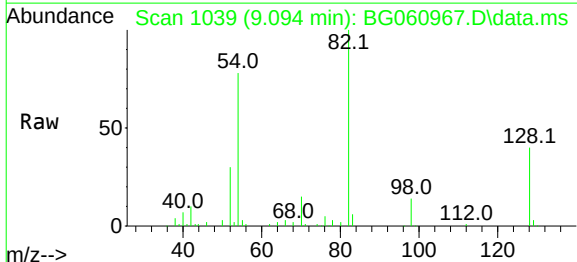
Tgt Ion:	82	Resp:	76829
Ion	Ratio	Lower	Upper
82	100		
128	39.7	31.4	47.0
54	78.4	54.2	81.4

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 04/22/2024

Supervised By :mohammad ahmed 04/22/2024



#31

Naphthalene

Concen: 8.835 ng

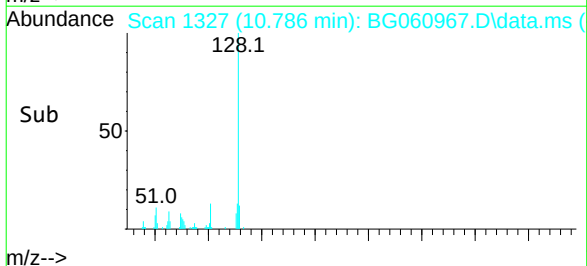
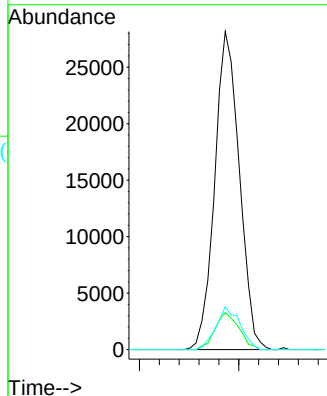
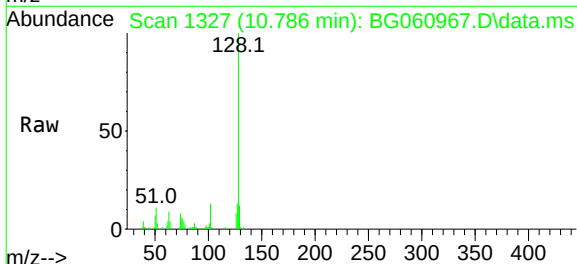
RT: 10.786 min Scan# 1327

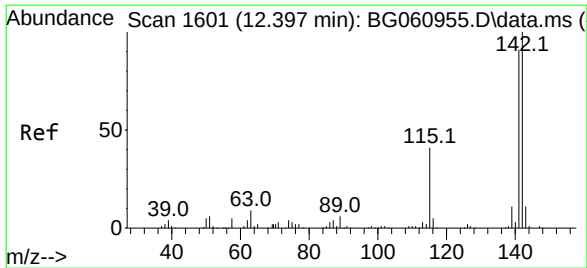
Delta R.T. -0.005 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Tgt Ion:	128	Resp:	48502
Ion	Ratio	Lower	Upper
128	100		
129	11.6	8.4	12.6
127	13.5	11.3	16.9





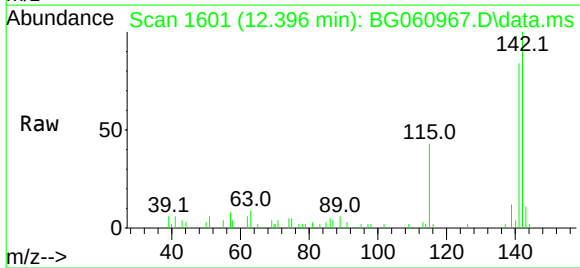
#37
2-Methylnaphthalene
Concen: 3.972 ng
RT: 12.396 min Scan# 1601
Delta R.T. 0.001 min
Lab File: BG060967.D
Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

ClientSampleId :

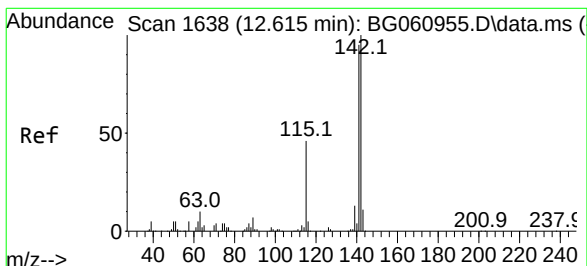
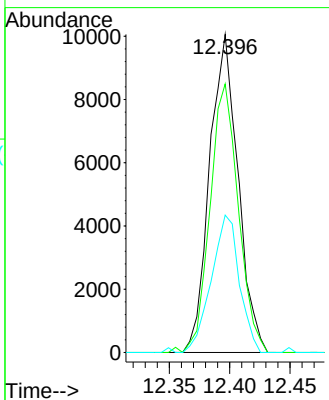
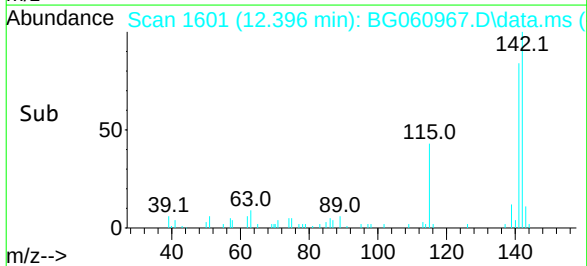
OK-01-041824



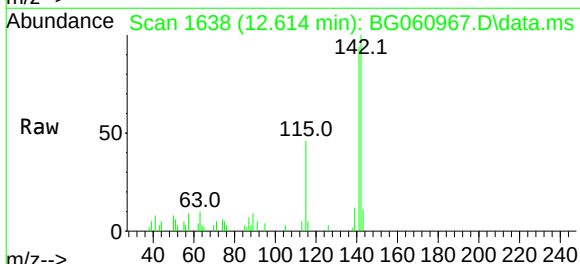
Tgt Ion:142 Resp: 16496
Ion Ratio Lower Upper
142 100
141 84.4 71.7 107.5
115 43.2 30.6 45.8

Manual Integrations
APPROVED

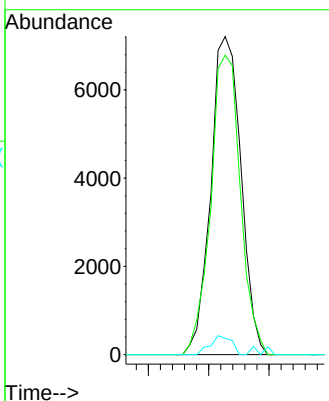
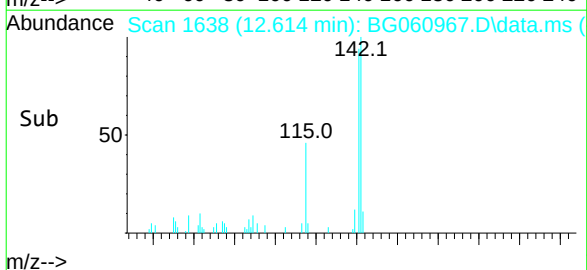
Reviewed By :Yogesh Patel 04/22/2024
Supervised By :mohammad ahmed 04/22/2024

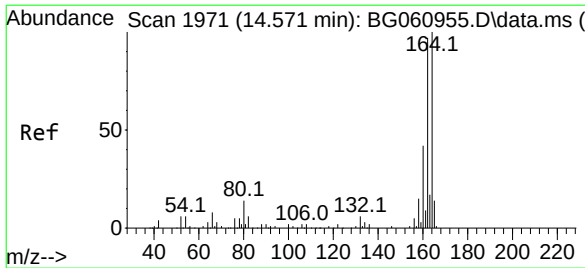


#38
1-Methylnaphthalene
Concen: 3.201 ng
RT: 12.614 min Scan# 1638
Delta R.T. 0.001 min
Lab File: BG060967.D
Acq: 19 Apr 2024 20:20



Tgt Ion:142 Resp: 12549
Ion Ratio Lower Upper
142 100
141 94.1 75.1 112.7
116 5.1 3.3 4.9#





#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 14.570 min Scan# 1971

Delta R.T. 0.001 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

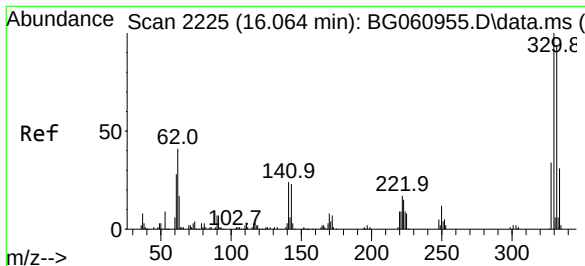
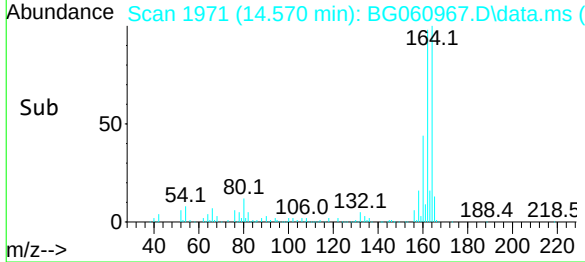
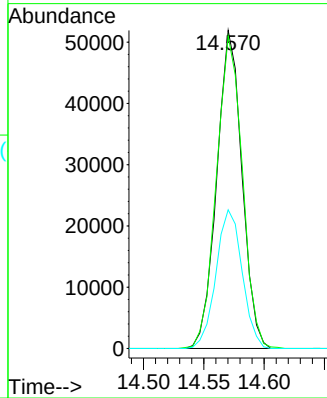
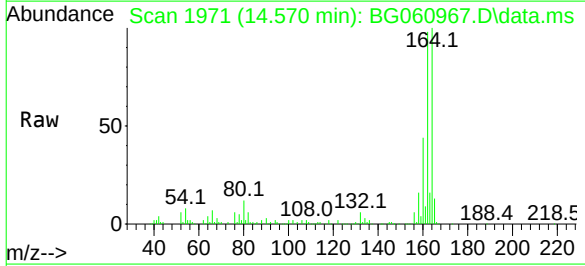
ClientSampleId :

OK-01-041824

Tgt Ion:	164	Resp:	75338
Ion	Ratio	Lower	Upper
164	100		
162	98.2	84.1	126.1
160	43.6	35.9	53.9

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 04/22/2024
Supervised By :mohammad ahmed 04/22/2024



#42

2,4,6-Tribromophenol

Concen: 59.742 ng

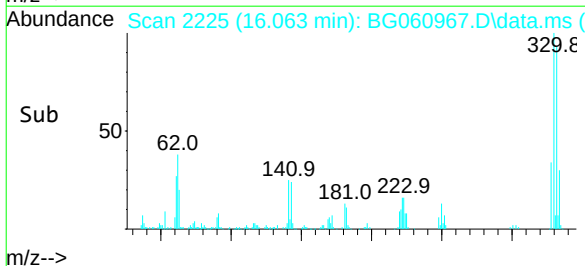
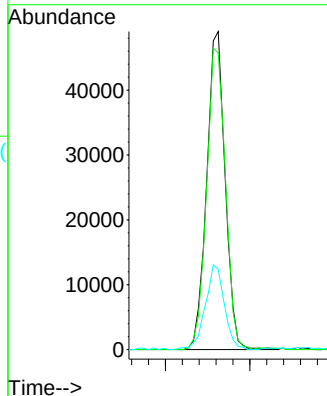
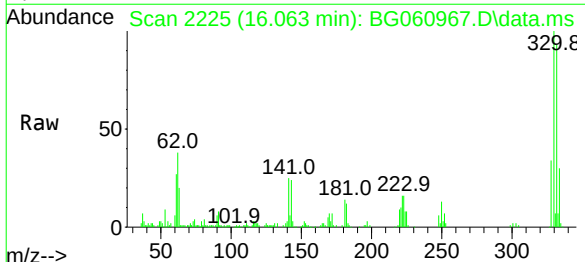
RT: 16.063 min Scan# 2225

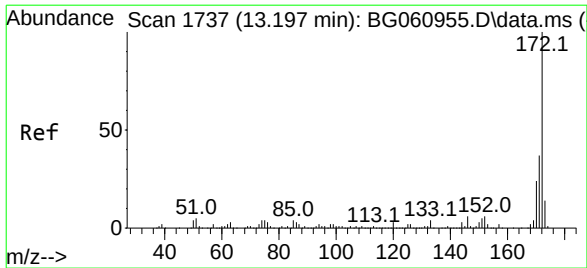
Delta R.T. 0.001 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Tgt Ion:	330	Resp:	74356
Ion	Ratio	Lower	Upper
330	100		
332	96.9	76.9	115.3
141	27.5	23.7	35.5





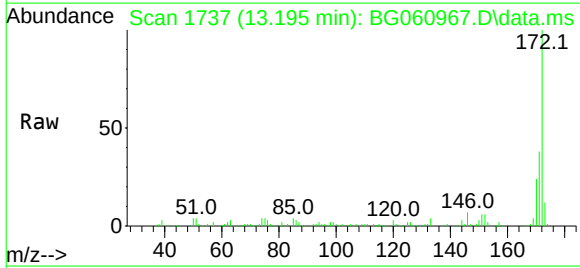
#45
2-Fluorobiphenyl
Concen: 37.147 ng
RT: 13.195 min Scan# 1737
Delta R.T. 0.001 min
Lab File: BG060967.D
Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

ClientSampleId :

OK-01-041824



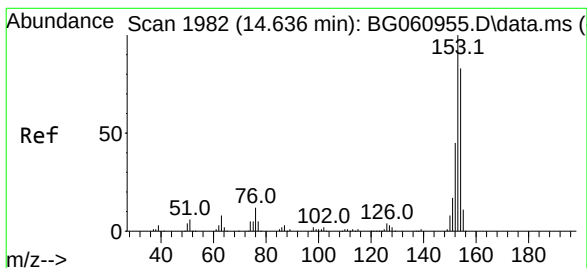
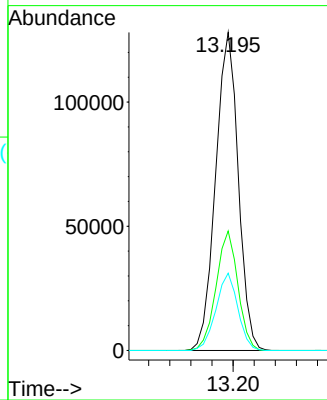
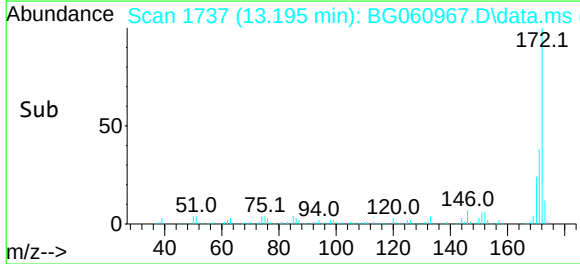
Tgt Ion:	172	Resp:	190711
Ion	Ratio	Lower	Upper
172	100		
171	37.6	29.3	43.9
170	24.3	19.5	29.3

Manual Integrations

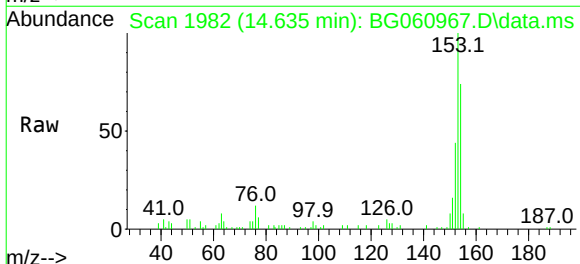
APPROVED

Reviewed By :Yogesh Patel 04/22/2024

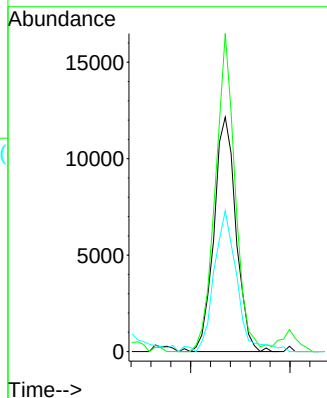
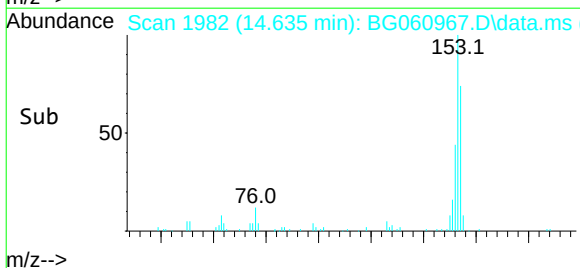
Supervised By :mohammad ahmed 04/22/2024

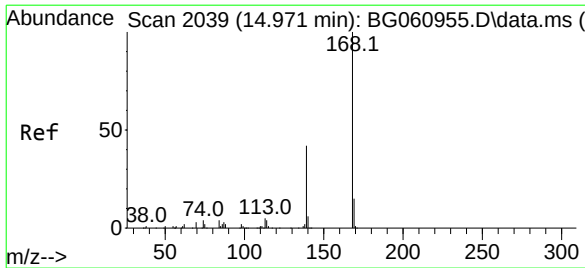


#52
Acenaphthene
Concen: 4.651 ng
RT: 14.635 min Scan# 1982
Delta R.T. 0.001 min
Lab File: BG060967.D
Acq: 19 Apr 2024 20:20



Tgt Ion:	154	Resp:	18701
Ion	Ratio	Lower	Upper
154	100		
153	135.6	91.4	137.0
152	60.0	44.1	66.1





#55

Dibenzenofuran

Concen: 3.811 ng

RT: 14.970 min Scan# 2039

Delta R.T. 0.001 min

Lab File: BG060967.D

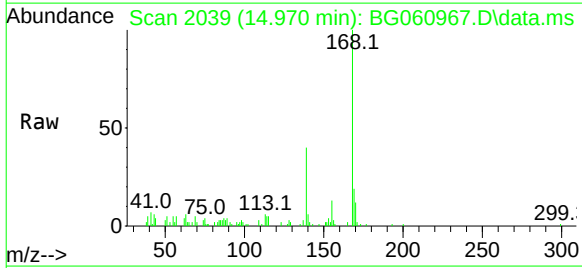
Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

ClientSampleId :

OK-01-041824



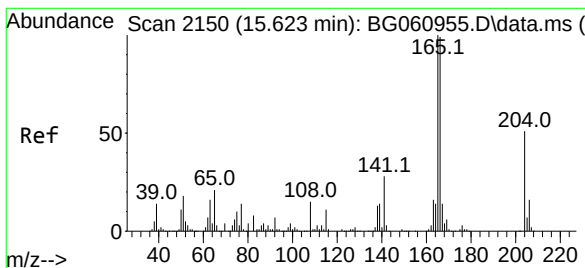
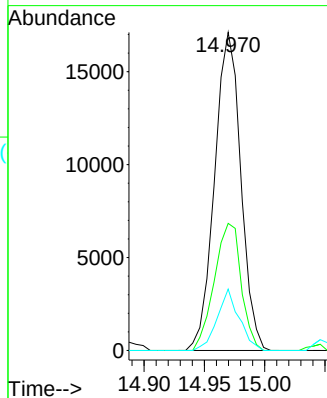
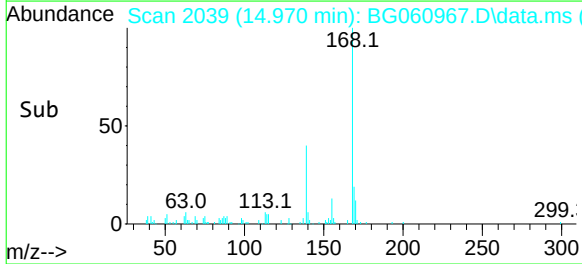
Tgt Ion:	168	Resp:	25887
Ion Ratio	Lower	Upper	
168	100		
139	40.0	29.9	44.9
169	19.3	10.6	16.0

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 04/22/2024

Supervised By :mohammad ahmed 04/22/2024



#58

Fluorene

Concen: 7.573 ng

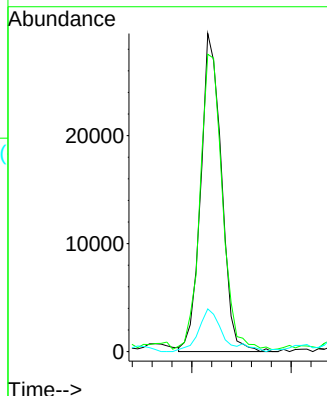
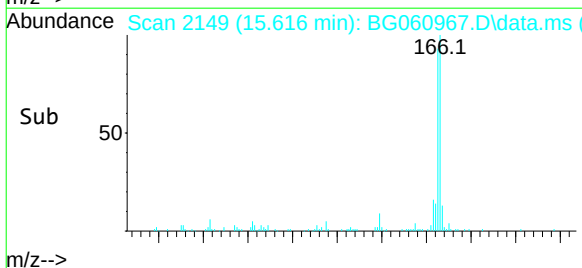
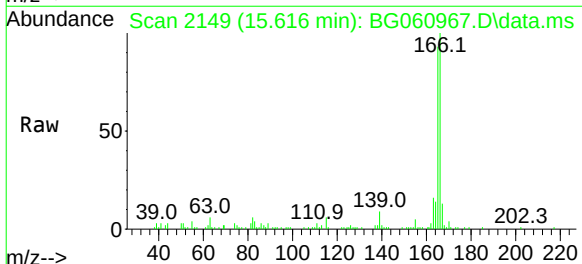
RT: 15.616 min Scan# 2149

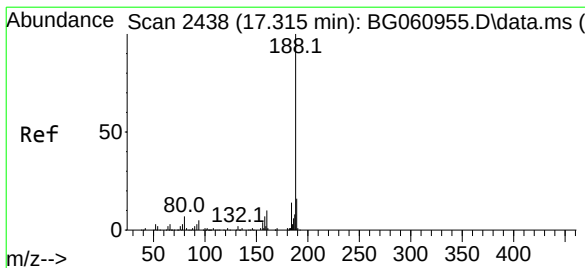
Delta R.T. -0.005 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Tgt Ion:	166	Resp:	42663
Ion Ratio	Lower	Upper	
166	100		
165	93.5	80.2	120.4
167	13.4	10.4	15.6





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 17.320 min Scan# 2438

Delta R.T. 0.001 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

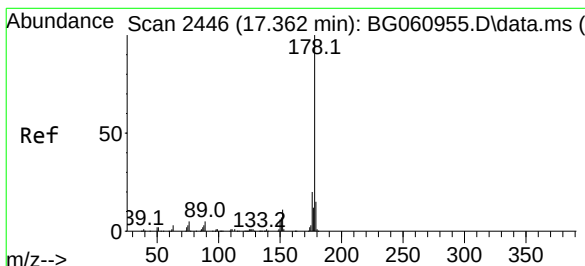
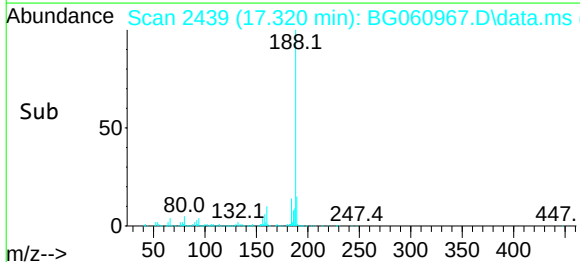
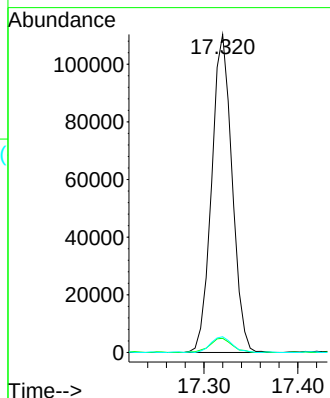
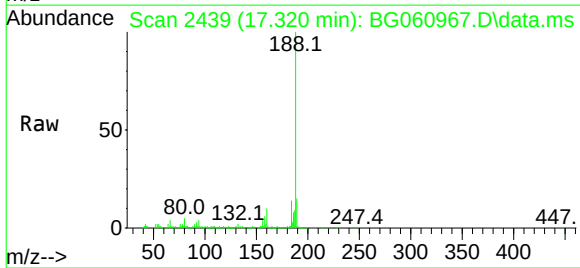
ClientSampleId :

OK-01-041824

Tgt Ion:188 Resp: 166775
 Ion Ratio Lower Upper
 188 100
 94 4.5 5.7 8.5#
 80 5.0 6.6 9.8#

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 04/22/2024
 Supervised By :mohammad ahmed 04/22/2024



#71

Phenanthrene

Concen: 40.108 ng

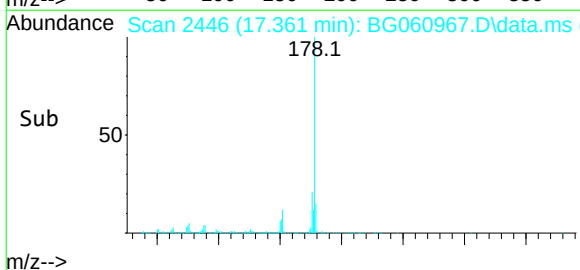
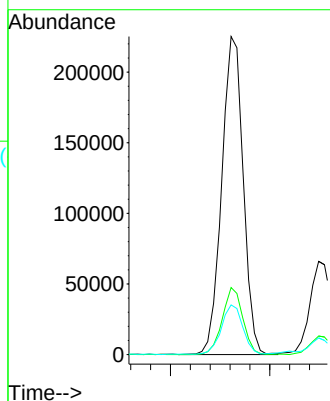
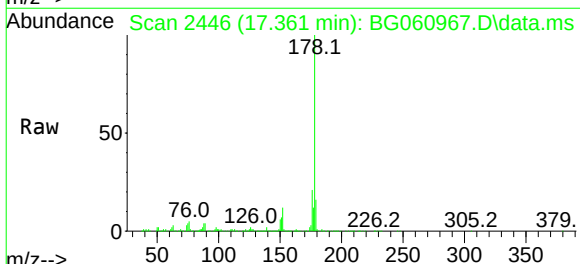
RT: 17.361 min Scan# 2446

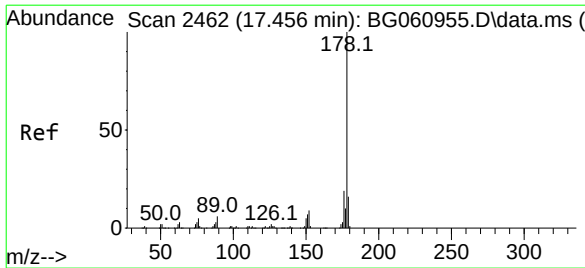
Delta R.T. 0.001 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Tgt Ion:178 Resp: 338575
 Ion Ratio Lower Upper
 178 100
 176 21.1 15.4 23.2
 179 15.6 12.0 18.0





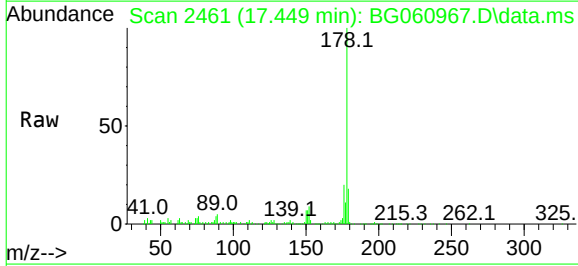
#72
 Anthracene
 Concen: 11.329 ng m
 RT: 17.449 min Scan# 2461
 Delta R.T. -0.005 min
 Lab File: BG060967.D
 Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

ClientSampleId :

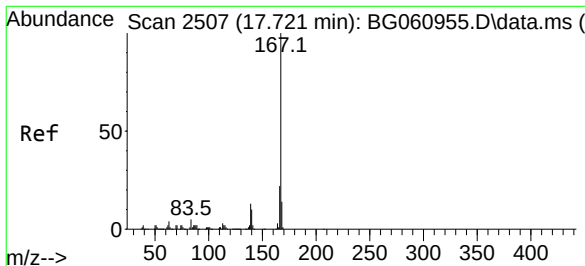
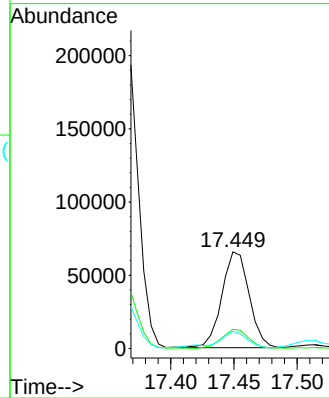
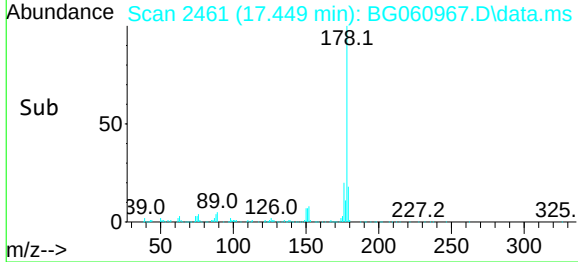
OK-01-041824



Tgt Ion:178 Resp: 98240
 Ion Ratio Lower Upper
 178 100
 176 19.9 15.0 22.4
 179 17.9 11.6 17.4#

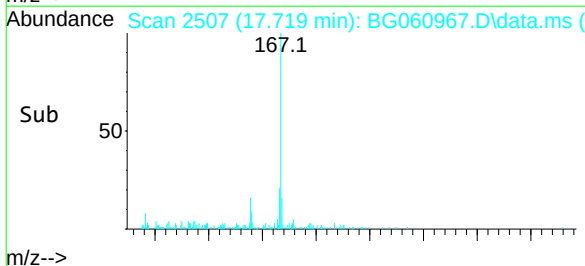
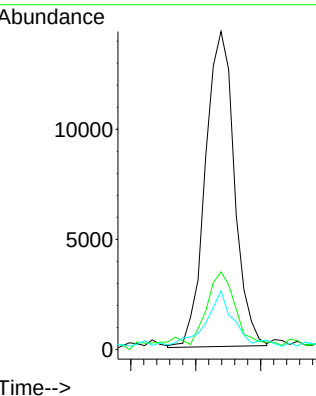
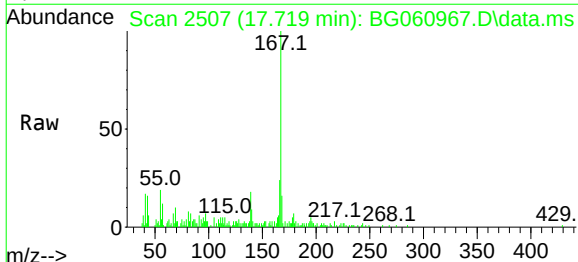
Manual Integrations
 APPROVED

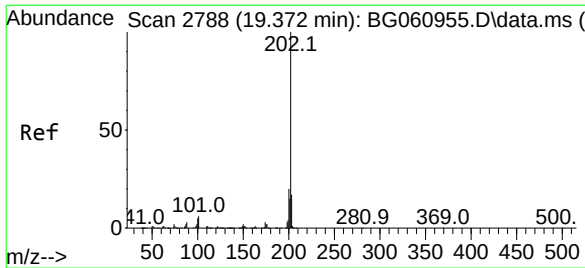
Reviewed By :Yogesh Patel 04/22/2024
 Supervised By :mohammad ahmed 04/22/2024



#73
 Carbazole
 Concen: 2.941 ng
 RT: 17.719 min Scan# 2507
 Delta R.T. 0.001 min
 Lab File: BG060967.D
 Acq: 19 Apr 2024 20:20

Tgt Ion:167 Resp: 22216
 Ion Ratio Lower Upper
 167 100
 166 24.5 18.4 27.6
 139 18.4 10.1 15.1#





#75

Fluoranthene

Concen: 50.381 ng

RT: 19.376 min Scan# 27

Delta R.T. 0.007 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

ClientSampleId :

OK-01-041824

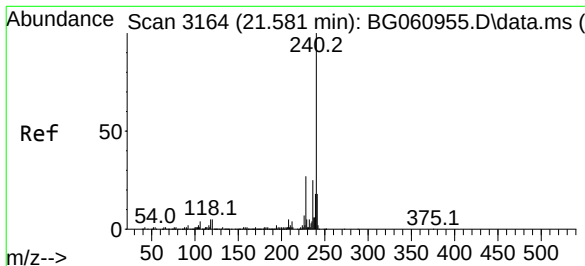
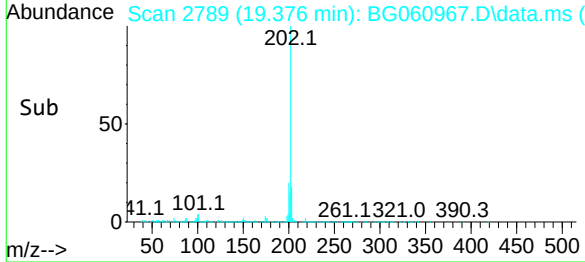
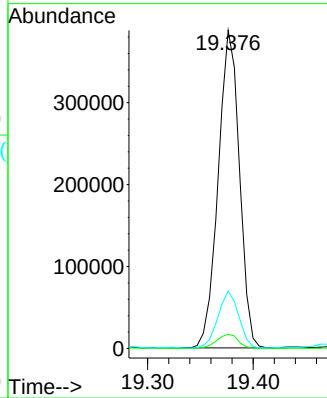
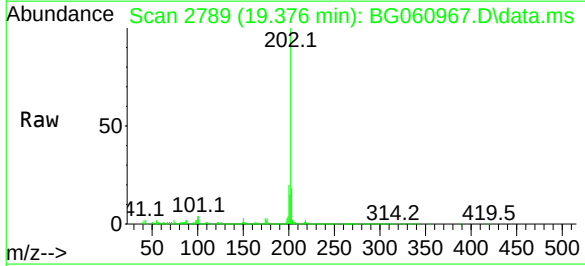
Tgt Ion:	202	Resp:	541336
Ion	Ratio	Lower	Upper
202	100		
101	4.5	0.0	28.6
203	18.0	0.0	37.3

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 04/22/2024

Supervised By :mohammad ahmed 04/22/2024



#76

Chrysene-d12

Concen: 20.000 ng

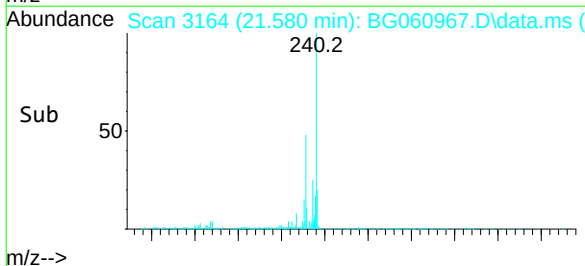
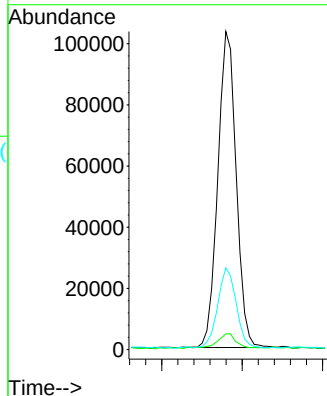
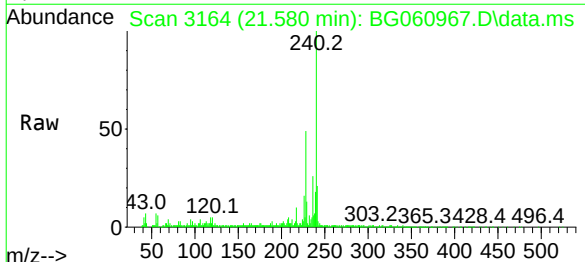
RT: 21.580 min Scan# 3164

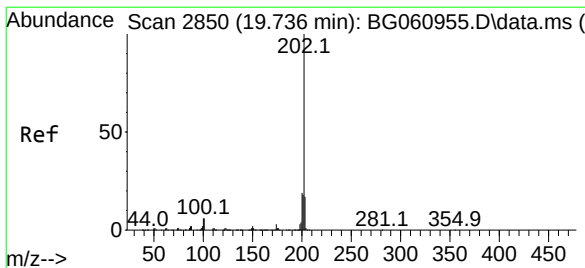
Delta R.T. 0.001 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Tgt Ion:	240	Resp:	164036
Ion	Ratio	Lower	Upper
240	100		
120	5.0	5.7	8.5#
236	25.7	21.1	31.7





#78

Pyrene

Concen: 43.855 ng

RT: 19.735 min Scan# 2850

Delta R.T. 0.001 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

ClientSampleId :

OK-01-041824

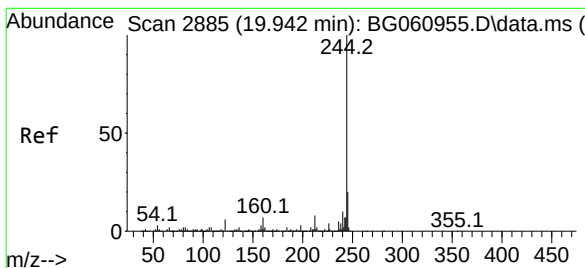
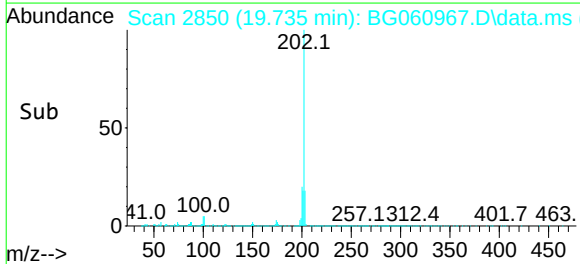
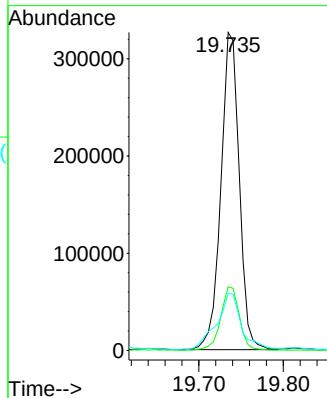
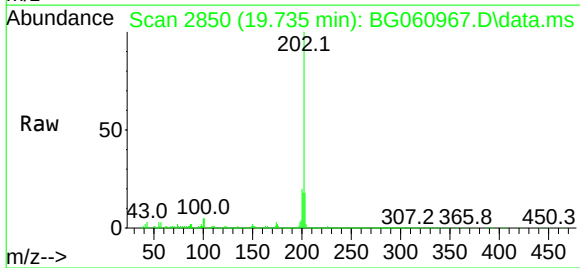
Tgt	Ion:202	Resp:	493485
Ion	Ratio	Lower	Upper
202	100		
200	20.0	16.7	25.1
203	18.0	13.8	20.8

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 04/22/2024

Supervised By :mohammad ahmed 04/22/2024



#79

Terphenyl-d14

Concen: 34.519 ng

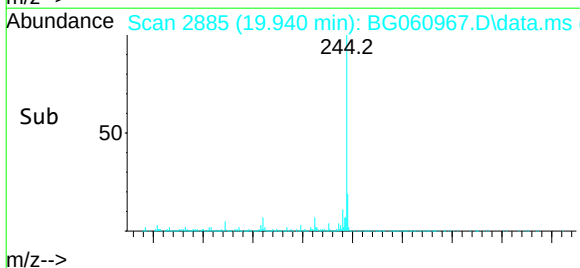
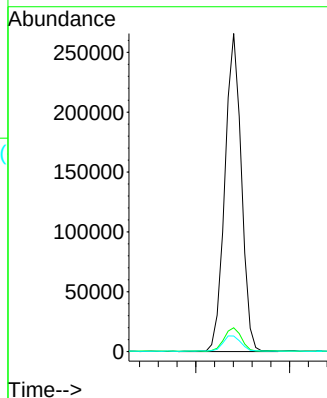
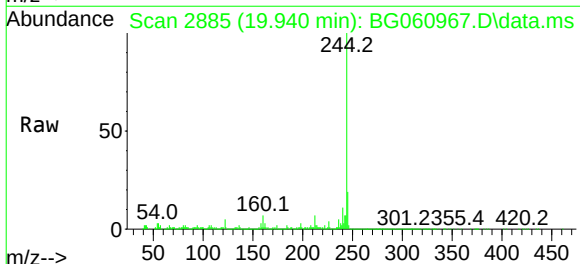
RT: 19.940 min Scan# 2885

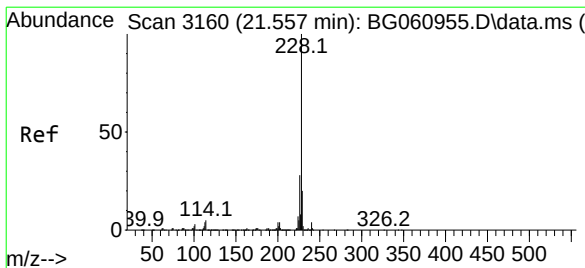
Delta R.T. 0.001 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Tgt	Ion:244	Resp:	324445
Ion	Ratio	Lower	Upper
244	100		
212	7.5	6.2	9.4
122	4.9	6.6	9.8





#81

Benzo(a)anthracene

Concen: 24.017 ng

RT: 21.562 min Scan# 31

Delta R.T. 0.001 min

Lab File: BG060967.D

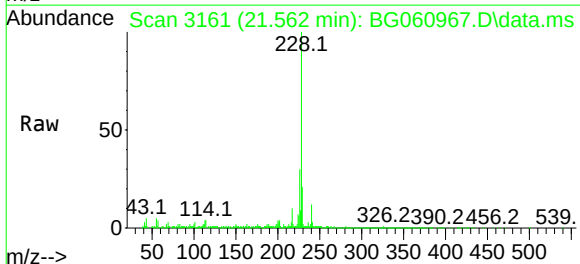
Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

ClientSampleId :

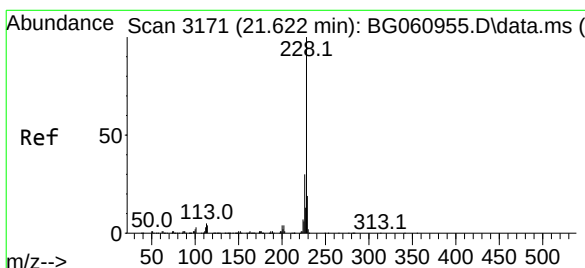
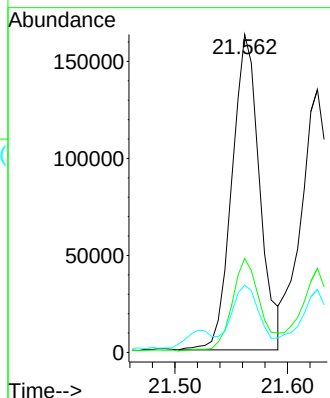
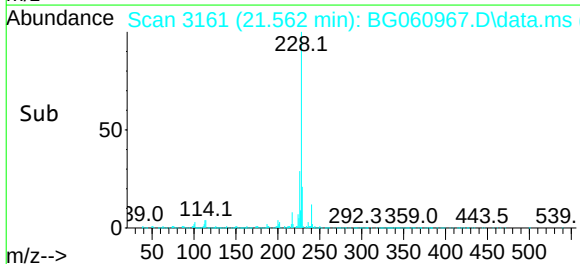
OK-01-041824



Tgt Ion:	228	Resp:	278197
Ion Ratio	Lower	Upper	
228	100		
226	29.6	22.0	33.0
229	21.2	15.6	23.4

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 04/22/2024
Supervised By :mohammad ahmed 04/22/2024



#83

Chrysene

Concen: 21.474 ng m

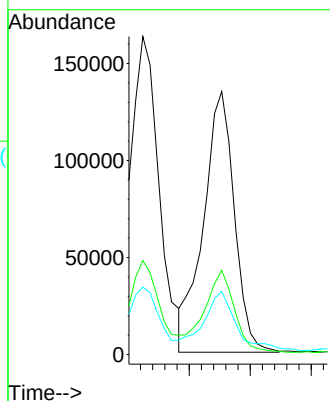
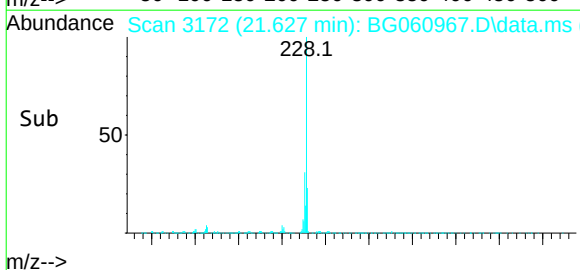
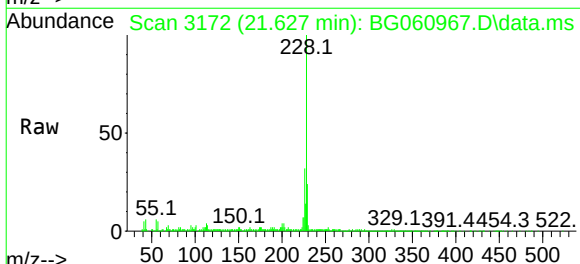
RT: 21.627 min Scan# 3172

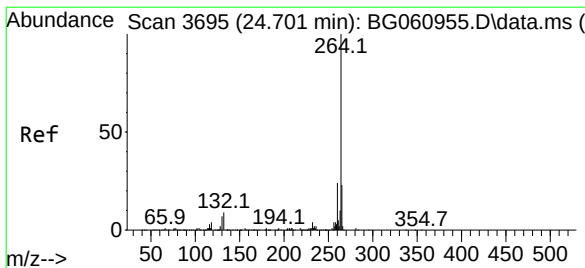
Delta R.T. 0.001 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Tgt Ion:	228	Resp:	237494
Ion Ratio	Lower	Upper	
228	100		
226	32.0	24.4	36.6
229	24.0	15.6	23.4#





#86

Perylene-d12

Concen: 20.000 ng

RT: 24.717 min Scan# 3698

Delta R.T. 0.019 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

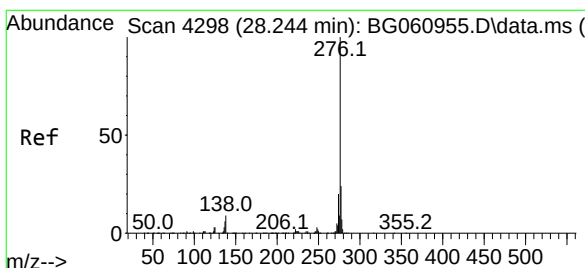
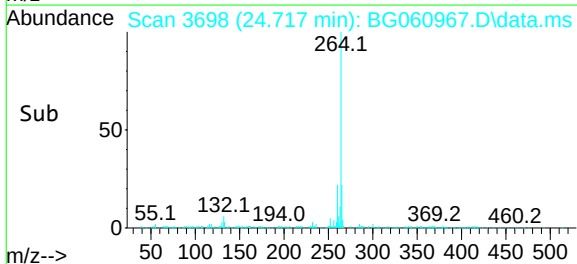
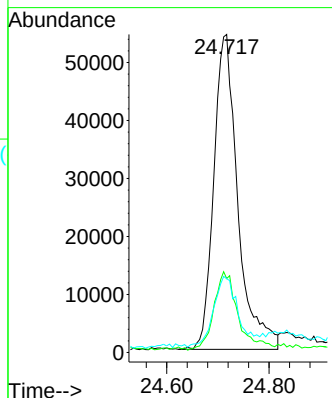
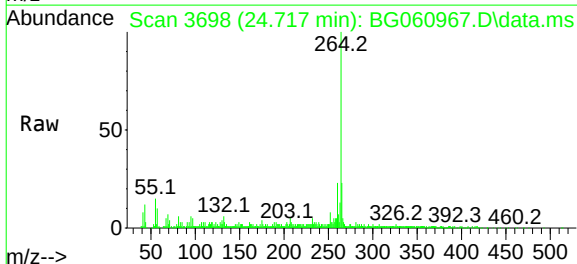
ClientSampleId :

OK-01-041824

Tgt	Ion:264	Resp:	177442
Ion	Ratio	Lower	Upper
264	100		
260	23.2	19.6	29.4
265	23.2	16.6	25.0

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 04/22/2024
Supervised By :mohammad ahmed 04/22/2024



#87

Indeno(1,2,3-cd)pyrene

Concen: 7.922 ng m

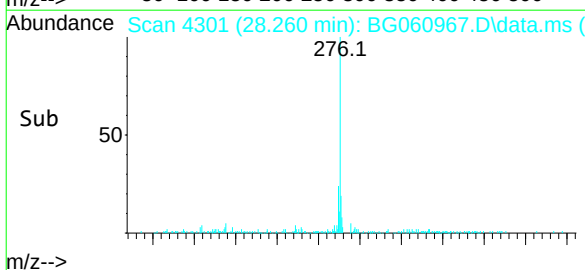
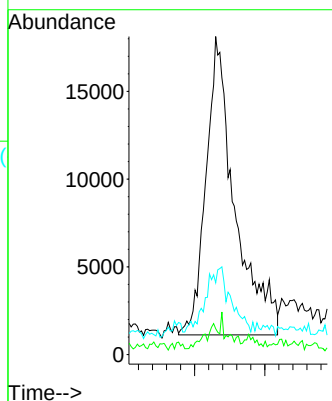
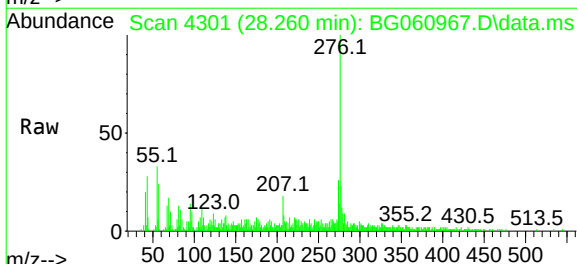
RT: 28.260 min Scan# 4301

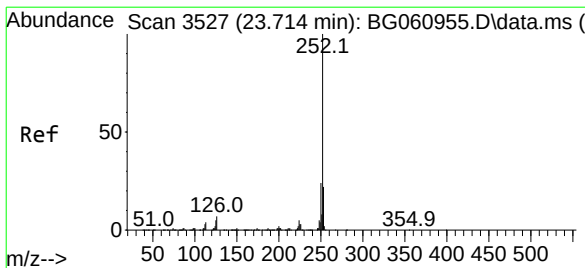
Delta R.T. 0.013 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Tgt	Ion:276	Resp:	97201
Ion	Ratio	Lower	Upper
276	100		
138	1.4	10.8	16.2#
277	0.0	20.3	30.5#





#88

Benzo(b)fluoranthene

Concen: 27.413 ng

RT: 23.736 min Scan# 3527

Delta R.T. 0.019 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

ClientSampleId :

OK-01-041824

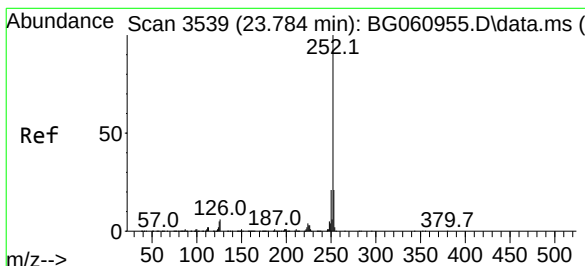
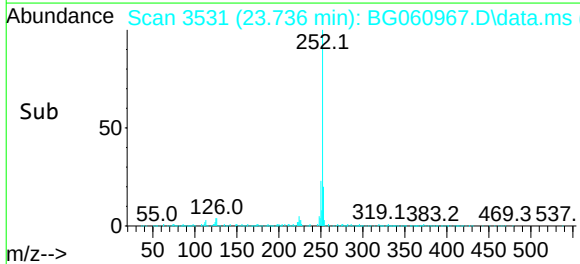
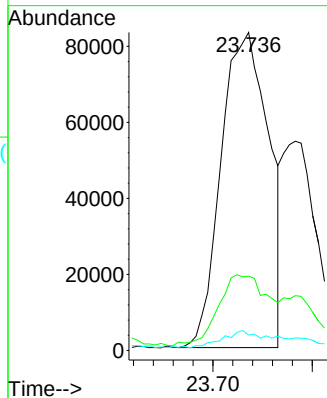
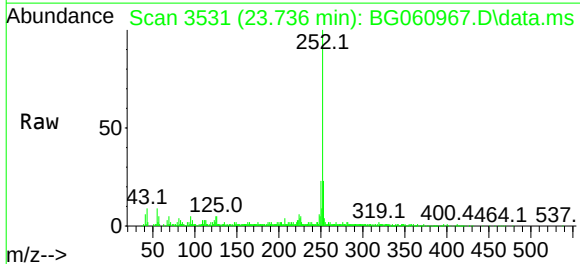
Tgt	Ion:252	Resp:	275209
Ion	Ratio	Lower	Upper
252	100		
253	23.4	16.8	25.2
125	4.8	5.6	8.4

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 04/22/2024

Supervised By :mohammad ahmed 04/22/2024



#89

Benzo(k)fluoranthene

Concen: 11.174 ng m

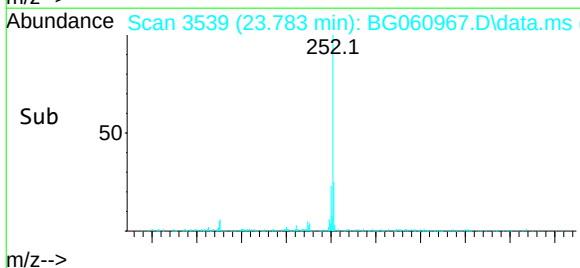
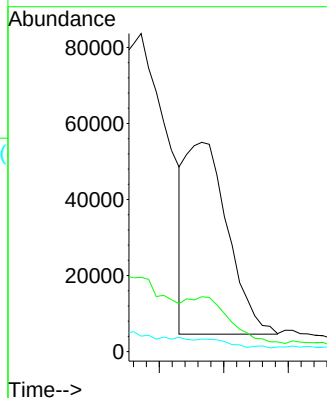
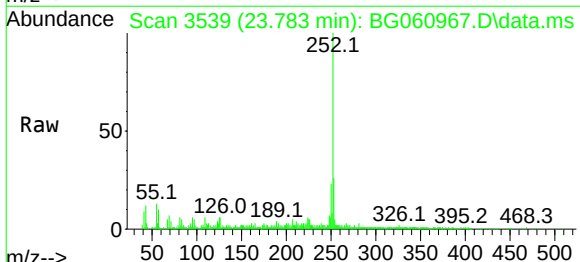
RT: 23.783 min Scan# 3539

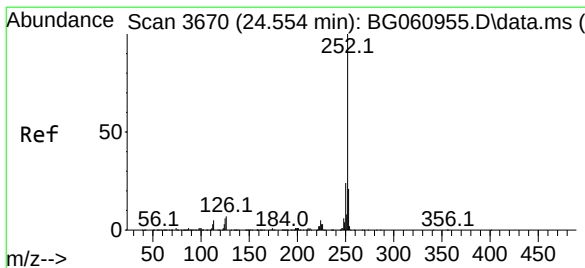
Delta R.T. 0.001 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Tgt	Ion:252	Resp:	114764
Ion	Ratio	Lower	Upper
252	100		
253	26.2	17.9	26.9
125	6.0	5.8	8.8





#90

Benzo(a)pyrene

Concen: 22.047 ng

RT: 24.570 min Scan# 36

Delta R.T. 0.019 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Instrument :

BNA_G

ClientSampleId :

OK-01-041824

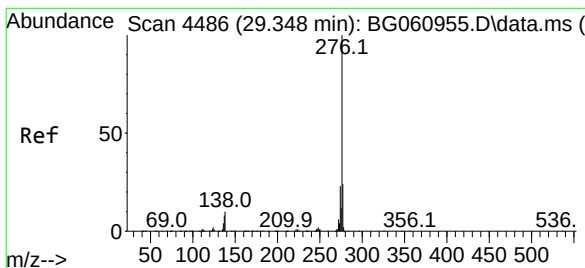
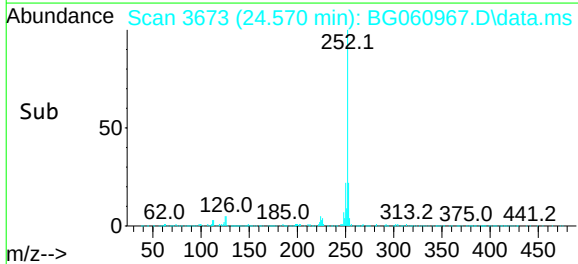
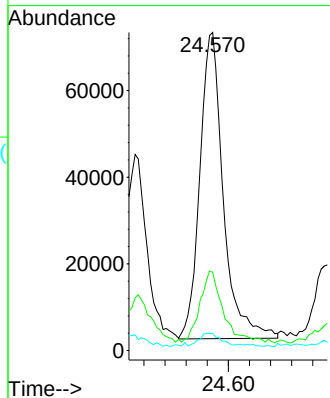
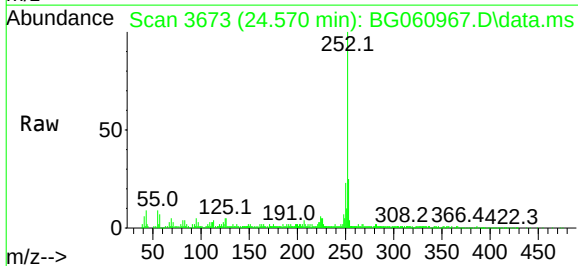
Tgt	Ion:252	Resp:	218221
Ion	Ratio	Lower	Upper
252	100		
253	24.6	17.1	25.7
125	5.3	6.1	9.1#

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 04/22/2024

Supervised By :mohammad ahmed 04/22/2024



#92

Benzo(g,h,i)perylene

Concen: 7.908 ng m

RT: 29.370 min Scan# 4490

Delta R.T. 0.019 min

Lab File: BG060967.D

Acq: 19 Apr 2024 20:20

Tgt	Ion:276	Resp:	78086
Ion	Ratio	Lower	Upper
276	100		
277	30.7	18.3	27.5#
138	8.4	12.2	18.4#

