

Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG121522\  
 Data File : BG055988.D  
 Acq On : 15 Dec 2022 22:37  
 Operator : CG/JU  
 Sample : N6037-02 5X  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 RB-17-(1-3)

Manual Integrations  
 APPROVED

Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022

Quant Time: Dec 16 04:08:10 2022  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG121322.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 14 02:24:06 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	8.387	152	11695	20.000	ng	0.01	
21) Naphthalene-d8	11.219	136	43375	20.000	ng	# 0.01	
39) Acenaphthene-d10	14.991	164	33468	20.000	ng	0.01	
64) Phenanthrene-d10	17.735	188	75738	20.000	ng	0.02	
76) Chrysene-d12	22.048	240	79195	20.000	ng	0.02	
86) Perylene-d12	25.561	264	60033	20.000	ng	# 0.05	
System Monitoring Compounds							
5) 2-Fluorophenol	5.896	112	9330	18.709	ng	0.01	
7) Phenol-d6	7.506	99	13521	21.081	ng	0.01	
23) Nitrobenzene-d5	9.550	82	9176	14.784	ng	0.00	
42) 2,4,6-Tribromophenol	16.466	330	11663	14.452	ng	0.01	
45) 2-Fluorobiphenyl	13.616	172	31745	13.303	ng	0.00	
79) Terphenyl-d14	20.303	244	53167	11.865	ng	0.01	
Target Compounds							
37) 2-Methylnaphthalene	12.847	142	27847	13.772	ng		Qvalue 99
38) 1-Methylnaphthalene	13.058	142	23947	12.157	ng		97
46) 1,1'-Biphenyl	13.828	154	9943	4.383	ng		98
52) Acenaphthene	15.056	154	39580	20.038	ng		95
55) Dibenzofuran	15.385	168	16239	4.889	ng	#	94
58) Fluorene	16.031	166	55849	20.569	ng		96
71) Phenanthrene	17.788	178	1109406	279.513	ng		98
72) Anthracene	17.864	178	158971	40.485	ng		99
75) Fluoranthene	19.768	202	550565	99.060	ng		98
78) Pyrene	20.132	202	829505	173.097	ng		99
81) Benzo(a)anthracene	22.024	228	341770	61.328	ng		99
83) Chrysene	22.100	228	343226	65.716	ng		98
87) Indeno(1,2,3-cd)pyrene	29.592	276	32957m	6.827	ng		
88) Benzo(b)fluoranthene	24.445	252	139522	35.911	ng	#	94
89) Benzo(k)fluoranthene	24.498	252	95848m	24.726	ng		
90) Benzo(a)pyrene	25.391	252	120785	36.778	ng		97
91) Dibenzo(a,h)anthracene	29.645	278	12543m	3.104	ng		
92) Benzo(g,h,i)perylene	30.872	276	25016m	6.403	ng		

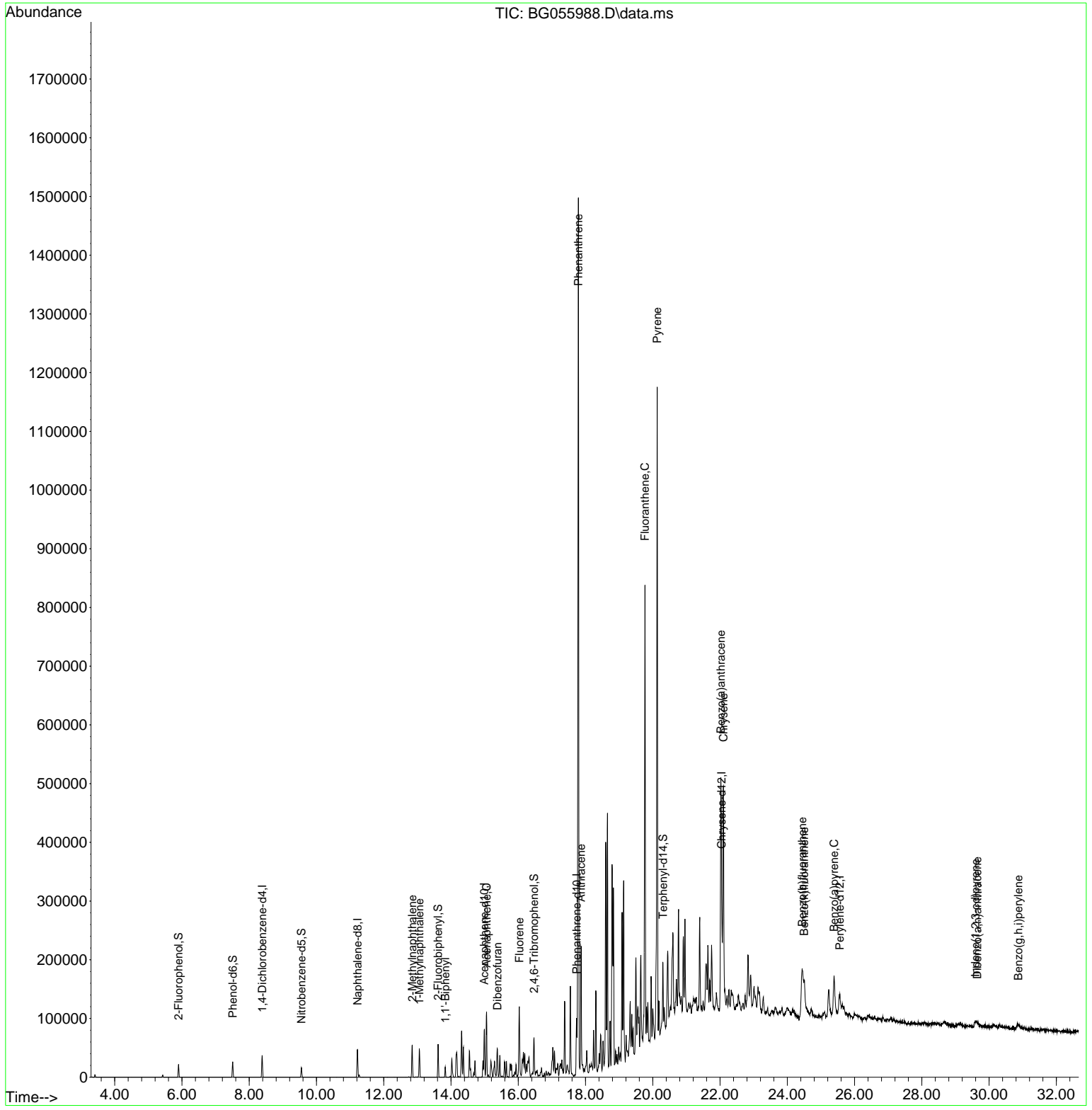
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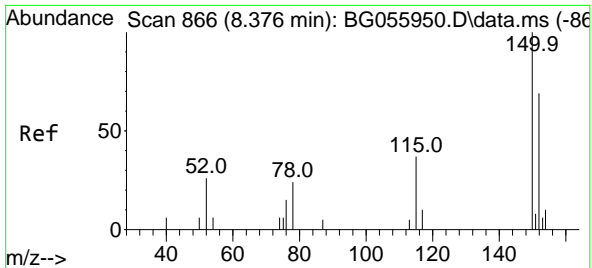
Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG121522\  
 Data File : BG055988.D  
 Acq On : 15 Dec 2022 22:37  
 Operator : CG/JU  
 Sample : N6037-02 5X  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

**Instrument :**  
 BNA\_G  
**ClientSampleId :**  
 RB-17-(1-3)

Quant Time: Dec 16 04:08:10 2022  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG121322.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 14 02:24:06 2022  
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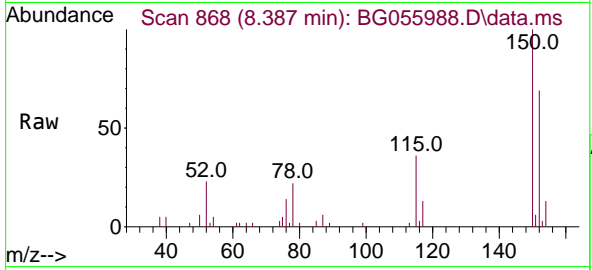
**Manual Integrations**  
**APPROVED**  
 Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022





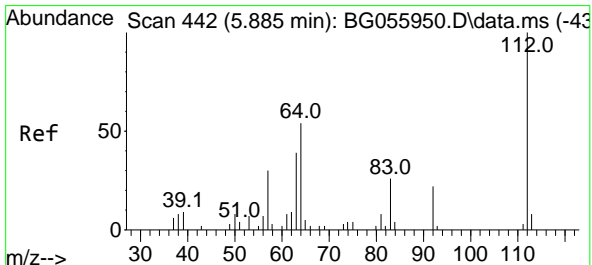
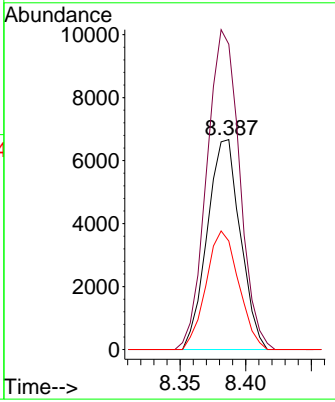
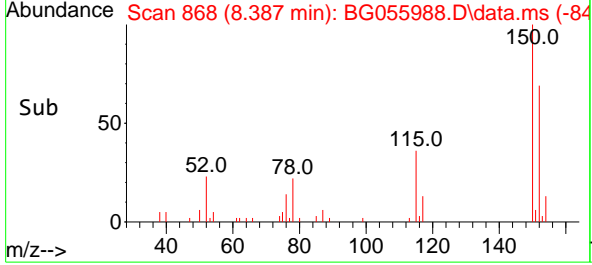
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 8.387 min Scan# 866  
 Delta R.T. 0.011 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument : BNA\_G  
 ClientSampleId : RB-17-(1-3)

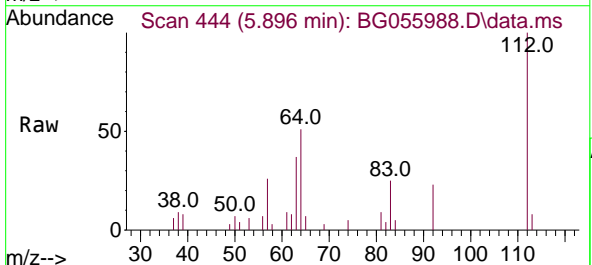


Tgt Ion:152 Resp: 11695  
 Ion Ratio Lower Upper  
 152 100  
 150 145.4 115.7 173.5  
 115 51.7 43.0 64.4

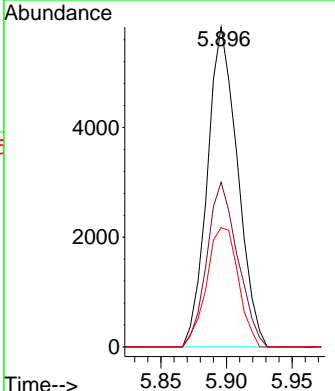
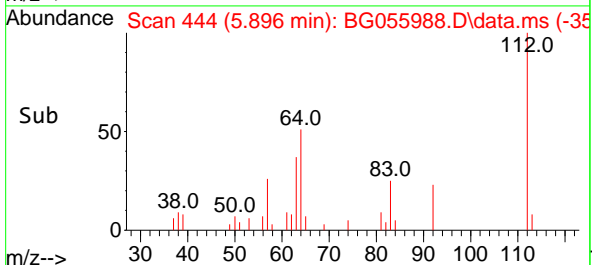
Manual Integrations  
**APPROVED**  
 Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022

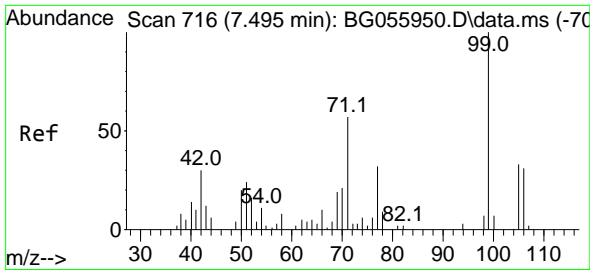


#5  
 2-Fluorophenol  
 Concen: 18.709 ng  
 RT: 5.896 min Scan# 444  
 Delta R.T. 0.011 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37



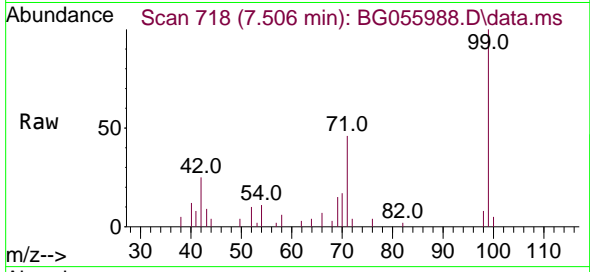
Tgt Ion:112 Resp: 9330  
 Ion Ratio Lower Upper  
 112 100  
 64 51.5 43.0 64.4  
 63 37.3 31.4 47.2





#7  
 Phenol-d6  
 Concen: 21.081 ng  
 RT: 7.506 min Scan# 71  
 Delta R.T. 0.011 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

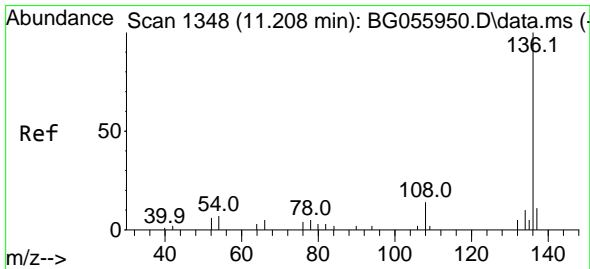
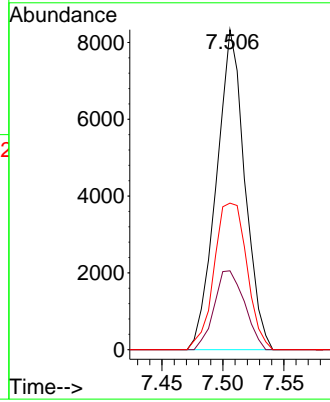
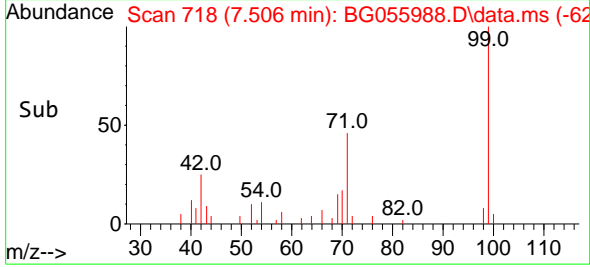
Instrument :  
 BNA\_G  
 ClientSampleId :  
 RB-17-(1-3)



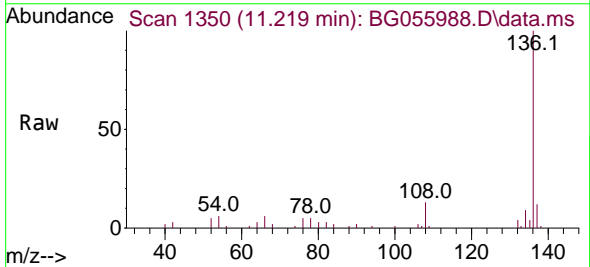
Tgt Ion: 99 Resp: 1352  
 Ion Ratio Lower Upper  
 99 100  
 42 24.6 24.3 36.5  
 71 45.8 45.6 68.4

Manual Integrations  
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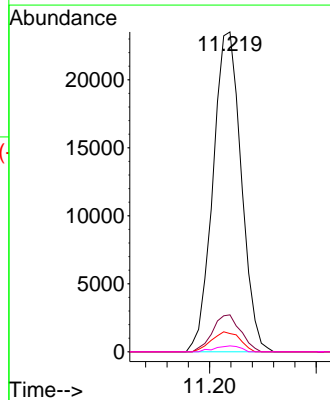
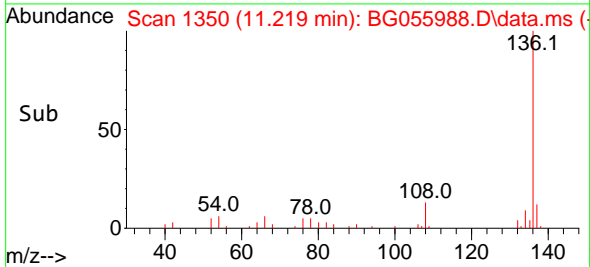
Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022

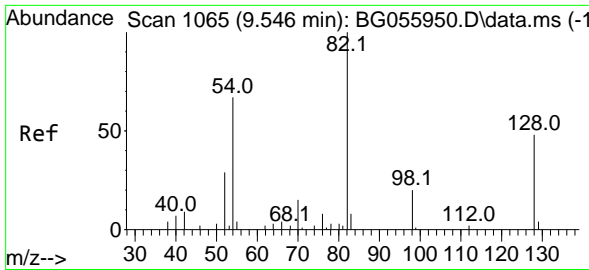


#21  
 Naphthalene-d8  
 Concen: 20.000 ng  
 RT: 11.219 min Scan# 1350  
 Delta R.T. 0.011 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37



Tgt Ion:136 Resp: 43375  
 Ion Ratio Lower Upper  
 136 100  
 137 11.6 9.2 13.8  
 54 5.7 5.6 8.4  
 68 1.9 0.0 0.0#





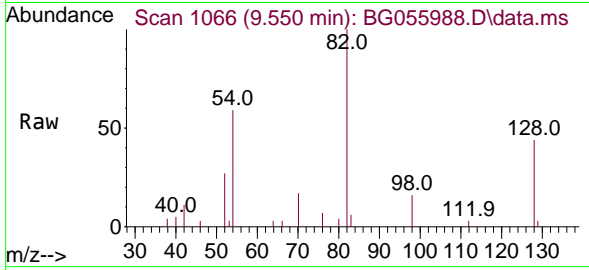
#23  
 Nitrobenzene-d5  
 Concen: 14.784 ng  
 RT: 9.550 min Scan# 1066  
 Delta R.T. 0.005 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument :

BNA\_G

ClientSampleId :

RB-17-(1-3)

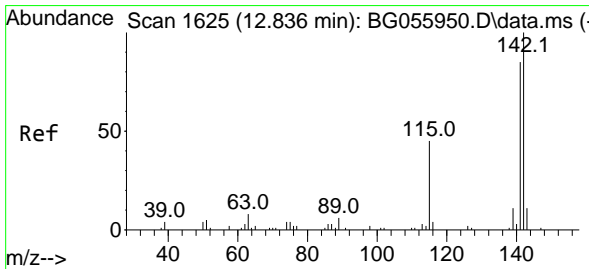
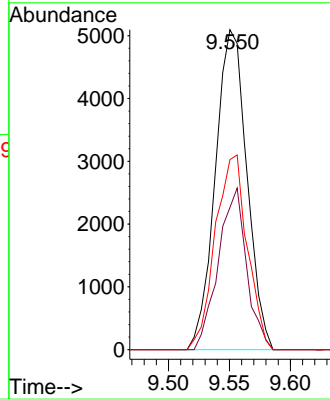
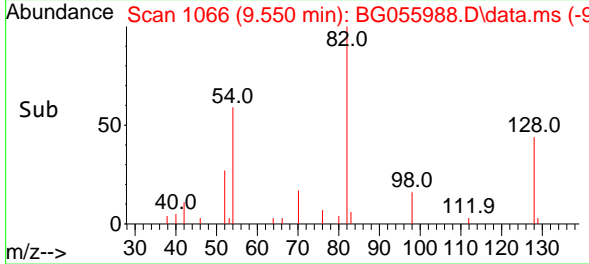


Tgt Ion: 82 Resp: 9176  
 Ion Ratio Lower Upper  
 82 100  
 128 44.4 38.4 57.6  
 54 59.4 53.3 79.9

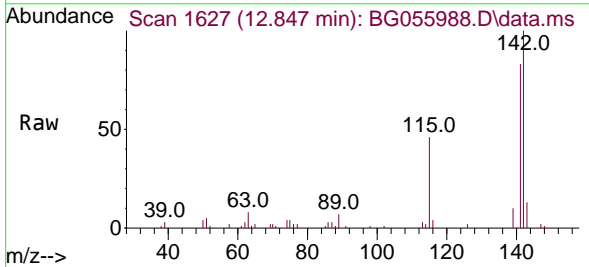
Manual Integrations

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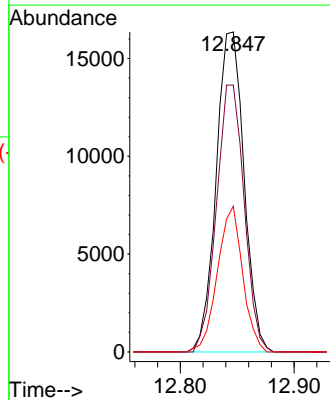
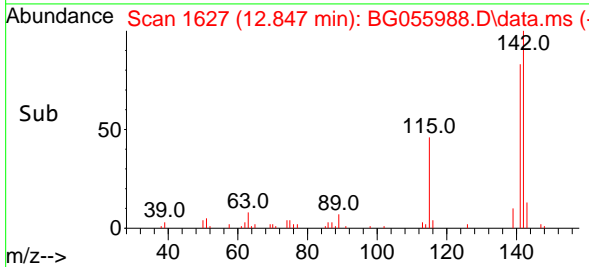
Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022

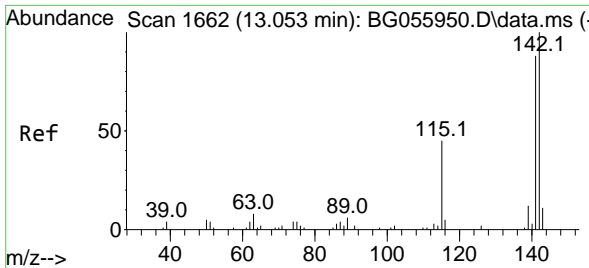


#37  
 2-Methylnaphthalene  
 Concen: 13.772 ng  
 RT: 12.847 min Scan# 1627  
 Delta R.T. 0.011 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37



Tgt Ion:142 Resp: 27847  
 Ion Ratio Lower Upper  
 142 100  
 141 83.4 67.8 101.6  
 115 45.5 35.7 53.5





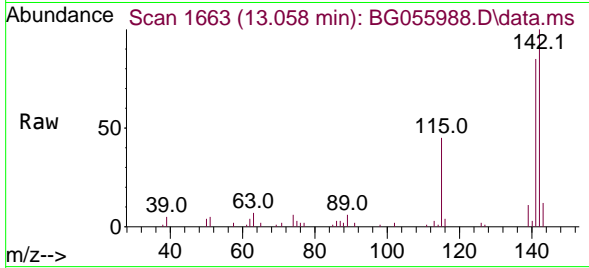
#38  
 1-Methylnaphthalene  
 Concen: 12.157 ng  
 RT: 13.058 min Scan# 1663  
 Delta R.T. 0.005 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument :

BNA\_G

ClientSampleId :

RB-17-(1-3)

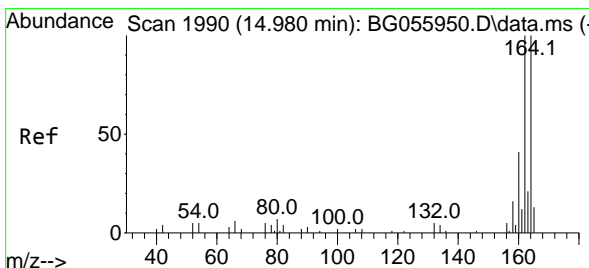
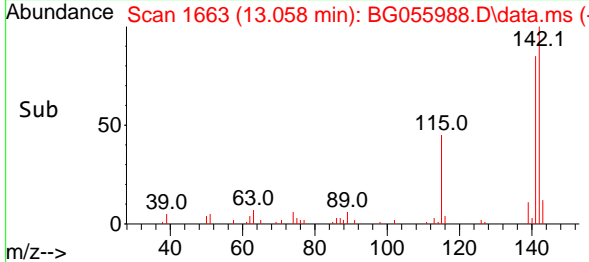
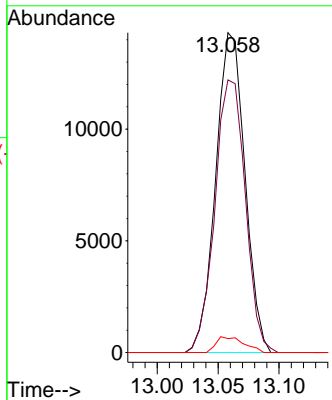


Tgt Ion:142 Resp: 2394  
 Ion Ratio Lower Upper  
 142 100  
 141 85.2 70.2 105.2  
 116 4.4 3.8 5.8

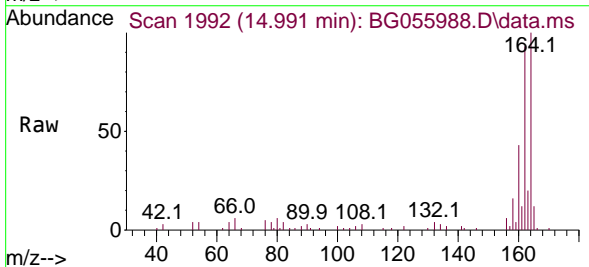
Manual Integrations

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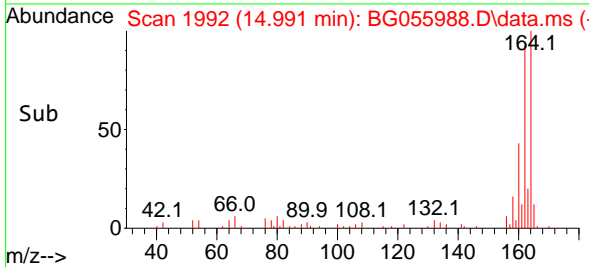
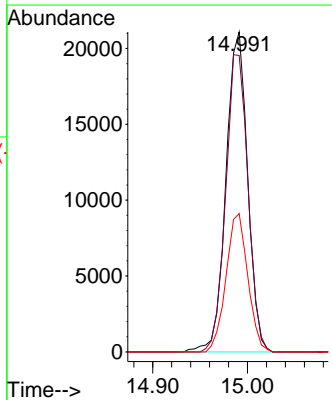
Reviewed By :Jagrut Upadhyay 12/16/2022  
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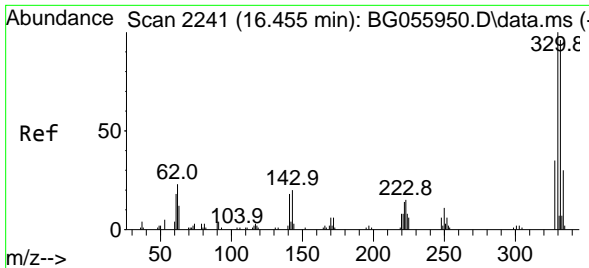


#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 14.991 min Scan# 1992  
 Delta R.T. 0.011 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37



Tgt Ion:164 Resp: 33468  
 Ion Ratio Lower Upper  
 164 100  
 162 92.6 79.8 119.8  
 160 43.2 33.0 49.4





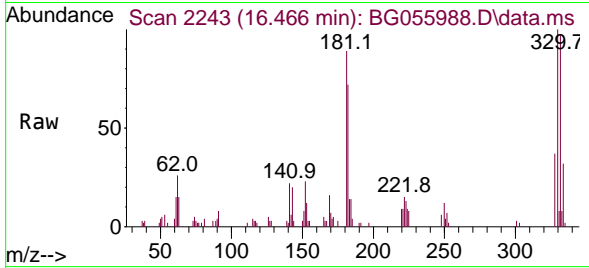
#42  
 2,4,6-Tribromophenol  
 Concen: 14.452 ng  
 RT: 16.466 min Scan# 21  
 Delta R.T. 0.011 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument :

BNA\_G

ClientSampleId :

RB-17-(1-3)



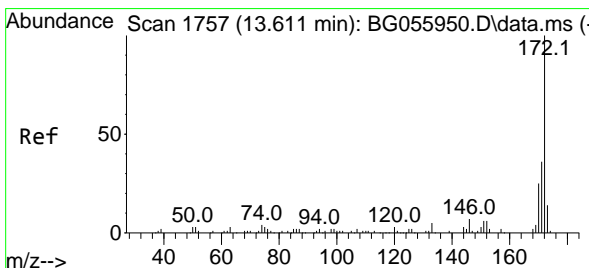
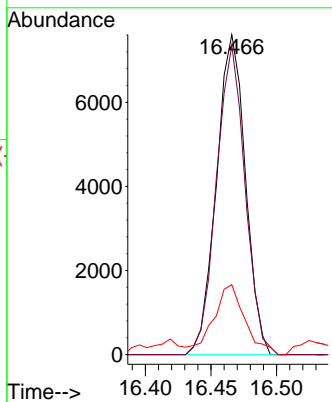
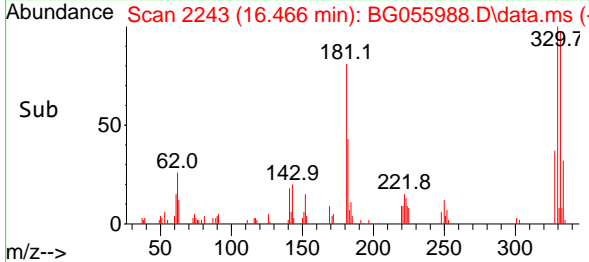
Tgt Ion: 330 Resp: 1166

Ion	Ratio	Lower	Upper
330	100		
332	95.7	76.6	114.8
141	23.8	15.0	22.4

Manual Integrations

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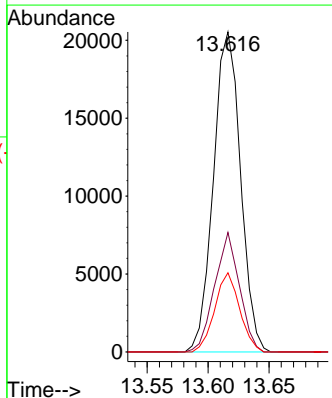
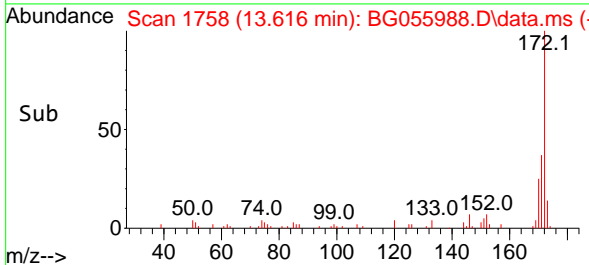
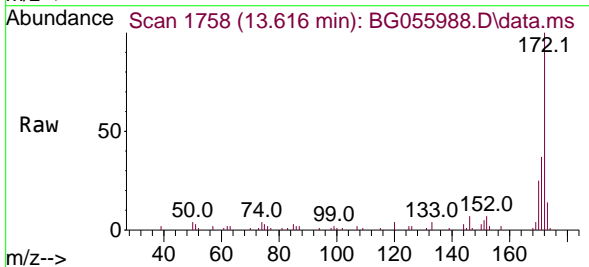
Reviewed By :Jagrut Upadhyay 12/16/2022  
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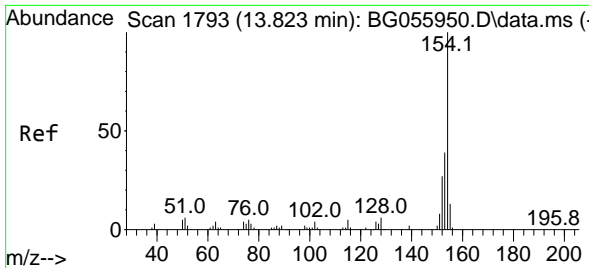


#45  
 2-Fluorobiphenyl  
 Concen: 13.303 ng  
 RT: 13.616 min Scan# 1758  
 Delta R.T. 0.005 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Tgt Ion: 172 Resp: 31745

Ion	Ratio	Lower	Upper
172	100		
171	37.3	28.6	42.8
170	24.7	19.9	29.9





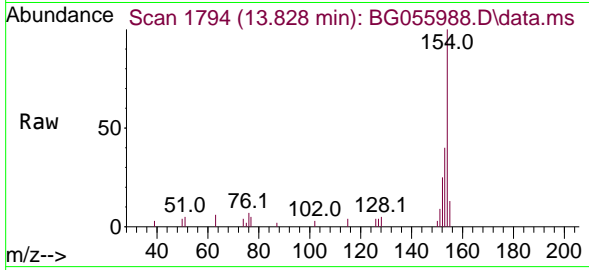
#46  
 1,1'-Biphenyl  
 Concen: 4.383 ng  
 RT: 13.828 min Scan# 11  
 Delta R.T. 0.005 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument :

BNA\_G

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RB-17-(1-3)

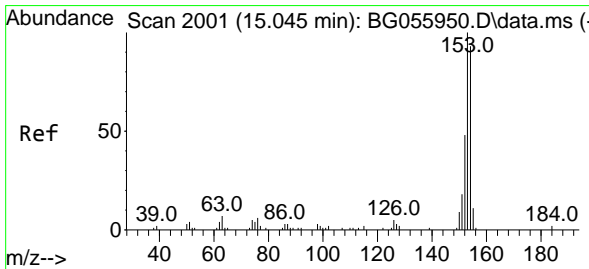
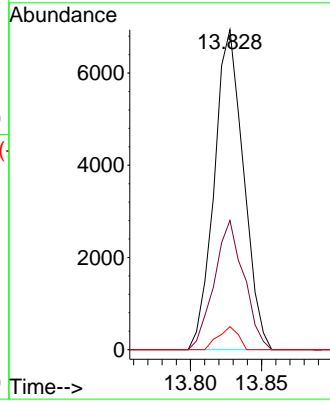
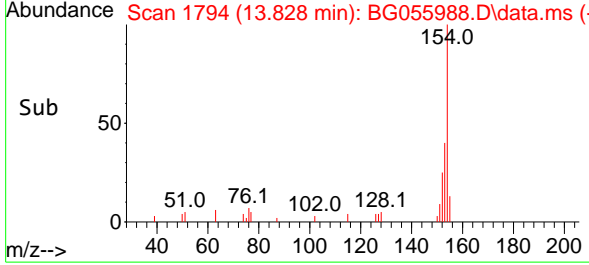


Tgt Ion:154 Resp: 994  
 Ion Ratio Lower Upper  
 154 100  
 153 40.4 19.5 59.5  
 76 7.2 0.0 25.5

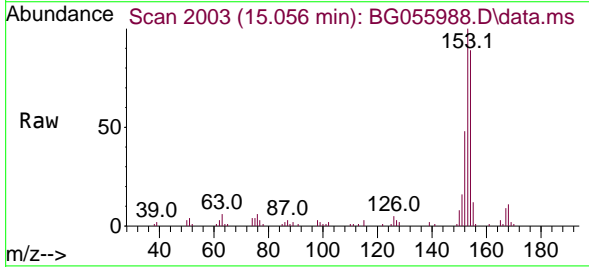
Manual Integrations

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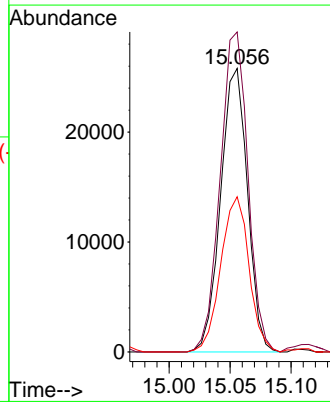
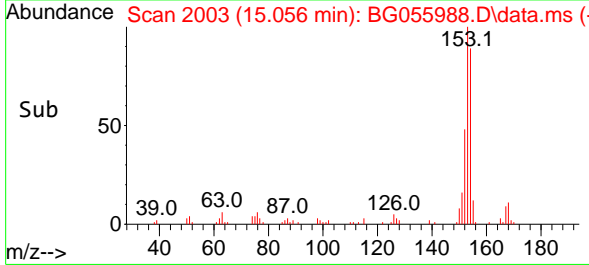
Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022



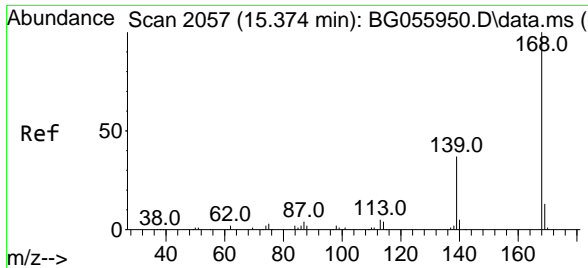
#52  
 Acenaphthene  
 Concen: 20.038 ng  
 RT: 15.056 min Scan# 2003  
 Delta R.T. 0.011 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37



Tgt Ion:154 Resp: 39580  
 Ion Ratio Lower Upper  
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 153 112.9 86.2 129.2  
 152 54.7 41.4 62.0

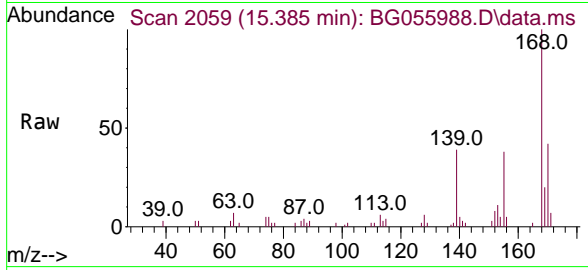






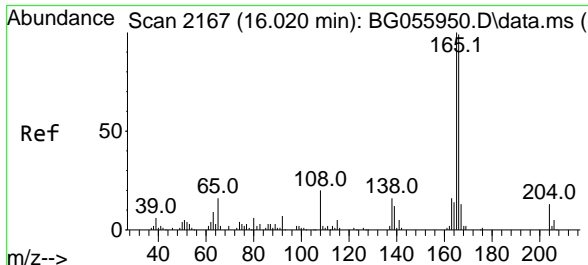
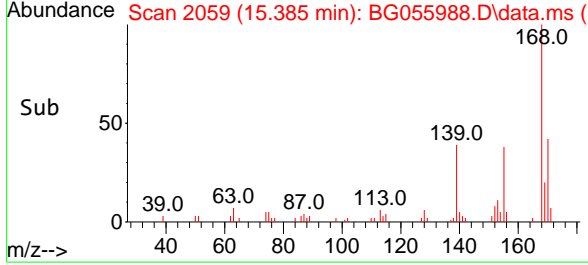
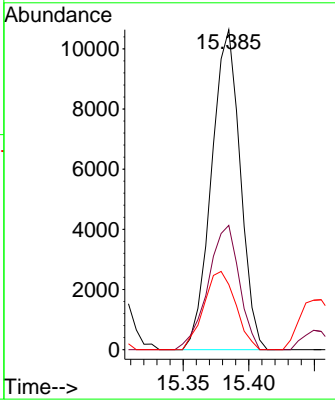
#55  
 Dibenzofuran  
 Concen: 4.889 ng  
 RT: 15.385 min Scan# 2059  
 Delta R.T. 0.011 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument : BNA\_G  
 ClientSampleId : RB-17-(1-3)



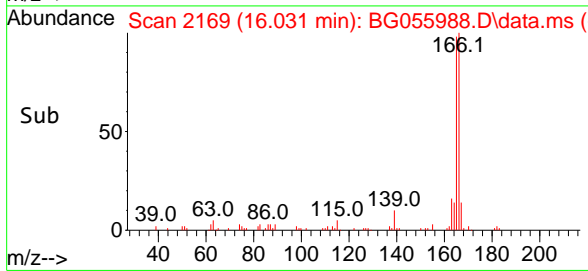
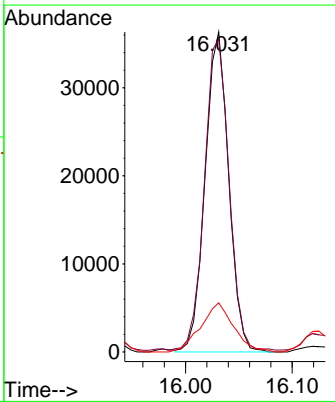
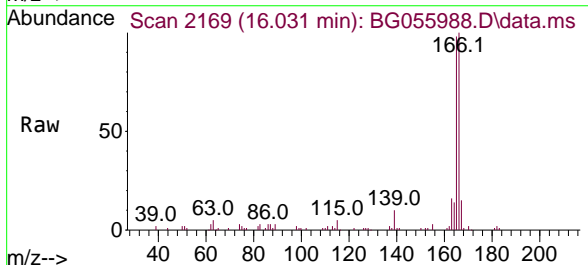
Tgt Ion:168 Resp: 16239  
 Ion Ratio Lower Upper  
 168 100  
 139 38.8 29.8 44.8  
 169 20.3 10.6 16.0

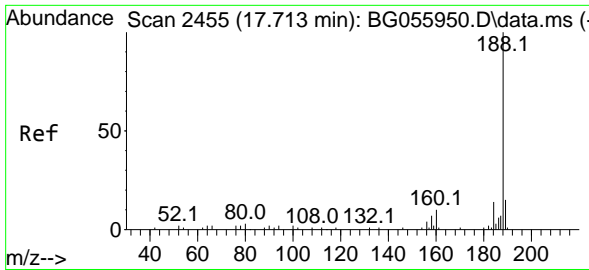
Manual Integrations  
**APPROVED**  
 Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022



#58  
 Fluorene  
 Concen: 20.569 ng  
 RT: 16.031 min Scan# 2169  
 Delta R.T. 0.011 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Tgt Ion:166 Resp: 55849  
 Ion Ratio Lower Upper  
 166 100  
 165 97.8 81.1 121.7  
 167 15.3 10.5 15.7





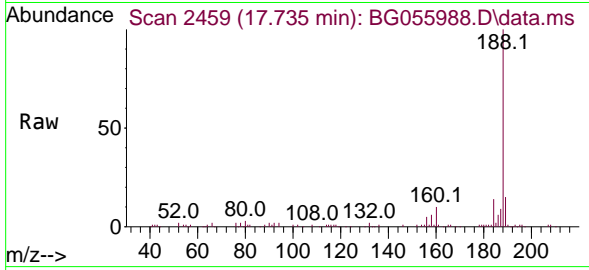
#64  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 17.735 min Scan# 2455  
 Delta R.T. 0.022 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument :

BNA\_G

ClientSampleId :

RB-17-(1-3)

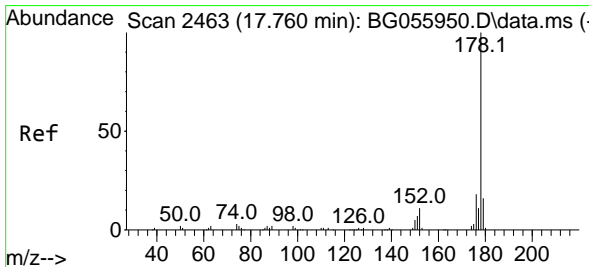
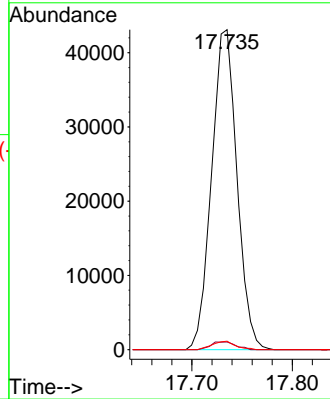
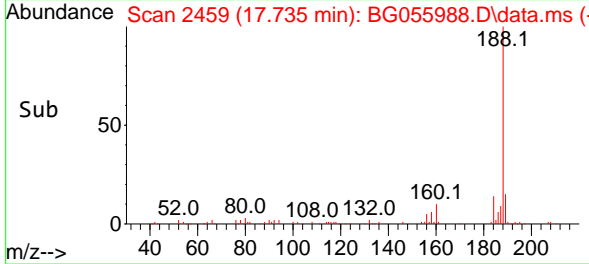


Tgt Ion:188 Resp: 75738  
 Ion Ratio Lower Upper  
 188 100  
 94 2.4 1.8 2.8  
 80 2.6 2.4 3.6

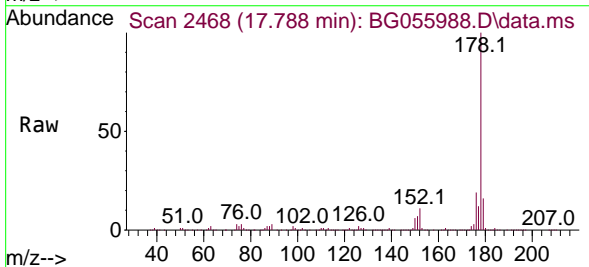
Manual Integrations

APPROVED

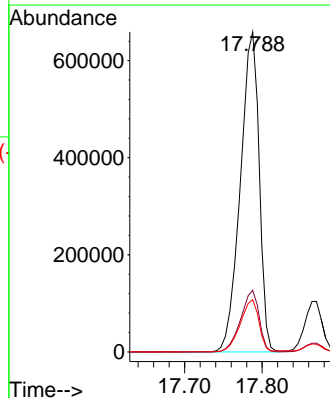
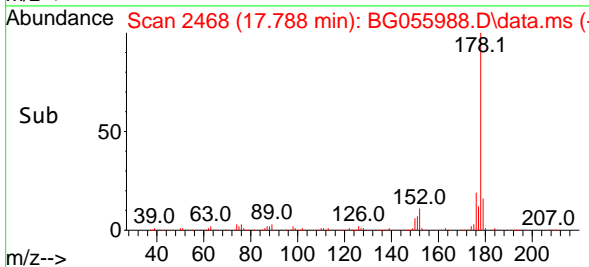
Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022

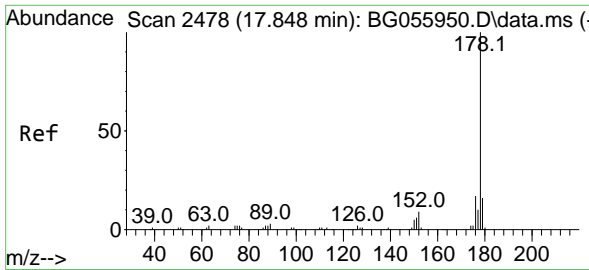


#71  
 Phenanthrene  
 Concen: 279.513 ng  
 RT: 17.788 min Scan# 2468  
 Delta R.T. 0.028 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37



Tgt Ion:178 Resp: 1109406  
 Ion Ratio Lower Upper  
 178 100  
 176 19.3 14.4 21.6  
 179 16.3 12.7 19.1





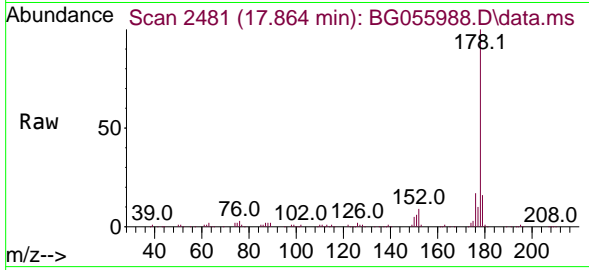
#72  
 Anthracene  
 Concen: 40.485 ng  
 RT: 17.864 min Scan# 2478  
 Delta R.T. 0.017 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument :

BNA\_G

ClientSampleId :

RB-17-(1-3)

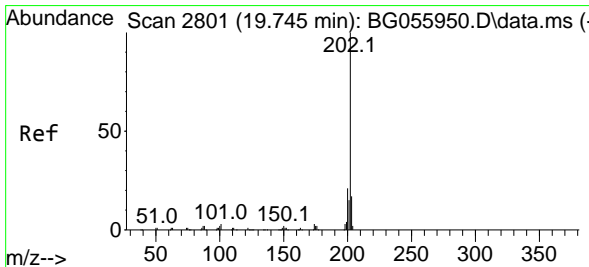
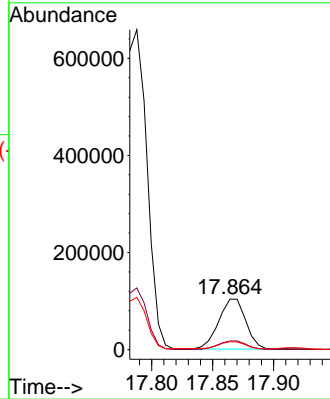
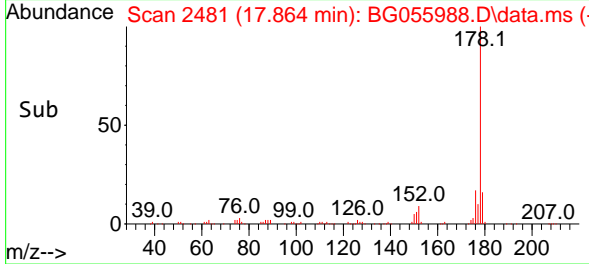


Tgt Ion:178 Resp: 158970  
 Ion Ratio Lower Upper  
 178 100  
 176 17.1 13.9 20.9  
 179 15.7 12.7 19.1

Manual Integrations

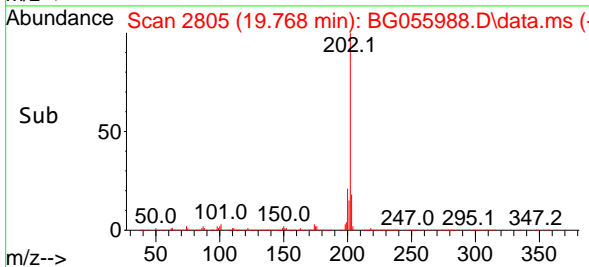
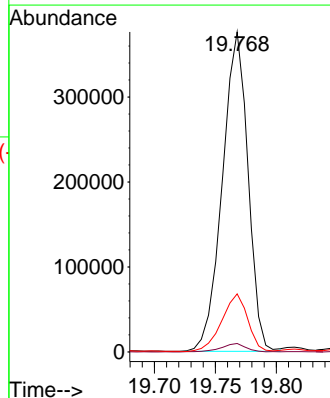
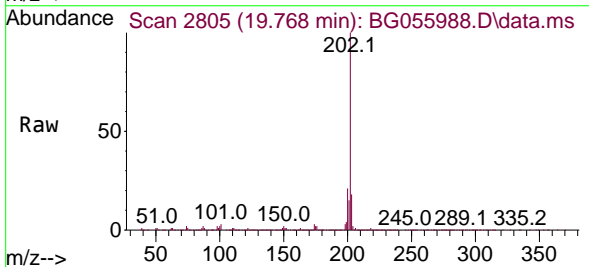
APPROVED

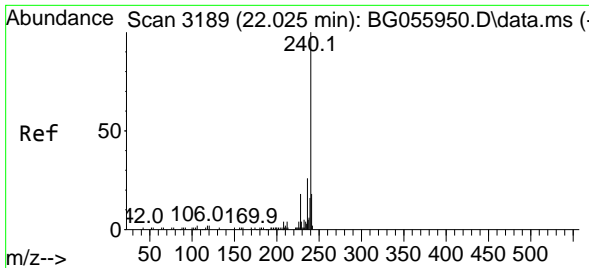
Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022



#75  
 Fluoranthene  
 Concen: 99.060 ng  
 RT: 19.768 min Scan# 2805  
 Delta R.T. 0.022 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Tgt Ion:202 Resp: 550565  
 Ion Ratio Lower Upper  
 202 100  
 101 2.6 0.0 22.6  
 203 18.1 0.0 37.1





#76  
 Chrysene-d12  
 Concen: 20.000 ng  
 RT: 22.048 min Scan# 3189  
 Delta R.T. 0.022 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument :

BNA\_G

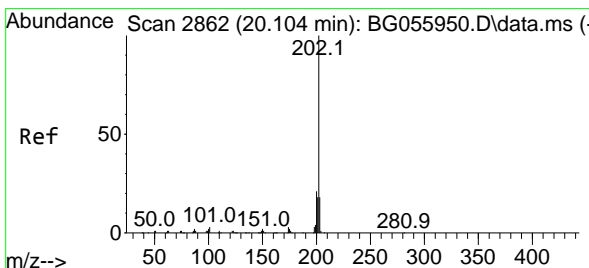
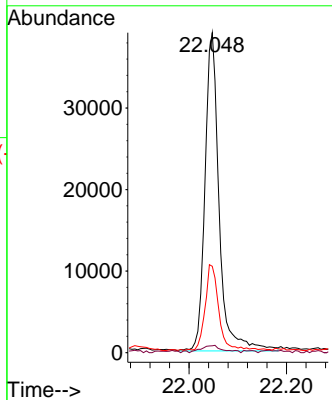
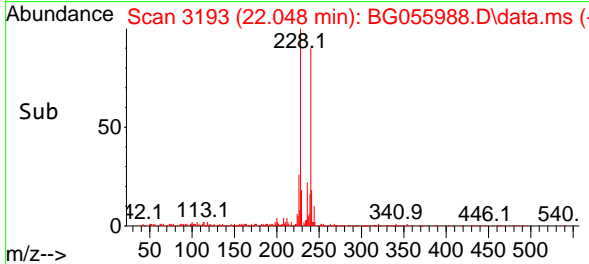
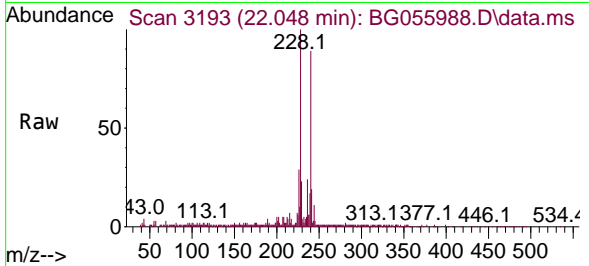
Client Sample Id :

RB-17-(1-3)

Tgt Ion	Resp	Lower	Upper
240	100		
120	2.1	1.7	2.5
236	27.0	21.1	31.7

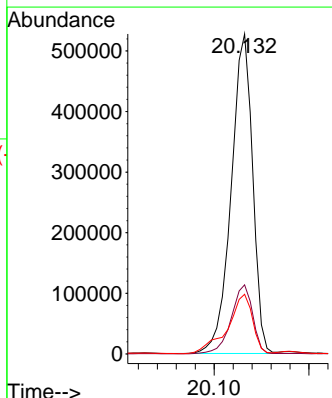
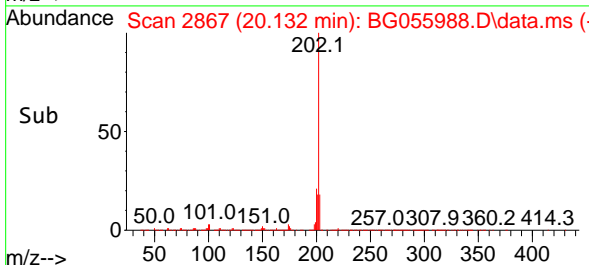
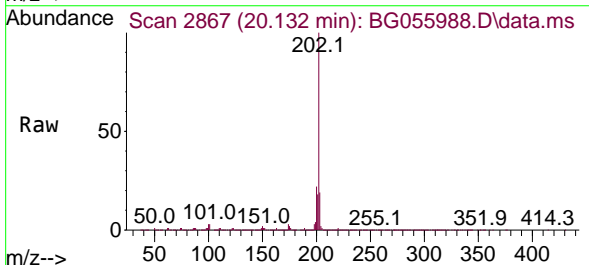
Manual Integrations  
 APPROVED

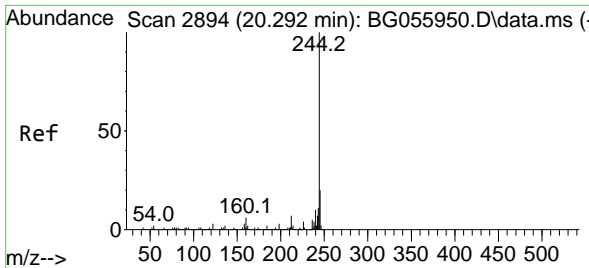
Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022



#78  
 Pyrene  
 Concen: 173.097 ng  
 RT: 20.132 min Scan# 2867  
 Delta R.T. 0.028 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Tgt Ion	Resp	Lower	Upper
202	100		
200	21.6	16.7	25.1
203	18.7	14.6	21.8





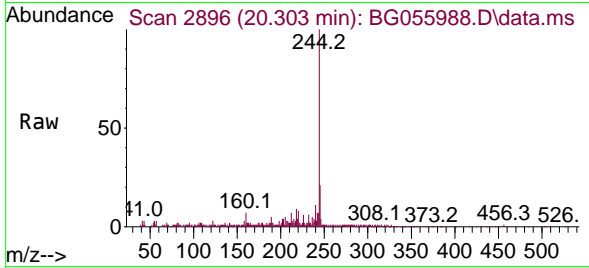
#79  
 Terphenyl-d14  
 Concen: 11.865 ng  
 RT: 20.303 min Scan# 2896  
 Delta R.T. 0.011 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument :

BNA\_G

Client Sample Id :

RB-17-(1-3)

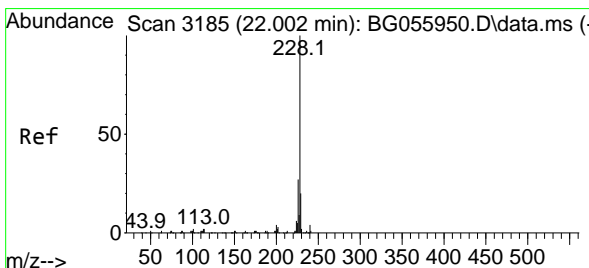
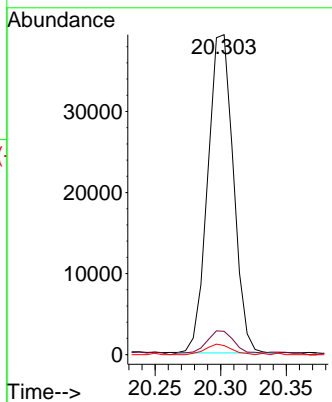
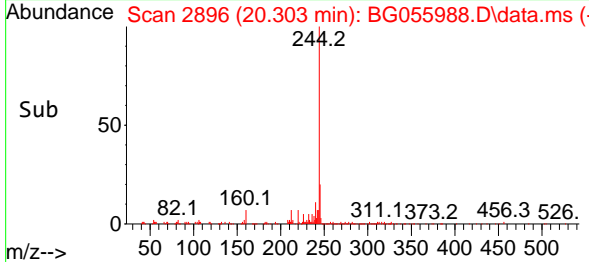


Tgt Ion: 244 Resp: 5316  
 Ion Ratio Lower Upper  
 244 100  
 212 7.3 5.8 8.6  
 122 2.8 2.5 3.7

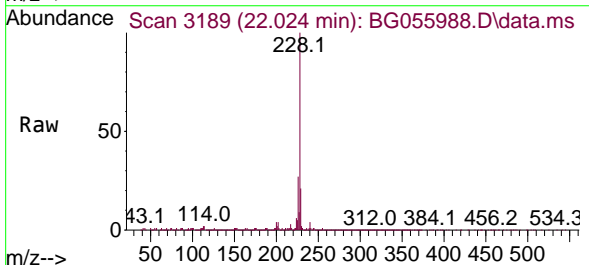
Manual Integrations

APPROVED

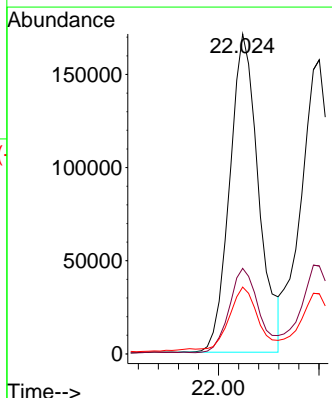
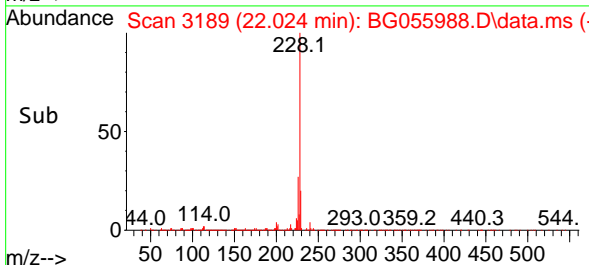
Reviewed By : Jagrut Upadhyay 12/16/2022  
 Supervised By : mohammad ahmed 12/17/2022

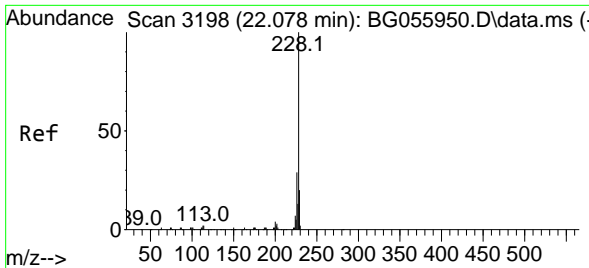


#81  
 Benzo(a)anthracene  
 Concen: 61.328 ng  
 RT: 22.024 min Scan# 3189  
 Delta R.T. 0.022 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37



Tgt Ion: 228 Resp: 341770  
 Ion Ratio Lower Upper  
 228 100  
 226 26.7 21.8 32.6  
 229 20.9 15.9 23.9





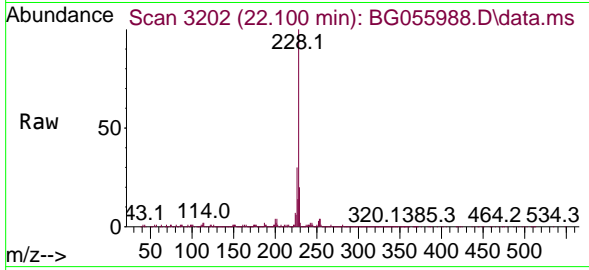
#83  
 Chrysene  
 Concen: 65.716 ng  
 RT: 22.100 min Scan# 3198  
 Delta R.T. 0.022 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument :

BNA\_G

ClientSampleId :

RB-17-(1-3)

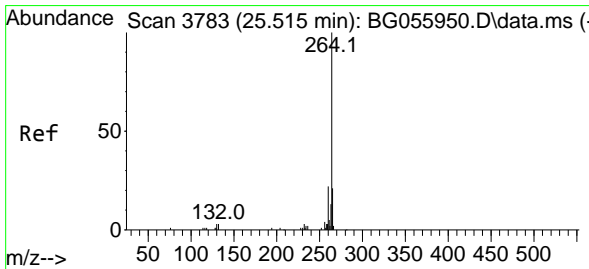
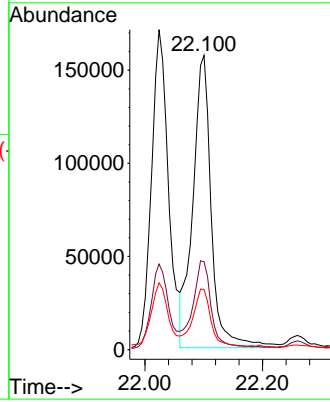
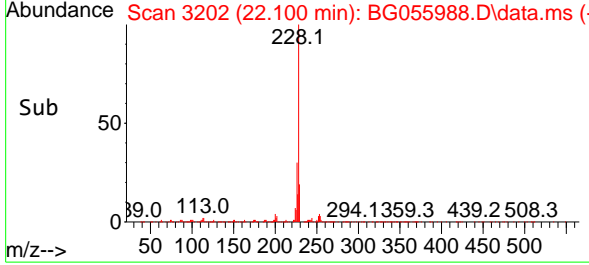


Tgt Ion:228 Resp: 343226  
 Ion Ratio Lower Upper  
 228 100  
 226 29.9 23.1 34.7  
 229 20.5 15.7 23.5

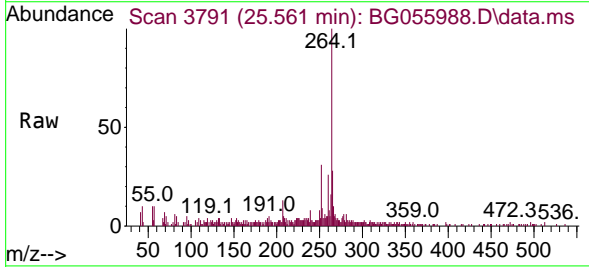
Manual Integrations

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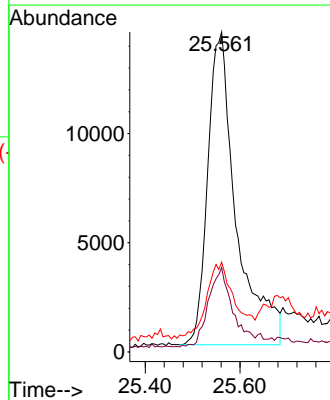
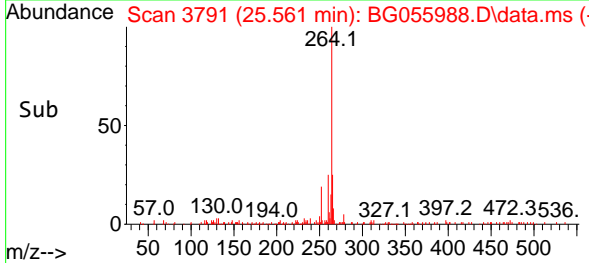
Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022

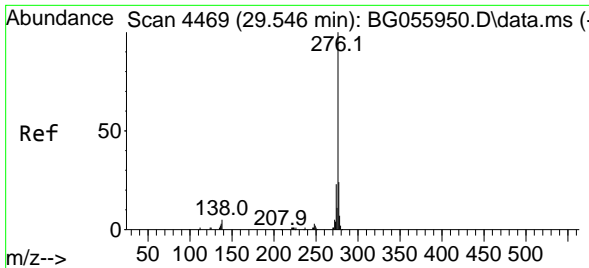


#86  
 Perylene-d12  
 Concen: 20.000 ng  
 RT: 25.561 min Scan# 3791  
 Delta R.T. 0.046 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37



Tgt Ion:264 Resp: 60033  
 Ion Ratio Lower Upper  
 264 100  
 260 26.4 17.8 26.8  
 265 28.0 16.6 25.0#





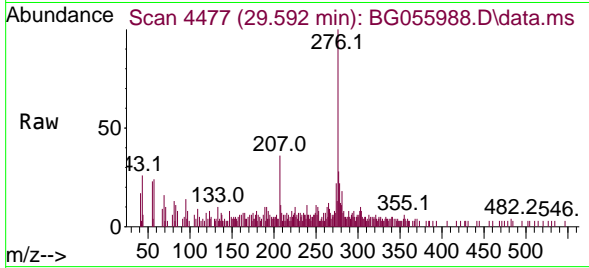
#87  
 Indeno(1,2,3-cd)pyrene  
 Concen: 6.827 ng m  
 RT: 29.592 min Scan# 4477  
 Delta R.T. 0.046 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument :

BNA\_G

ClientSampleId :

RB-17-(1-3)

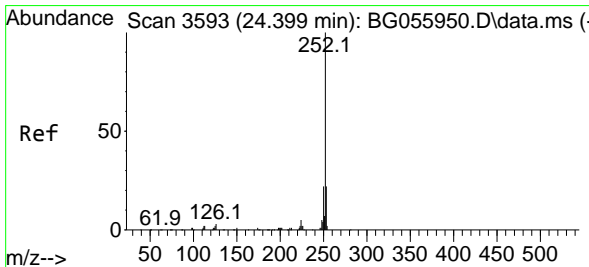
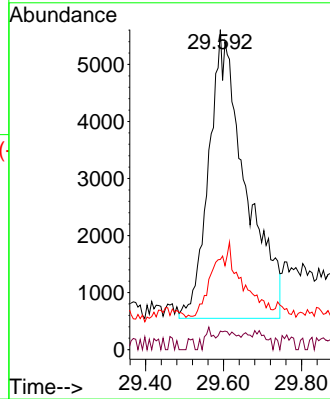
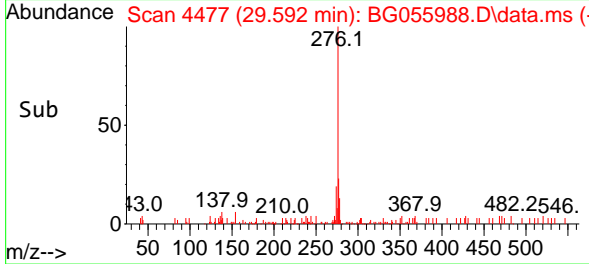


Tgt Ion:276 Resp: 32952  
 Ion Ratio Lower Upper  
 276 100  
 138 1.0 3.0 4.4  
 277 0.0 20.4 30.6

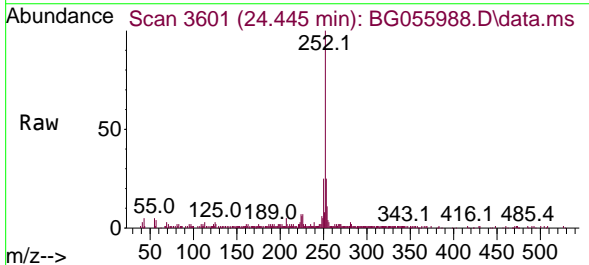
Manual Integrations

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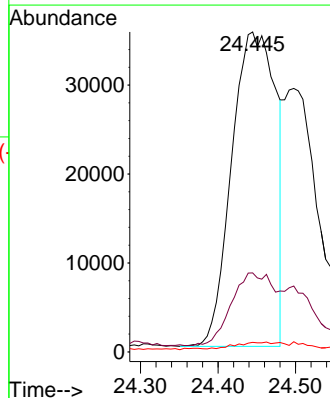
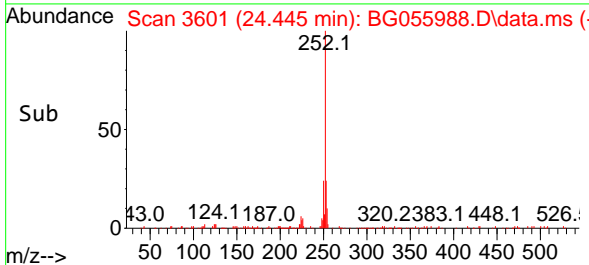
Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022

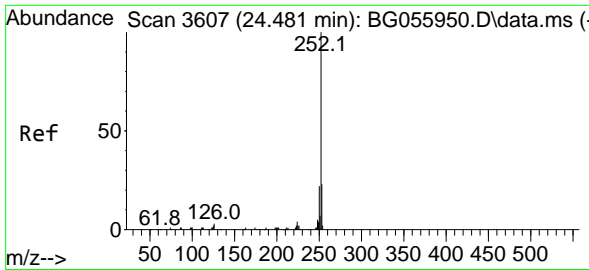


#88  
 Benzo(b)fluoranthene  
 Concen: 35.911 ng  
 RT: 24.445 min Scan# 3601  
 Delta R.T. 0.046 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37



Tgt Ion:252 Resp: 139522  
 Ion Ratio Lower Upper  
 252 100  
 253 24.7 17.4 26.0  
 125 3.0 1.8 2.8





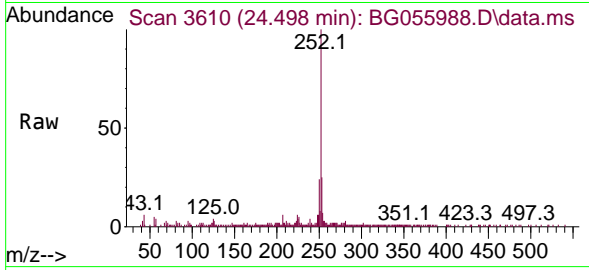
#89  
 Benzo(k)fluoranthene  
 Concen: 24.726 ng m  
 RT: 24.498 min Scan# 30  
 Delta R.T. 0.017 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument :

BNA\_G

ClientSampleId :

RB-17-(1-3)

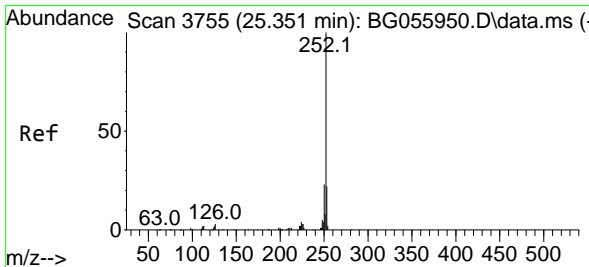
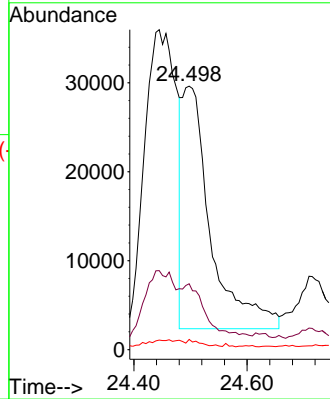
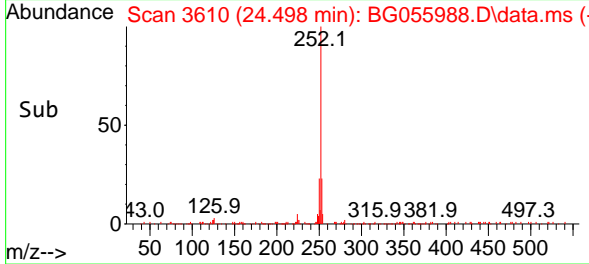


Tgt Ion:252 Resp: 95848  
 Ion Ratio Lower Upper  
 252 100  
 253 25.0 18.2 27.2  
 125 3.8 2.0 3.0

Manual Integrations

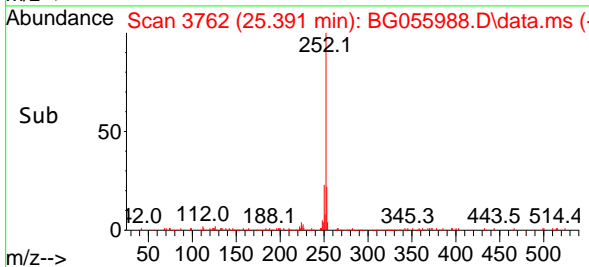
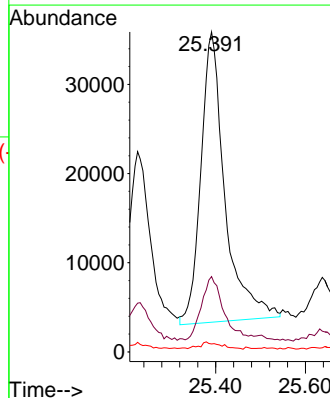
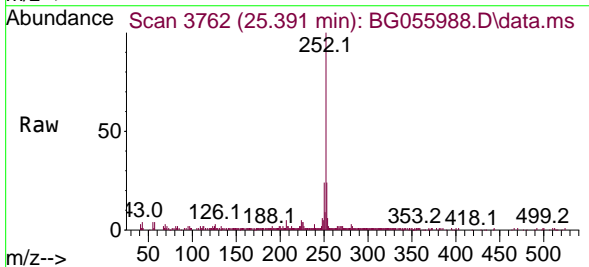
APPROVED

Reviewed By :Jagrut Upadhyay 12/16/2022  
 Supervised By :mohammad ahmed 12/17/2022

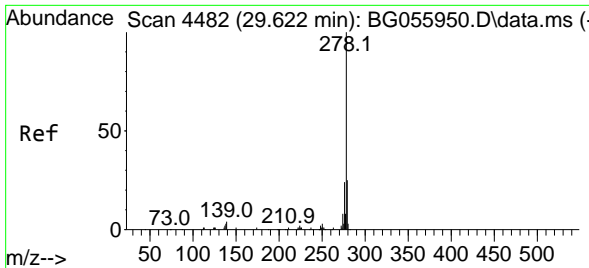


#90  
 Benzo(a)pyrene  
 Concen: 36.778 ng  
 RT: 25.391 min Scan# 3762  
 Delta R.T. 0.040 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Tgt Ion:252 Resp: 120785  
 Ion Ratio Lower Upper  
 252 100  
 253 23.5 17.7 26.5  
 125 2.5 1.9 2.9

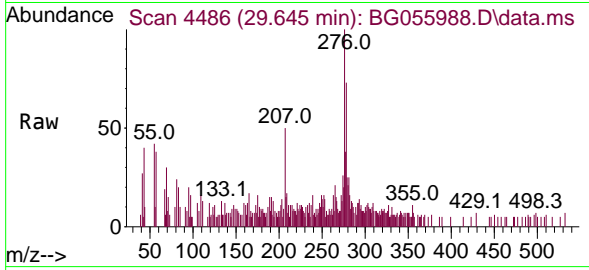






#91  
 Dibenzo(a,h)anthracene  
 Concen: 3.104 ng m  
 RT: 29.645 min Scan# 4486  
 Delta R.T. 0.022 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37

Instrument :  
 BNA\_G  
 ClientSampleId :  
 RB-17-(1-3)

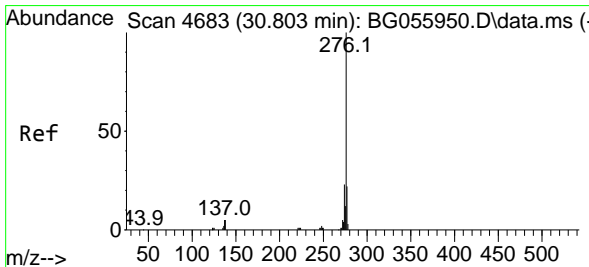
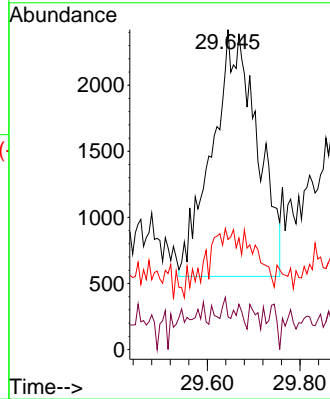
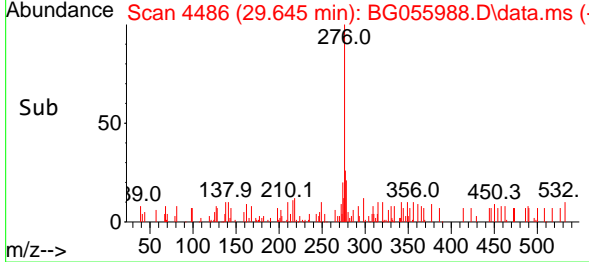


Tgt Ion: 278 Resp: 1254

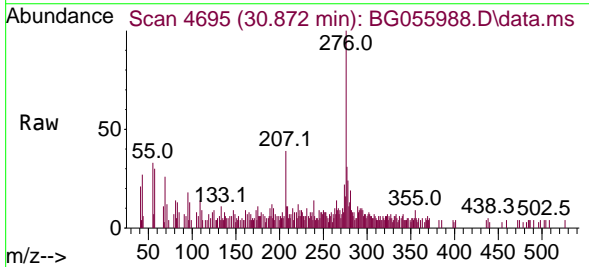
Ion	Ratio	Lower	Upper
278	100		
139	10.2	2.9	4.3
279	34.4	20.0	30.0

Manual Integrations  
 APPROVED

Reviewed By :Jagrut Upadhyay 12/16/2022  
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#92  
 Benzo(g,h,i)perylene  
 Concen: 6.403 ng m  
 RT: 30.872 min Scan# 4695  
 Delta R.T. 0.069 min  
 Lab File: BG055988.D  
 Acq: 15 Dec 2022 22:37



Tgt Ion: 276 Resp: 25016

Ion	Ratio	Lower	Upper
276	100		
277	31.4	17.8	26.6
138	5.9	3.8	5.6

