

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102219\
 Data File : BM023322.D
 Acq On : 22 Oct 2019 17:09
 Operator : JU
 Sample : K5345-02MS
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 ETOJ6MS

Manual Integrations
 APPROVED

mohammad
 10/24/2019 8:08:35 AM

Quant Time: Oct 22 18:27:42 2019
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM101419MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Oct 22 11:39:35 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.65	152	333184	20.00	ng/ul	0.00
18) Naphthalene-d8	10.43	136	1343288	20.00	ng/ul	0.00
36) Acenaphthene-d10	14.29	164	840158	20.00	ng/ul	0.00
62) Phenanthrene-d10	17.04	188	1818103	20.00	ng/ul	0.00
78) Chrysene-d12	21.24	240	1885965	20.00	ng/ul	0.01
86) Perylene-d12	23.44	264	2386259m	20.00	ng/ul	0.01

System Monitoring Compounds

3) 1,4-Dioxane-d8	3.17	96	25580	3.38	ng/uL	0.00
5) Phenol-d5	6.82	99	520562	17.94	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.99	67	287179	17.49	ng/ul	0.00
9) 2-Chlorophenol-d4	7.18	132	417852	18.81	ng/ul	0.00
13) 4-Methylphenol-d8	8.35	113	425651	18.26	ng/ul	0.00
19) Nitrobenzene-d5	8.79	128	189924	20.90	ng/ul	0.00
22) 2-Nitrophenol-d4	9.51	143	204874	23.68	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.05	165	454493	20.65	ng/ul	0.00
29) 4-Chloroaniline-d4	10.56	131	501778	18.74	ng/ul	0.00
44) Dimethylphthalate-d6	13.71	166	1484671	23.06	ng/ul	0.00
47) Acenaphthylene-d8	13.98	160	1651324	21.87	ng/ul	0.00
52) 4-Nitrophenol-d4	14.49	143	219875	21.10	ng/ul	0.00
58) Fluorene-d10	15.29	176	1301960	23.74	ng/ul	0.00
63) 4,6-Dinitro-2-methylphenol	15.40	200	181533	25.18	ng/ul	0.00
71) Anthracene-d10	17.13	188	2152162	24.55	ng/ul	0.00
79) Pyrene-d10	19.43	212	2407111	26.36	ng/ul	0.00
90) Benzo(a)pyrene-d12	23.31	264	2924844	24.18	ng/ul	0.02

Target Compounds

					Ovalue
6) Phenol	6.85	94	654670	21.877	ng/ul 98
10) 2-Chlorophenol	7.21	128	462516	19.926	ng/ul 97
15) N-Nitroso-di-n-propylamine	8.45	70	358564	17.864	ng/ul 96
28) Naphthalene	10.47	128	932378	13.429	ng/ul 99
33) 4-Chloro-3-methylphenol	11.72	107	582730	23.649	ng/ul 99
34) 2-Methylnaphthalene	12.10	142	150602	2.915	ng/ul 100
45) Dimethylphthalate	13.76	163	339038	5.261	ng/ul 99
48) Acenaphthylene	14.01	152	1807141	23.406	ng/ul 99
50) Acenaphthene	14.36	153	1687195	31.382	ng/ul 99
53) 4-Nitrophenol	14.50	109	217674	23.184	ng/ul 92
54) Dibenzofuran	14.69	168	307213	4.025	ng/ul 97
55) 2,4-Dinitrotoluene	14.66	165	482355	32.592	ng/ul 96
59) Fluorene	15.34	166	264396	4.222	ng/ul 98
69) Pentachlorophenol	16.69	266	230592	16.538	ng/ul 99
70) Phenanthrene	17.08	178	2186966	21.434	ng/ul 99
72) Anthracene	17.17	178	4540829	43.067	ng/ul 100
75) Carbazole	17.44	167	767334	8.146	ng/ul 99
77) Fluoranthene	19.10	202	10257133	84.527	ng/ul 99
80) Pyrene	19.47	202	12799996	108.339	ng/ul 95
83) Benzo(a)anthracene	21.22	228	8307056	65.006	ng/ul 93
85) Chrysene	21.27	228	12490687	105.268	ng/ul 95
88) Benzo(b)fluoranthene	22.80	252	20855492	144.149	ng/ul 93
89) Benzo(k)fluoranthene	22.83	252	6944602m	49.989	ng/ul

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102219\
Data File : BM023322.D
Acq On : 22 Oct 2019 17:09
Operator : JU
Sample : K5345-02MS
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ETOJ6MS

Manual Integrations
APPROVED

mohammad
10/24/2019 8:08:35 AM

Quant Time: Oct 22 18:27:42 2019
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM101419MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Oct 22 11:39:35 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Benzo(a)pyrene	23.36	252	10546160	75.977	ng/ul	97
92) Indeno(1,2,3-cd)pyrene	25.67	276	10163544m	61.549	ng/ul	
93) Dibenzo(a,h)anthracene	25.67	278	2561732m	18.554	ng/ul	
94) Benzo(g,h,i)perylene	26.34	276	9340509m	68.701	ng/ul	

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

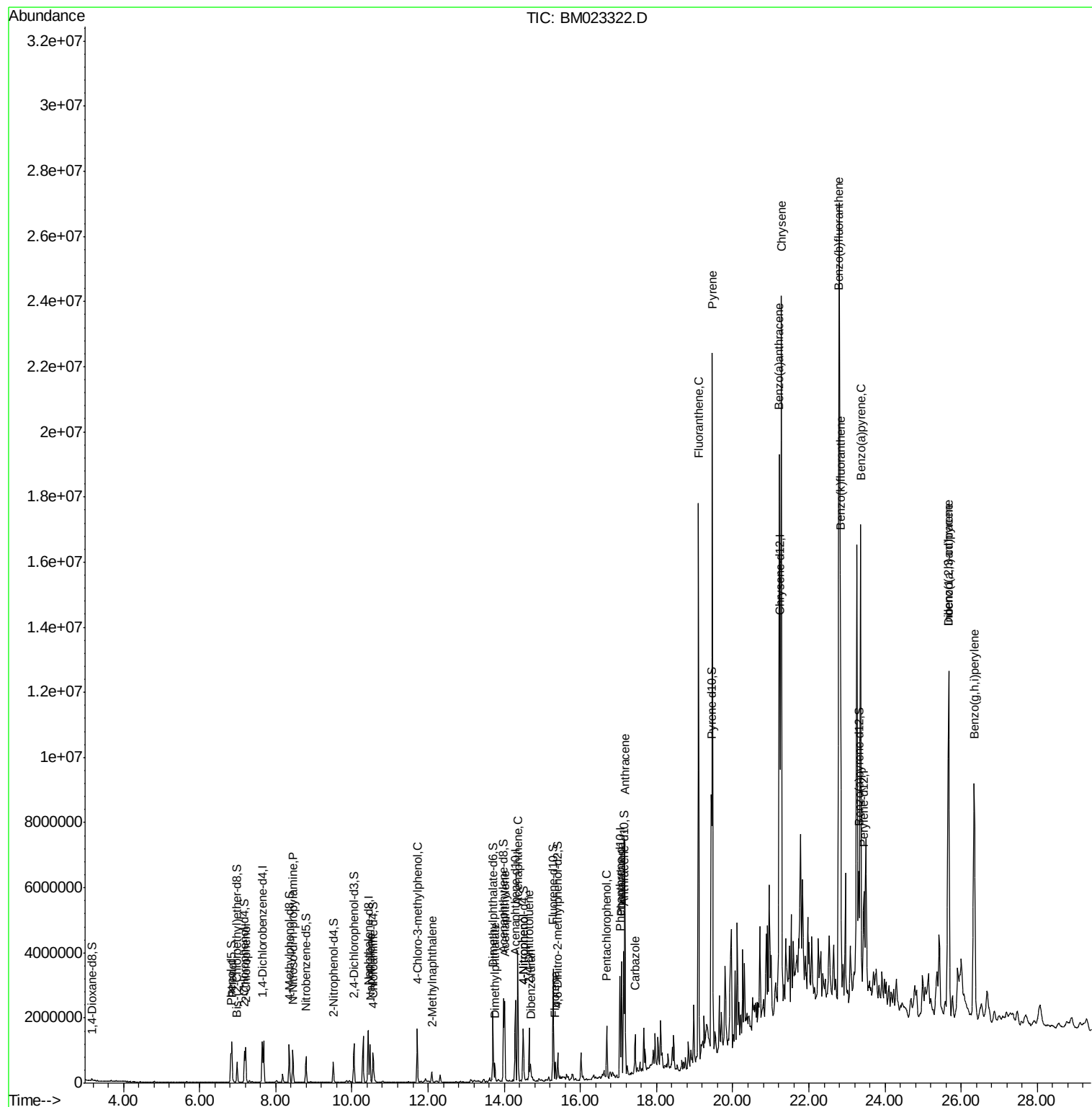
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102219\
Data File : BM023322.D
Acq On : 22 Oct 2019 17:09
Operator : JU
Sample : K5345-02MS
Misc :
ALS Vial : 5 Sample Multiplier: 1

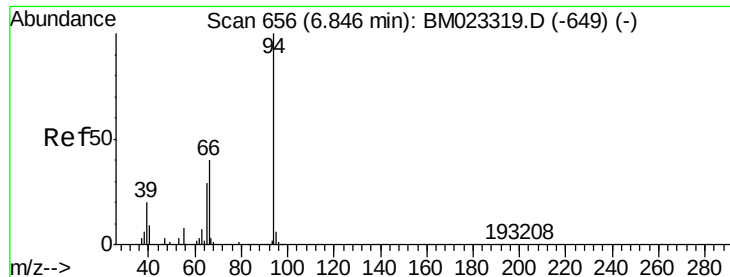
Instrument :
BNA_M
ClientSampleId :
ETOJ6MS

Quant Time: Oct 22 18:27:42 2019
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM101419MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Oct 22 11:39:35 2019
Response via : Initial Calibration

Manual Integrations
APPROVED

mohammad
10/24/2019 8:08:35 AM





#6

Phenol

Concen: 21.877 ng/ul

RT: 6.85 min Scan# 656

Delta R.T. -0.00 min

Lab File: BM023322.D

Acq: 22 Oct 2019 17:09

Instrument :

BNA_M

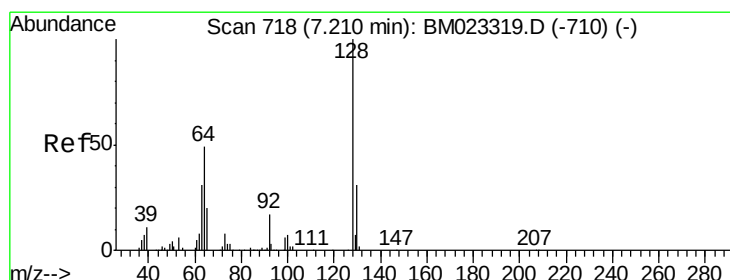
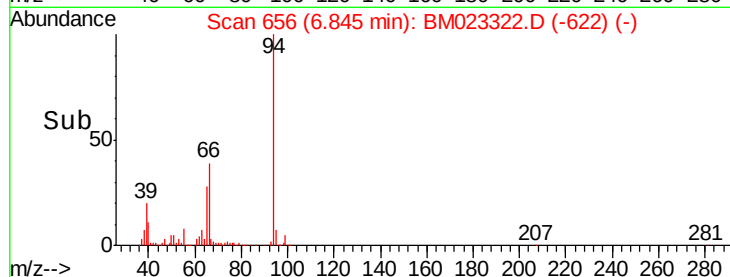
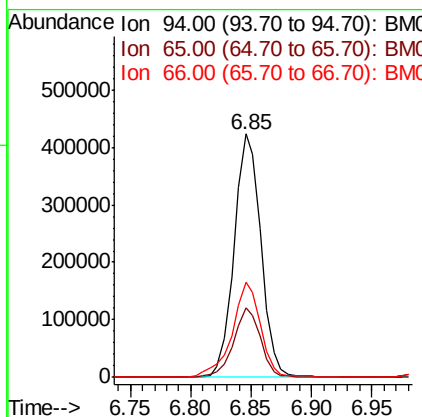
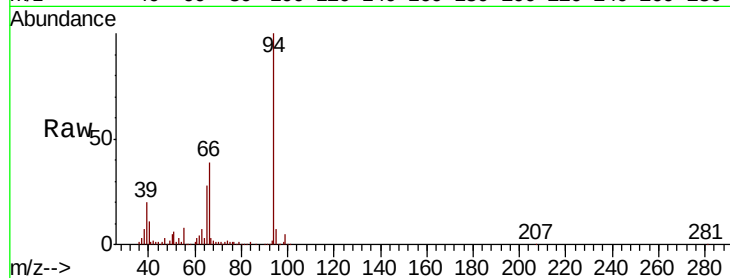
ClientSampled :

ETOJ6MS

Tot Ion:	94	Resp:	654670
Ion	Ratio	Lower	Upper
94	100		
65	28.3	23.2	34.8
66	39.2	32.9	49.3

Manual Integrations
APPROVED

mohammad
10/24/2019 8:08:35 AM



#10

2-Chlorophenol

Concen: 19.926 ng/ul

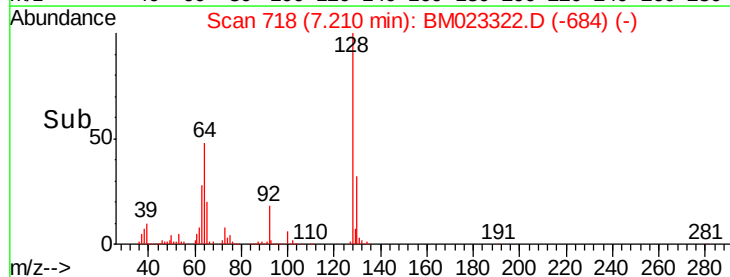
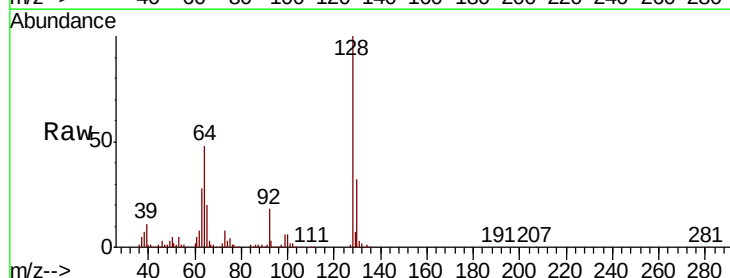
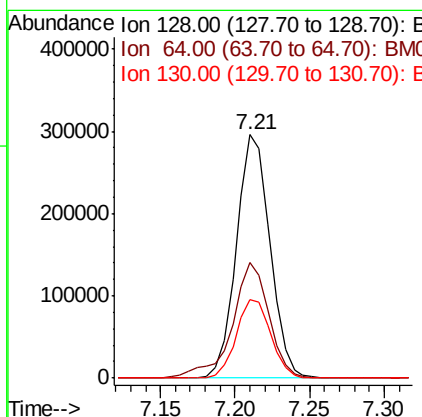
RT: 7.21 min Scan# 718

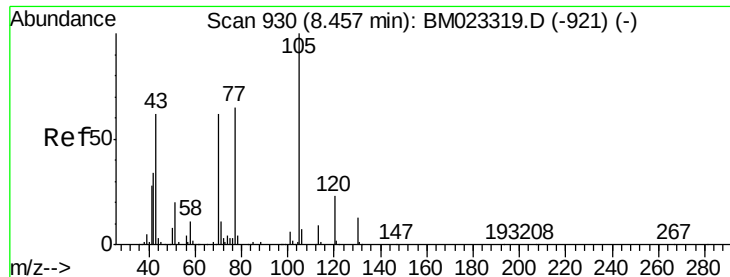
Delta R.T. -0.00 min

Lab File: BM023322.D

Acq: 22 Oct 2019 17:09

Tgt Ion:	128	Resp:	462516
Ion	Ratio	Lower	Upper
128	100		
64	47.6	40.3	60.5
130	32.1	24.7	37.1





#15

N-Nitroso-di-n-propylamine

Concen: 17.864 ng/ul

RT: 8.45 min Scan# 929

Delta R.T. -0.01 min

Lab File: BM023322.D

Acq: 22 Oct 2019 17:09

Instrument :

BNA_M

ClientSampleId :

ETOJ6MS

Tot Ion: 70 Resp: 358564

Ion Ratio Lower Upper

70 100

42 52.0 44.9 67.3

101 10.1 7.9 11.9

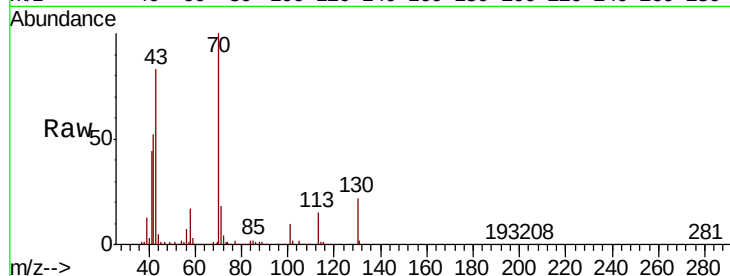
130 22.0 17.1 25.7

Manual Integrations

APPROVED

mohammad

10/24/2019 8:08:35 AM

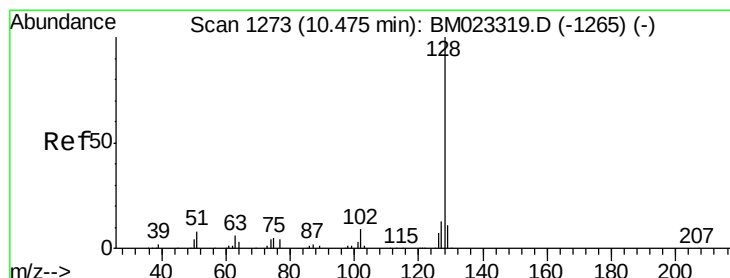
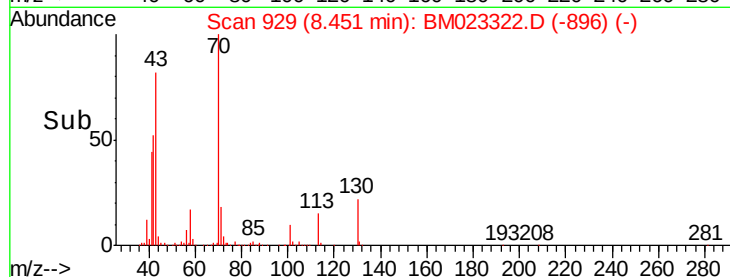
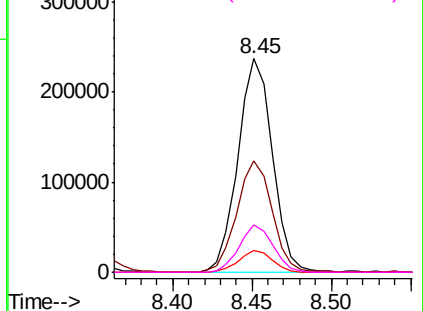


Abundance Ion 70.00 (69.70 to 70.70): BM0

Ion 42.00 (41.70 to 42.70): BM0

Ion 101.00 (100.70 to 101.70): E

Ion 130.00 (129.70 to 130.70): E



#28

Naphthalene

Concen: 13.429 ng/ul

RT: 10.47 min Scan# 1273

Delta R.T. -0.00 min

Lab File: BM023322.D

Acq: 22 Oct 2019 17:09

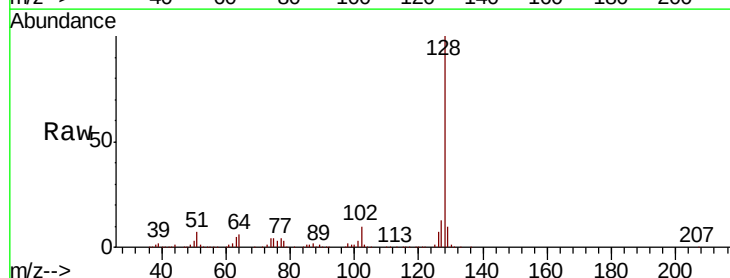
Tgt Ion:128 Resp: 932378

Ion Ratio Lower Upper

128 100

129 10.3 8.8 13.2

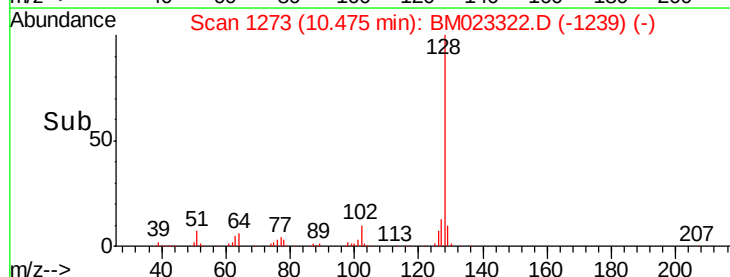
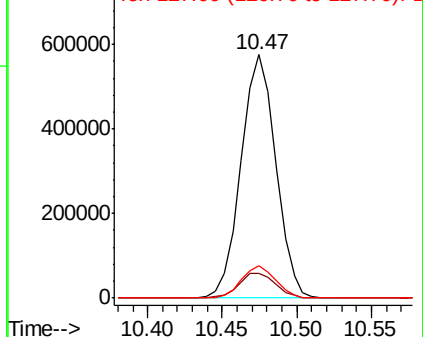
127 13.2 10.2 15.4

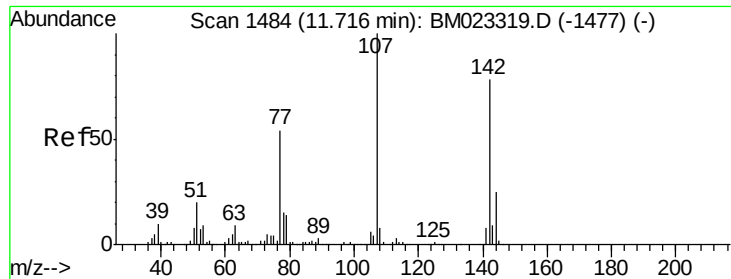


Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E





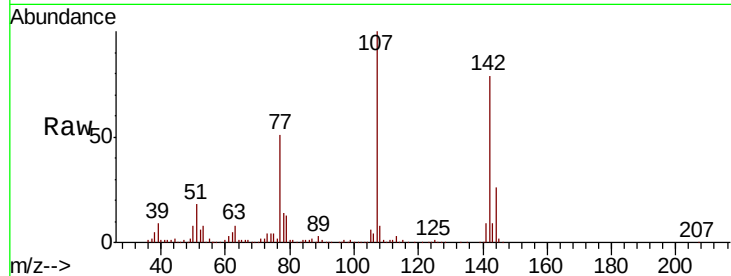
#33
 4-Chloro-3-methylphenol
 Concen: 23.649 ng/ul
 RT: 11.72 min Scan# 1484
 Delta R.T. -0.00 min
 Lab File: BM023322.D
 Acq: 22 Oct 2019 17:09

Instrument :
 BNA_M
 ClientSampleID :
 ETOJ6MS

Tot Ion	Ratio	Resp	Lower	Upper
107	100	582730		
144	26.2		20.0	30.0
142	79.0		62.5	93.7

Manual Integrations
 APPROVED

mohammad
 10/24/2019 8:08:35 AM

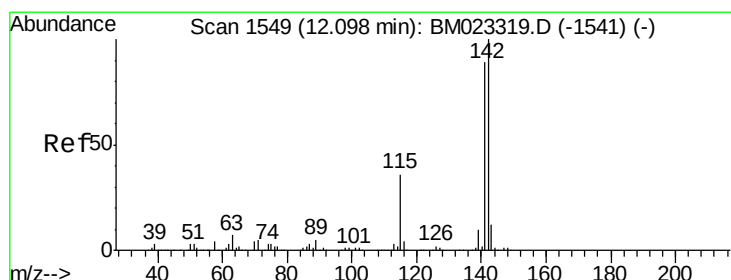
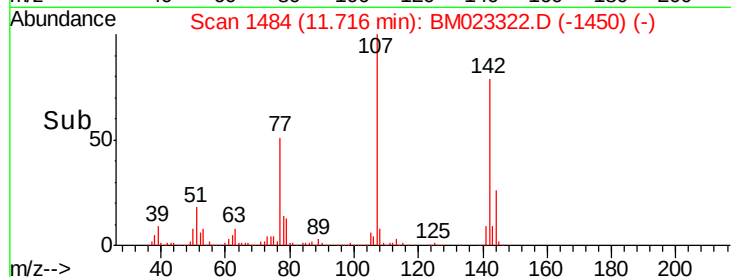
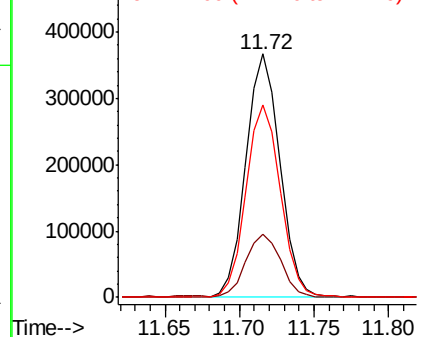


Abundance

Ion 107.00 (106.70 to 107.70): E

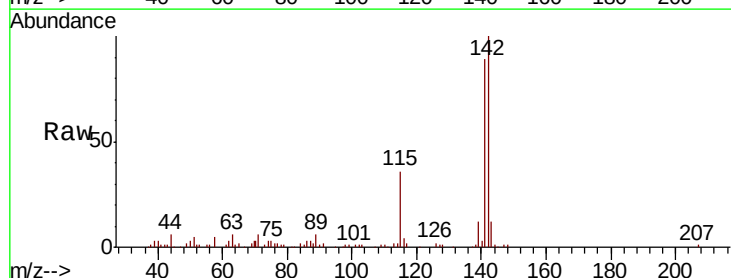
Ion 144.00 (143.70 to 144.70): E

Ion 142.00 (141.70 to 142.70): E



#34
 2-Methylnaphthalene
 Concen: 2.915 ng/ul
 RT: 12.10 min Scan# 1549
 Delta R.T. -0.00 min
 Lab File: BM023322.D
 Acq: 22 Oct 2019 17:09

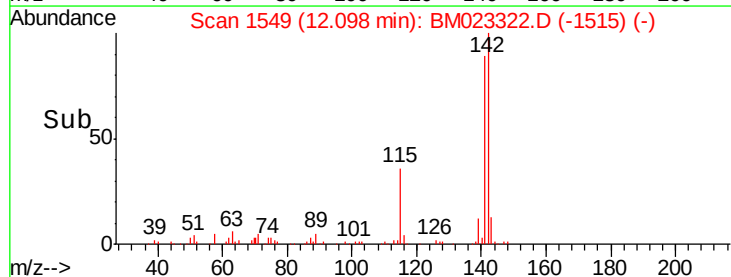
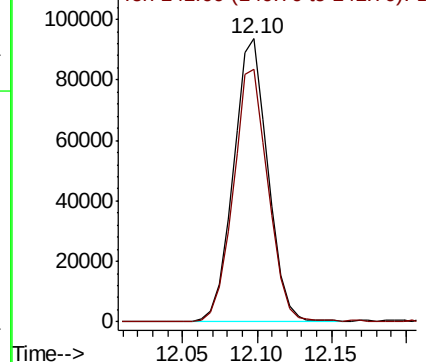
Tgt Ion	Ratio	Resp	Lower	Upper
142	100	150602		
141	89.1		71.4	107.0

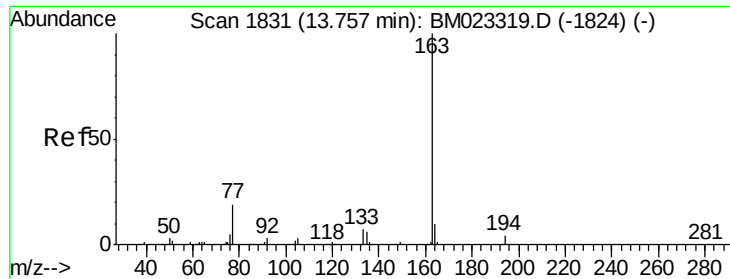


Abundance

Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E





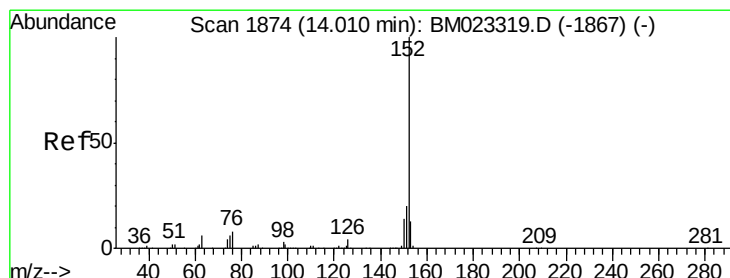
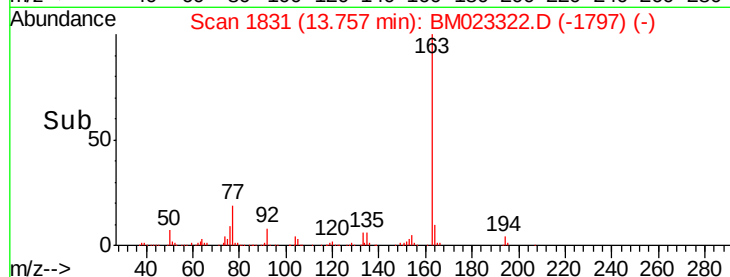
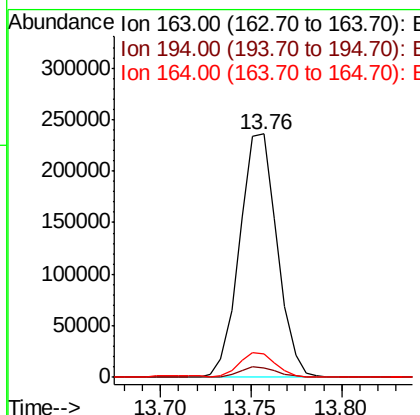
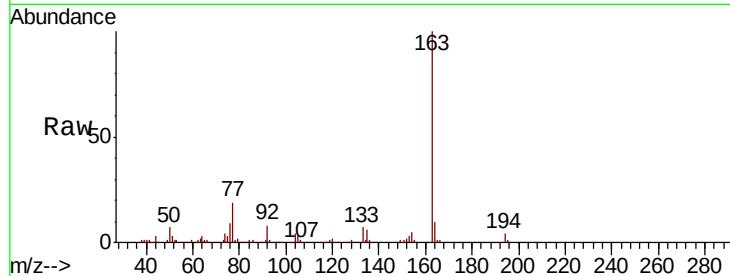
#45
Dimethylphthalate
Concen: 5.261 ng/ul
RT: 13.76 min Scan# 1831
Delta R.T. -0.00 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Instrument :
BNA_M
ClientSampleId :
ETOJ6MS

Tot Ion	Ratio	Resp	Lower	Upper
163	100	339038		
194	4.0		3.4	5.2
164	9.6		7.8	11.6

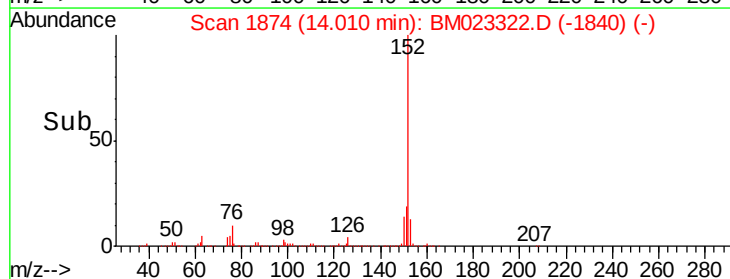
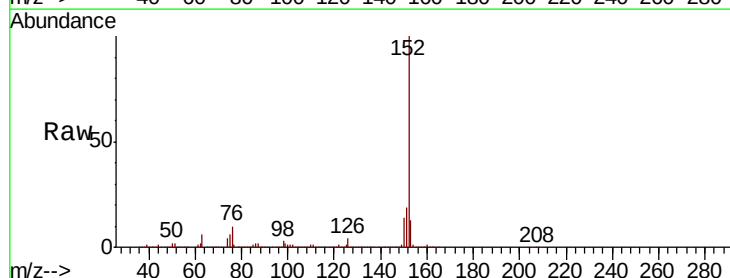
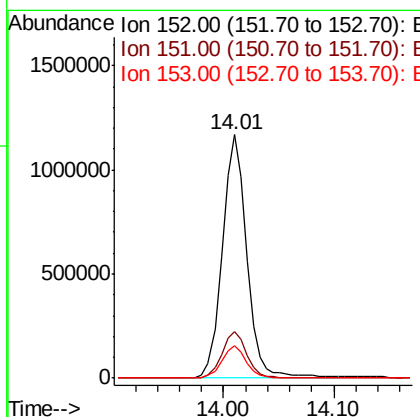
Manual Integrations
APPROVED

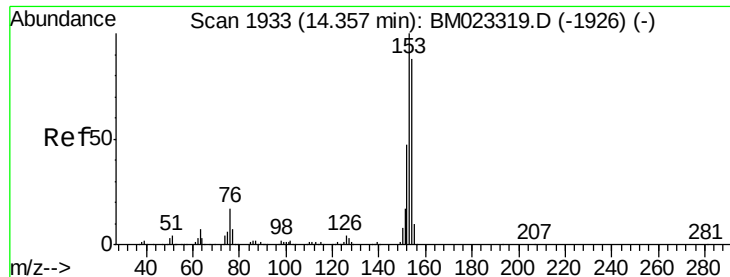
mohammad
10/24/2019 8:08:35 AM



#48
Acenaphthylene
Concen: 23.406 ng/ul
RT: 14.01 min Scan# 1874
Delta R.T. -0.00 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Tgt Ion	Ratio	Resp	Lower	Upper
152	100	1807141		
151	19.4		15.9	23.9
153	13.2		10.3	15.5





#50

Acenaphthene

Concen: 31.382 ng/ul

RT: 14.36 min Scan# 1933

Delta R.T. -0.00 min

Lab File: BM023322.D

Acq: 22 Oct 2019 17:09

Instrument :

BNA_M

ClientSampleId :

ETOJ6MS

Tot Ion:153 Resp: 1687195

Ion Ratio Lower Upper

153 100

152 45.9 37.4 56.0

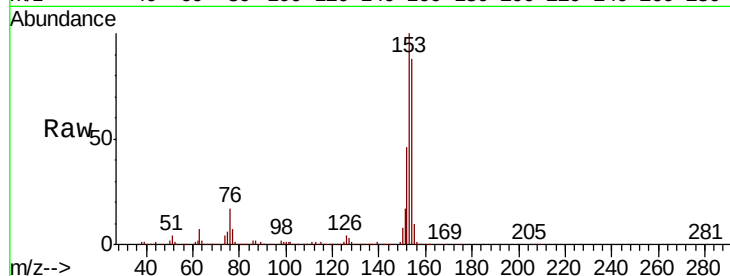
154 88.1 70.7 106.1

Manual Integrations

APPROVED

mohammad

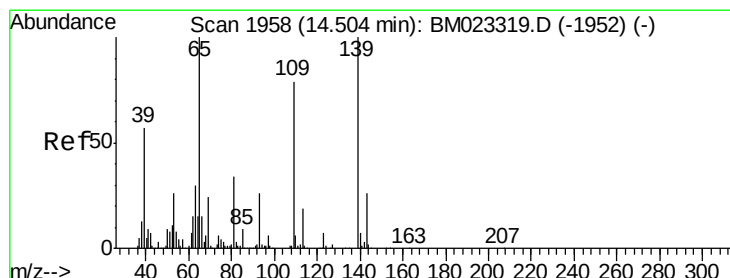
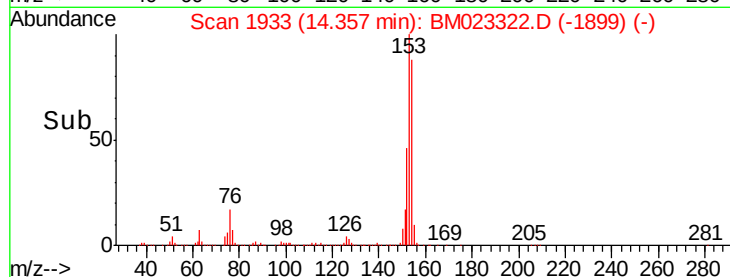
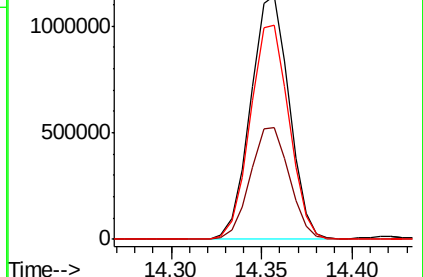
10/24/2019 8:08:35 AM



Abundance Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E

Ion 154.00 (153.70 to 154.70): E



#53

4-Nitrophenol

Concen: 23.184 ng/ul

RT: 14.50 min Scan# 1958

Delta R.T. -0.00 min

Lab File: BM023322.D

Acq: 22 Oct 2019 17:09

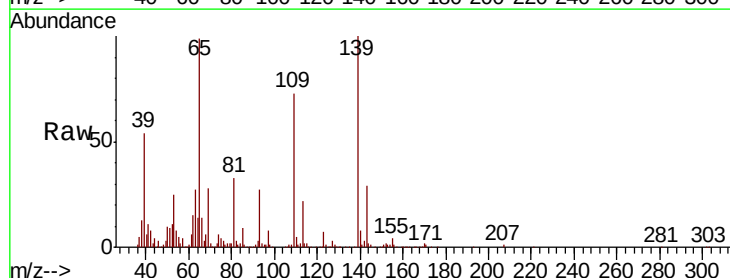
Tgt Ion:109 Resp: 217674

Ion Ratio Lower Upper

109 100

139 137.2 101.5 152.3

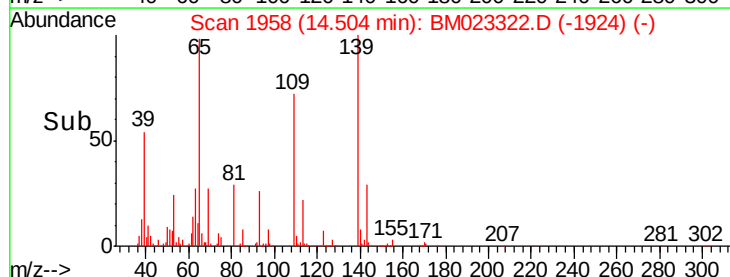
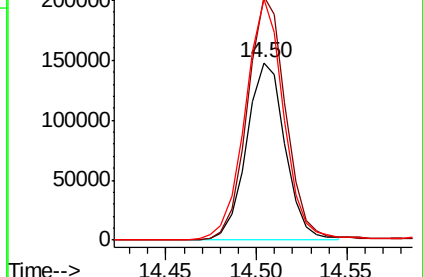
65 135.6 102.5 153.7

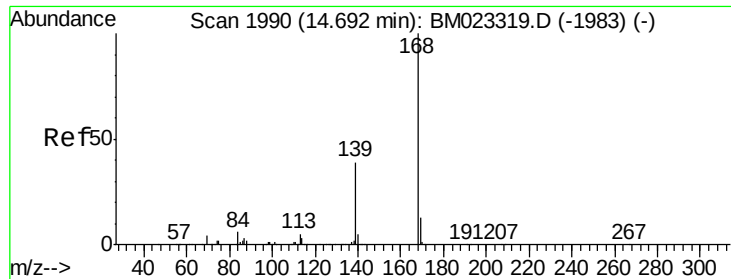


Abundance Ion 109.00 (108.70 to 109.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 65.00 (64.70 to 65.70): E





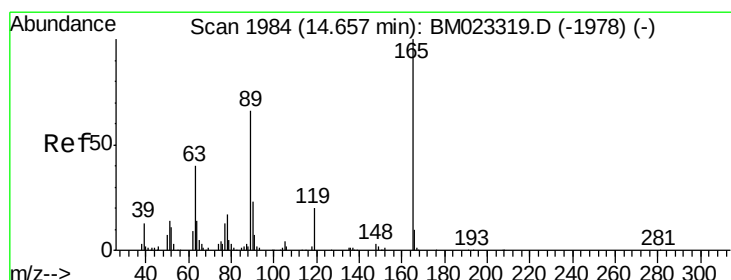
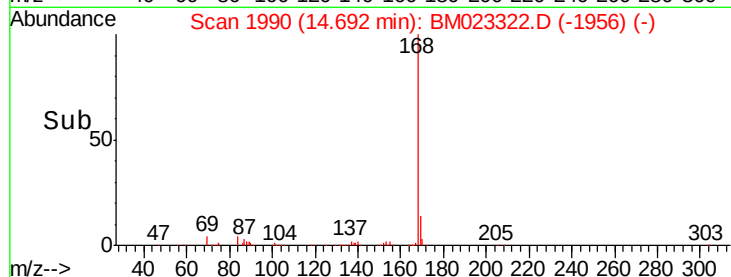
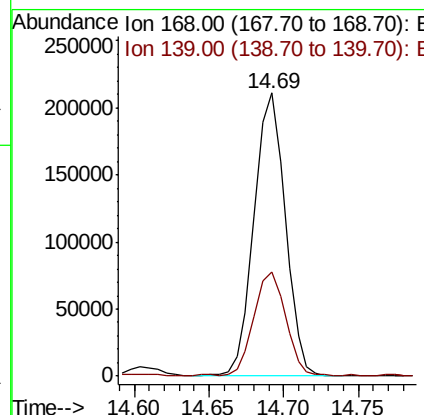
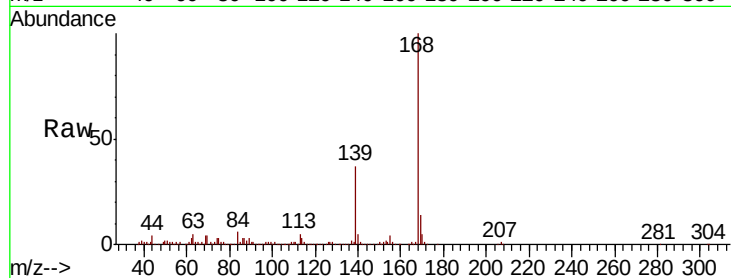
#54
Dibenzofuran
Concen: 4.025 ng/ul
RT: 14.69 min Scan# 1990
Delta R.T. -0.00 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Instrument :
BNA_M
ClientSampleId :
ETOJ6MS

Tot Ion	Ratio	Lower	Upper
168	100		
139	36.8	31.0	46.4

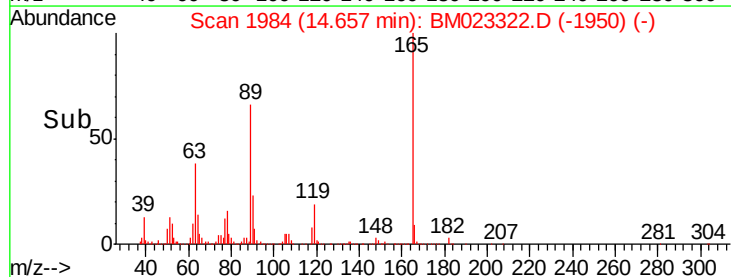
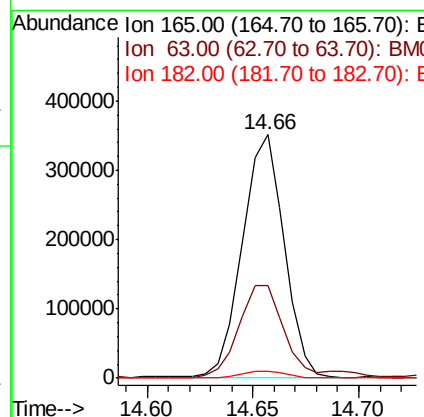
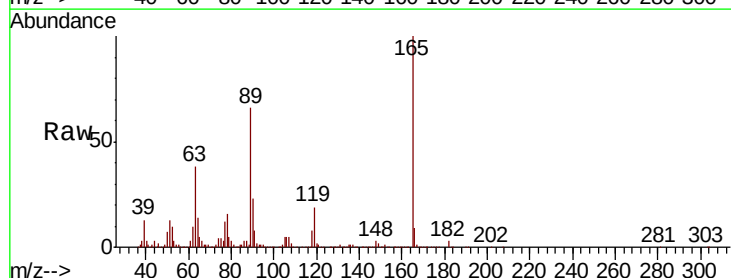
Manual Integrations
APPROVED

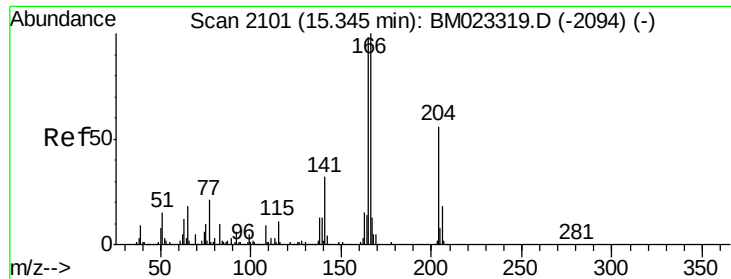
mohammad
10/24/2019 8:08:35 AM



#55
2,4-Dinitrotoluene
Concen: 32.592 ng/ul
RT: 14.66 min Scan# 1984
Delta R.T. -0.00 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Tgt Ion	Ratio	Lower	Upper
165	100		
63	37.8	32.1	48.1
182	3.0	2.2	3.4





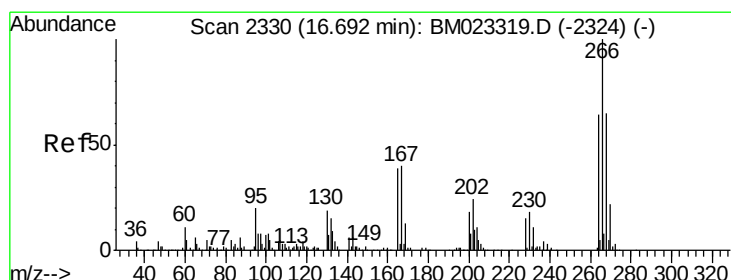
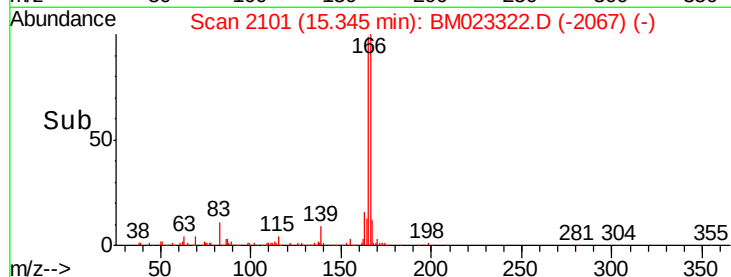
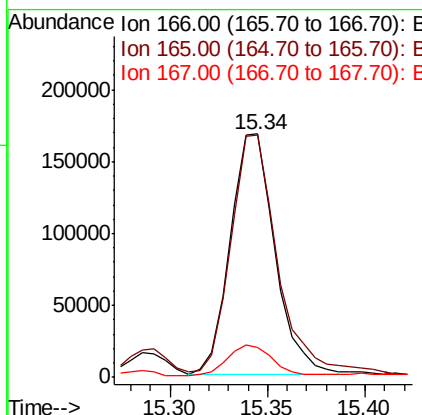
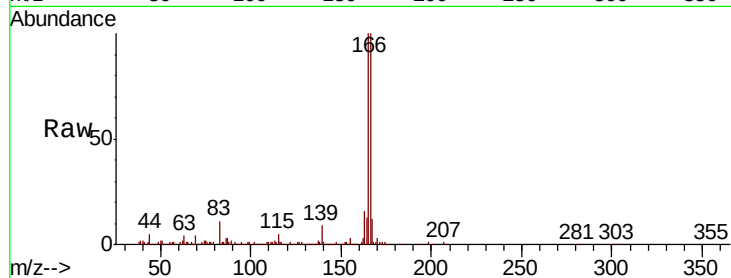
#59
Fluorene
Concen: 4.222 ng/ul
RT: 15.34 min Scan# 2101
Delta R.T. -0.00 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Instrument :
BNA_M
ClientSampleId :
ETOJ6MS

Tot Ion	Ratio	Resp	Lower	Upper
166	100	264396		
165	99.8	78.3	117.5	
167	12.5	10.7	16.1	

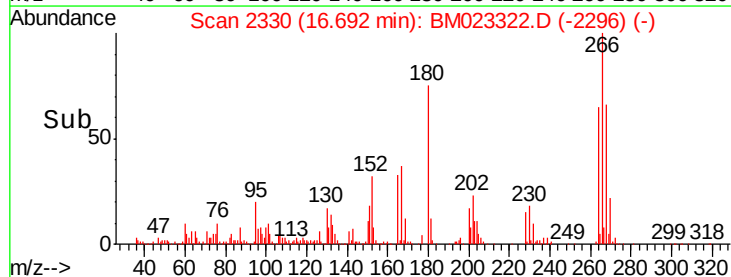
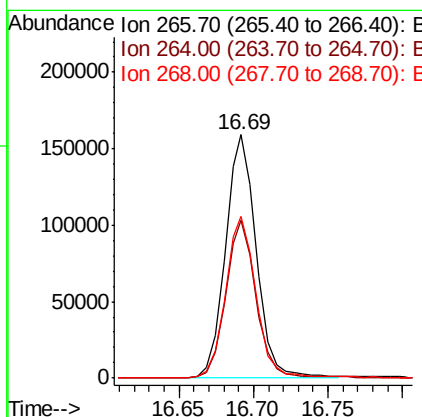
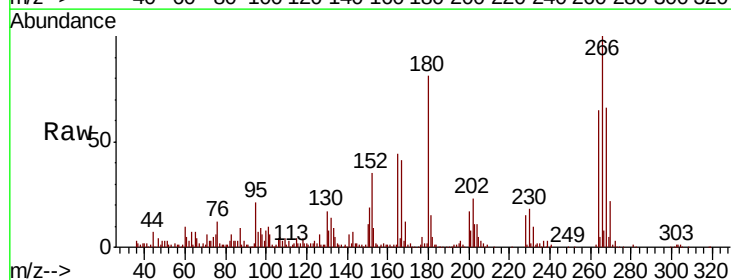
Manual Integrations
APPROVED

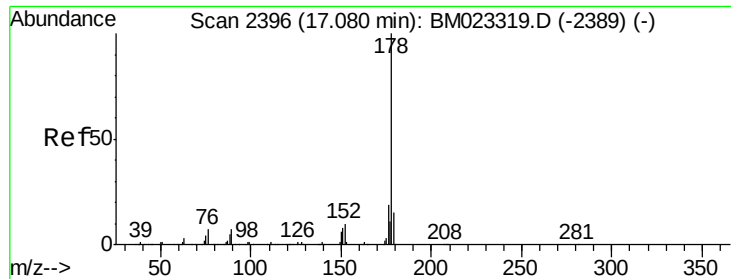
mohammad
10/24/2019 8:08:35 AM



#69
Pentachlorophenol
Concen: 16.538 ng/ul
RT: 16.69 min Scan# 2330
Delta R.T. -0.00 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Tgt Ion	Ratio	Resp	Lower	Upper
266	100	230592		
264	64.9	51.0	76.4	
268	66.2	52.2	78.2	





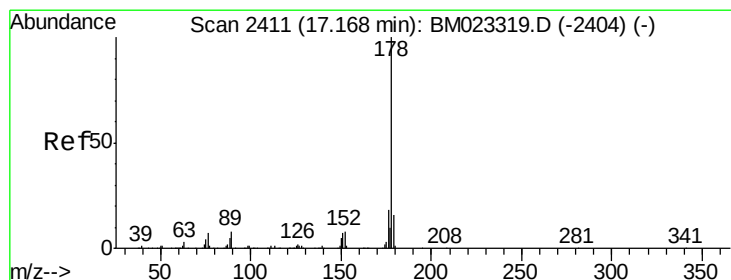
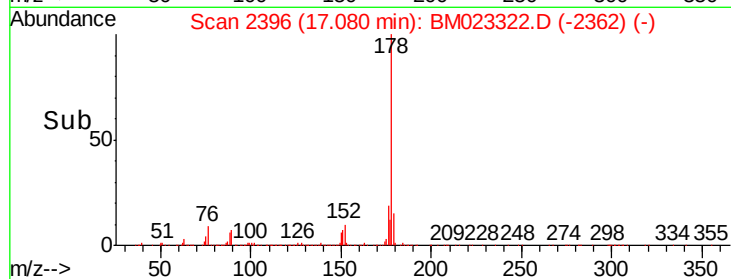
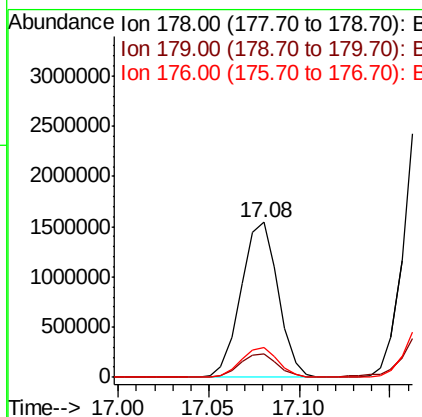
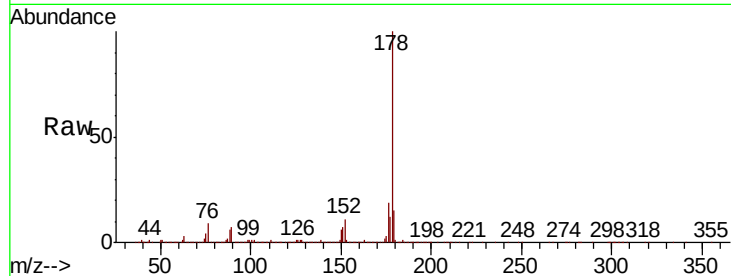
#70
Phenanthrene
Concen: 21.434 ng/ul
RT: 17.08 min Scan# 2396
Delta R.T. -0.00 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Instrument :
BNA_M
ClientSampleId :
ETOJ6MS

Tot Ion:178 Resp: 2186966
Ion Ratio Lower Upper
178 100
179 15.1 11.7 17.5
176 19.1 15.0 22.4

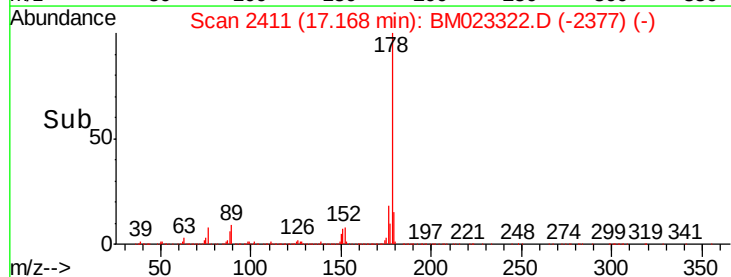
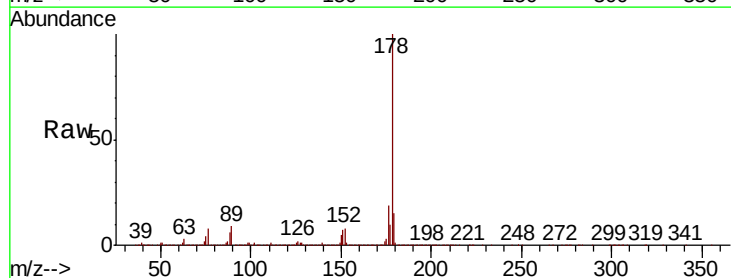
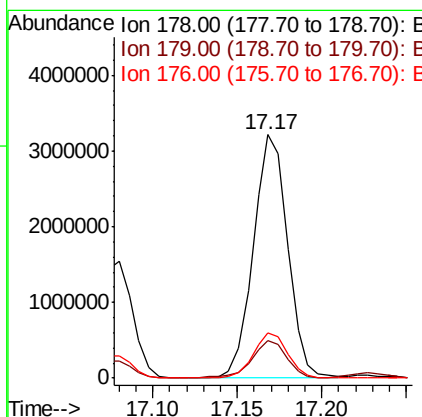
Manual Integrations
APPROVED

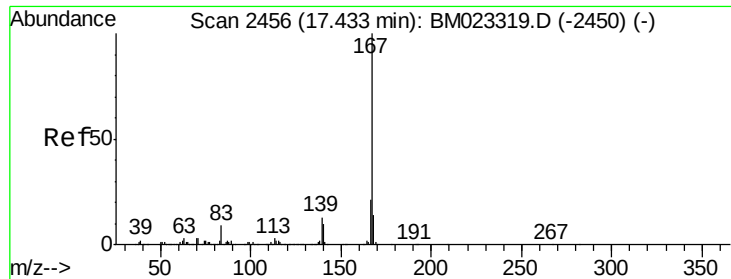
mohammad
10/24/2019 8:08:35 AM



#72
Anthracene
Concen: 43.067 ng/ul
RT: 17.17 min Scan# 2411
Delta R.T. -0.00 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Tgt Ion:178 Resp: 4540829
Ion Ratio Lower Upper
178 100
179 15.5 12.5 18.7
176 18.5 14.8 22.2





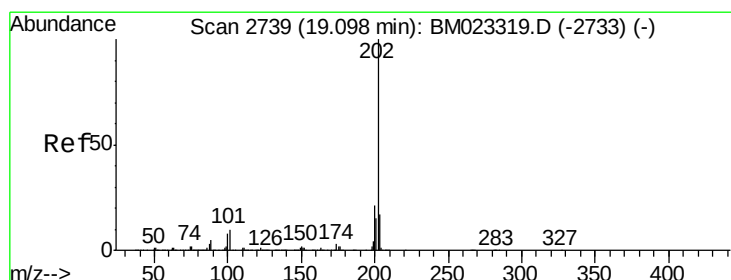
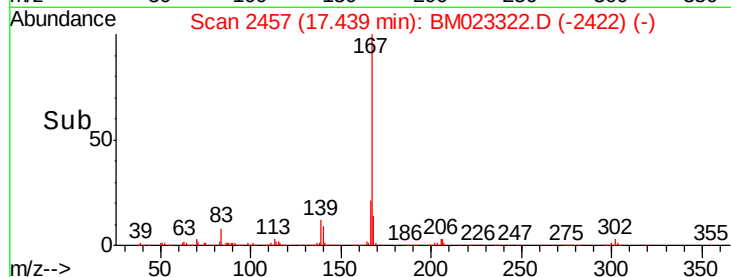
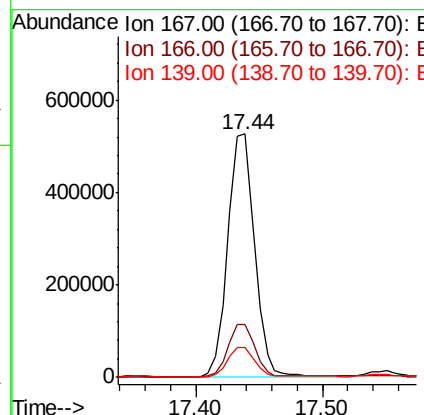
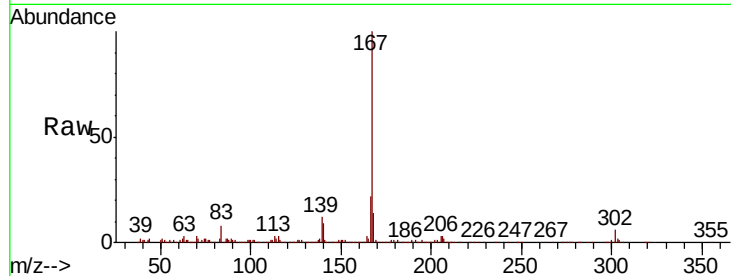
#75
 Carbazole
 Concen: 8.146 ng/ul
 RT: 17.44 min Scan# 2457
 Delta R.T. 0.01 min
 Lab File: BM023322.D
 Acq: 22 Oct 2019 17:09

Instrument :
 BNA_M
 ClientSampleId :
 ETOJ6MS

Tot Ion	Ratio	Lower	Upper
167	100		
166	21.5	17.0	25.6
139	12.2	10.5	15.7

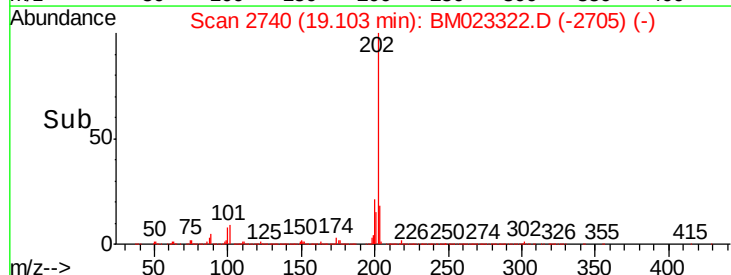
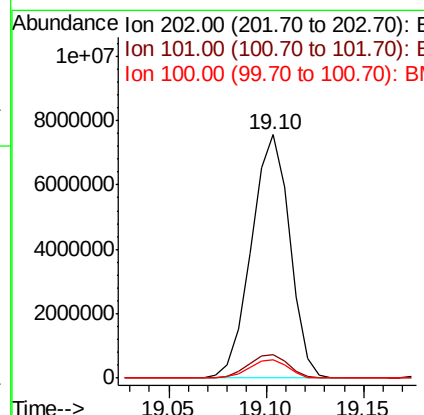
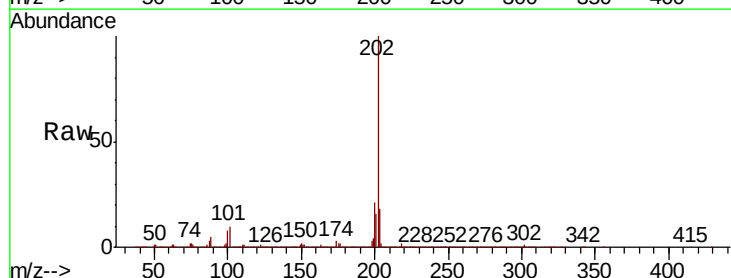
Manual Integrations
 APPROVED

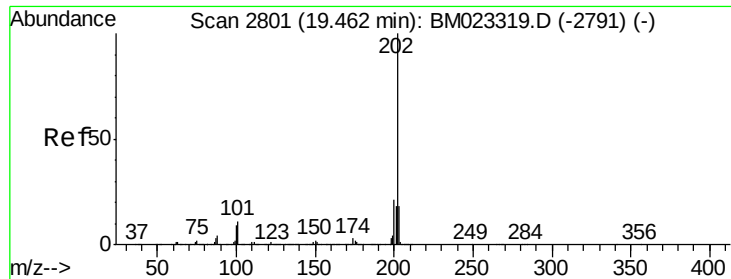
mohammad
 10/24/2019 8:08:35 AM



#77
 Fluoranthene
 Concen: 84.527 ng/ul
 RT: 19.10 min Scan# 2740
 Delta R.T. 0.01 min
 Lab File: BM023322.D
 Acq: 22 Oct 2019 17:09

Tgt Ion	Ratio	Lower	Upper
202	100		
101	9.6	8.2	12.4
100	7.6	6.1	9.1





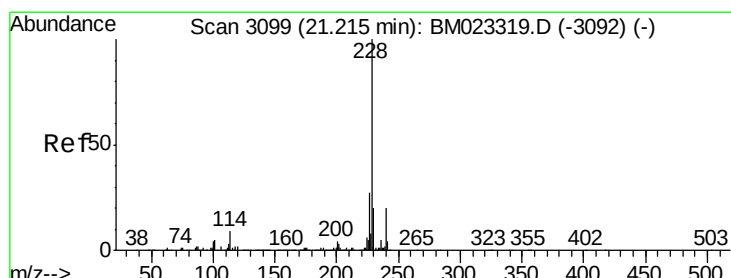
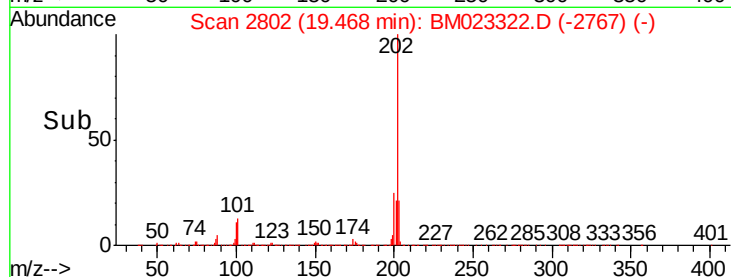
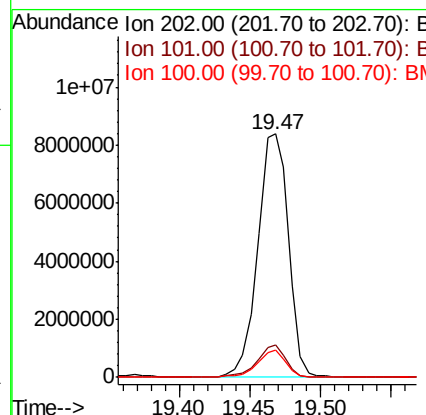
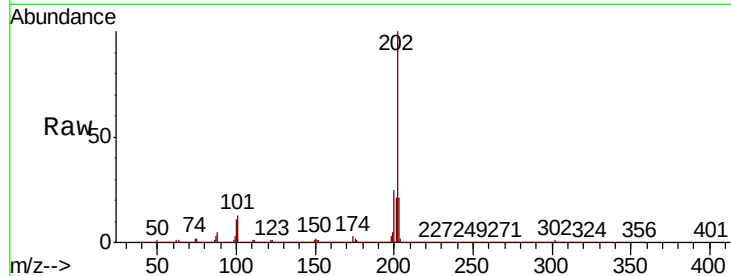
#80
Pvrene
Concen: 108.339 ng/ul
RT: 19.47 min Scan# 2802
Delta R.T. 0.01 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Instrument :
BNA_M
ClientSampleId :
ETOJ6MS

Tot Ion	Ratio	Lower	Upper
202	100		
101	13.2	9.0	13.6
100	11.1	7.5	11.3

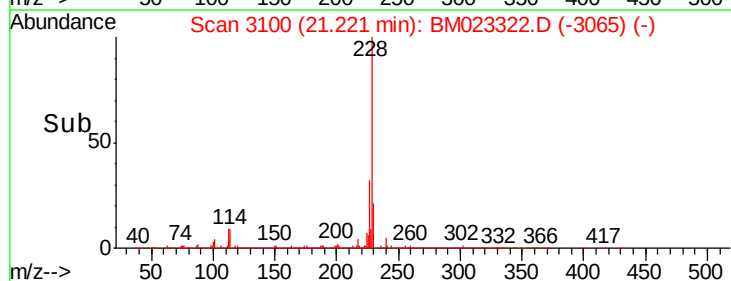
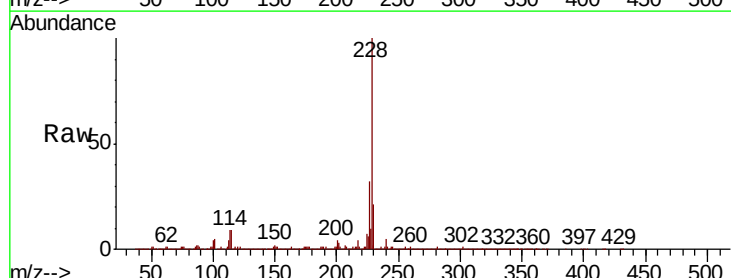
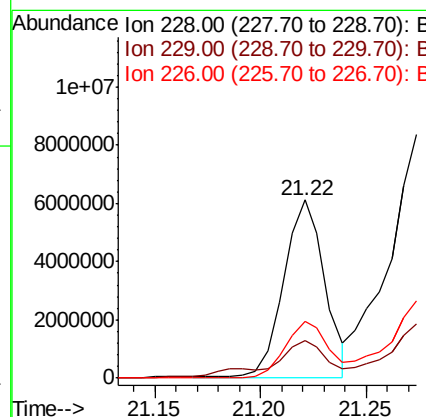
Manual Integrations
APPROVED

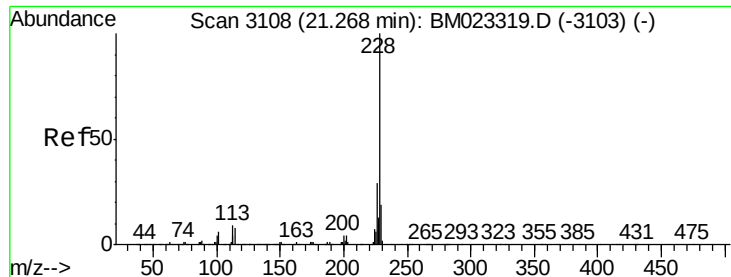
mohammad
10/24/2019 8:08:35 AM



#83
Benzo(a)anthracene
Concen: 65.006 ng/ul
RT: 21.22 min Scan# 3100
Delta R.T. 0.01 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Tgt Ion	Ratio	Lower	Upper
228	100		
229	21.2	15.8	23.8
226	31.9	21.5	32.3





#85

Chrysene

Concen: 105.268 ng/ul

RT: 21.27 min Scan# 3109

Delta R.T. 0.01 min

Lab File: BM023322.D

Acq: 22 Oct 2019 17:09

Instrument :

BNA_M

ClientSampled :

ETOJ6MS

Tot Ion:228 Resp:12490687

Ion Ratio Lower Upper

228 100

226 31.7 23.4 35.0

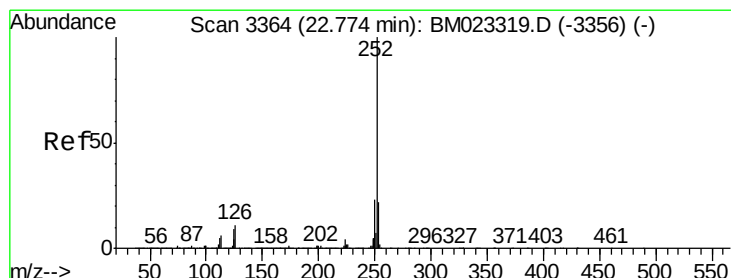
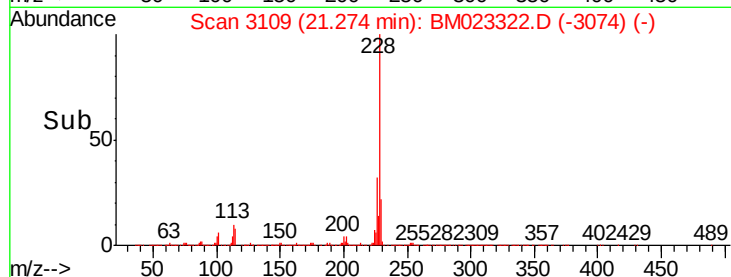
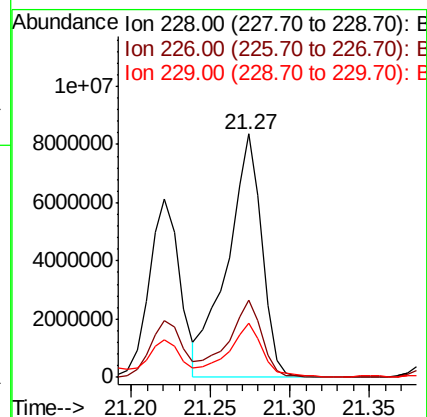
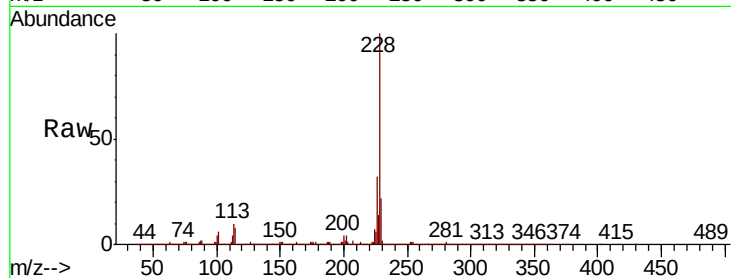
229 22.2 15.5 23.3

Manual Integrations

APPROVED

mohammad

10/24/2019 8:08:35 AM



#88

Benzo(b)fluoranthene

Concen: 144.149 ng/ul

RT: 22.80 min Scan# 3368

Delta R.T. 0.02 min

Lab File: BM023322.D

Acq: 22 Oct 2019 17:09

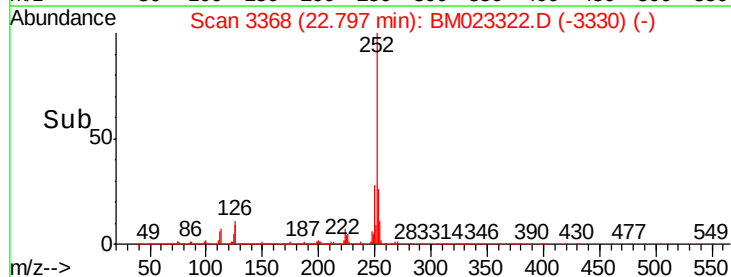
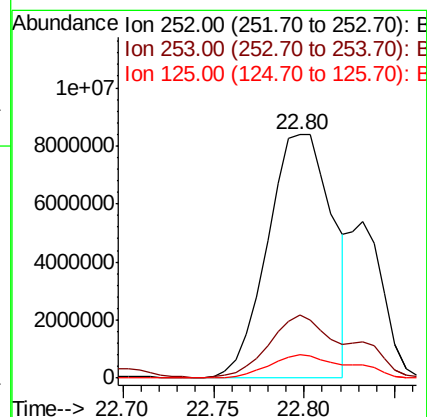
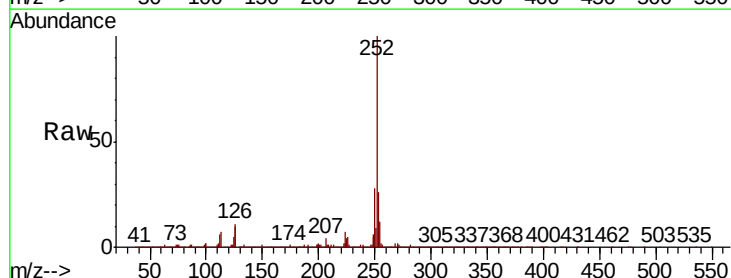
Tgt Ion:252 Resp:20855492

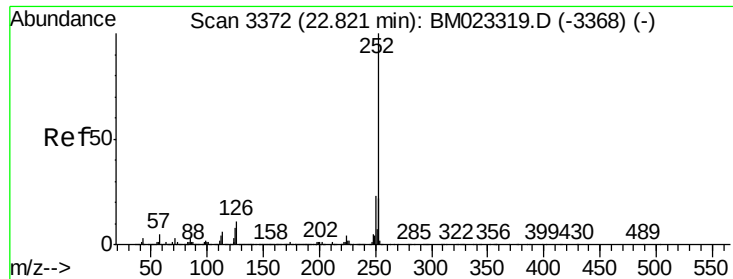
Ion Ratio Lower Upper

252 100

253 25.9 17.3 25.9

125 9.5 7.0 10.4





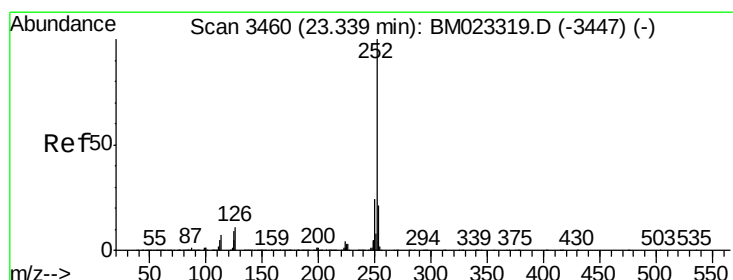
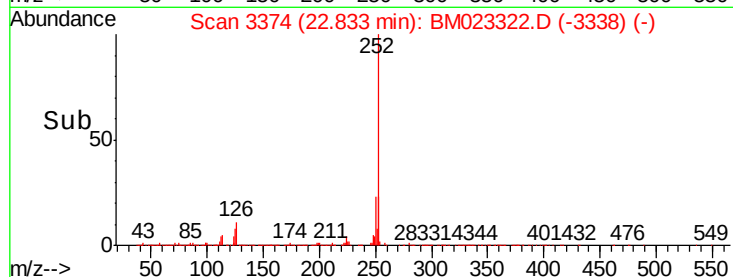
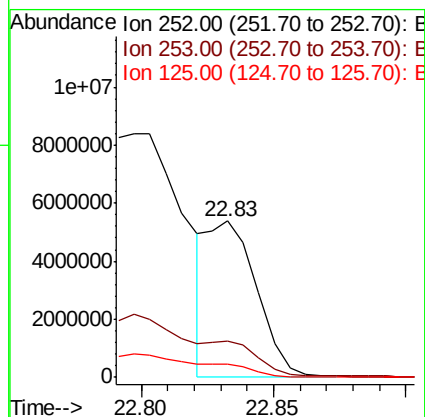
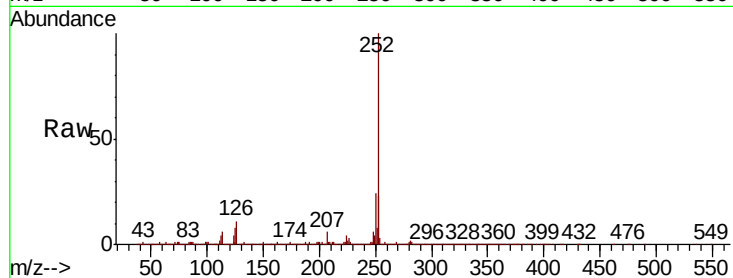
#89
Benzo(k)fluoranthene
Concen: 49.989 ng/ul m
RT: 22.83 min Scan# 3374
Delta R.T. 0.01 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Instrument :
BNA_M
ClientSampleId :
ETOJ6MS

Tot Ion:252 Resp: 6944602
Ion Ratio Lower Upper
252 100
253 23.5 17.5 26.3
125 8.2 6.6 9.8

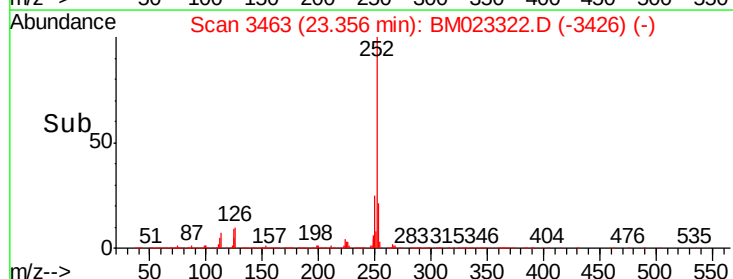
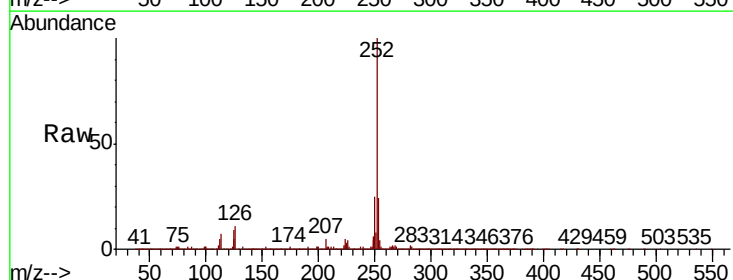
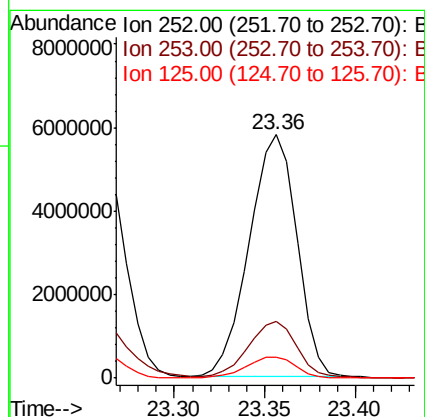
Manual Integrations
APPROVED

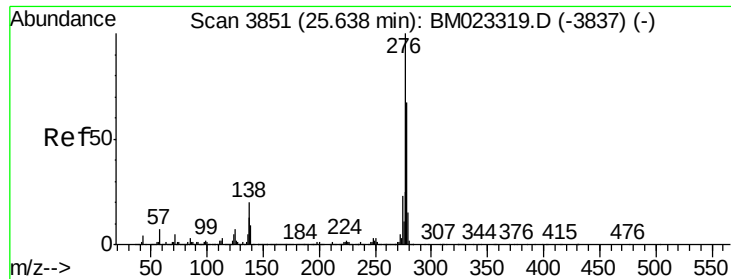
mohammad
10/24/2019 8:08:35 AM



#91
Benzo(a)pyrene
Concen: 75.977 ng/ul
RT: 23.36 min Scan# 3463
Delta R.T. 0.02 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Tgt Ion:252 Resp:10546160
Ion Ratio Lower Upper
252 100
253 23.5 17.0 25.6
125 8.8 7.1 10.7





#92

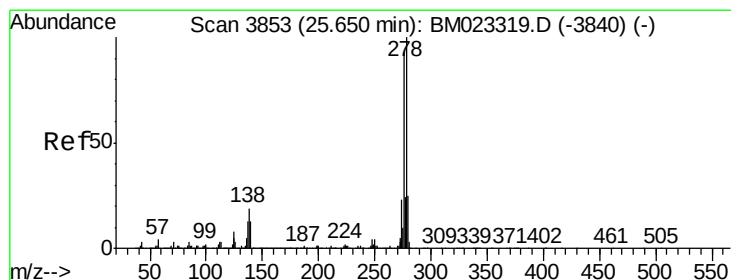
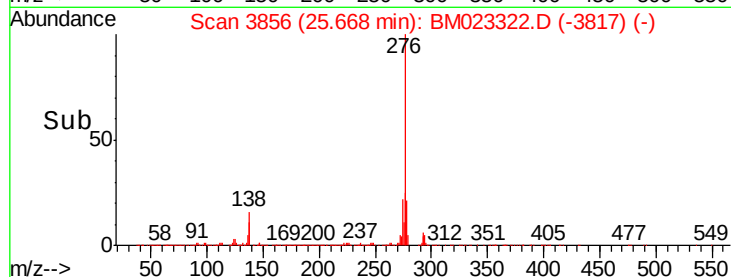
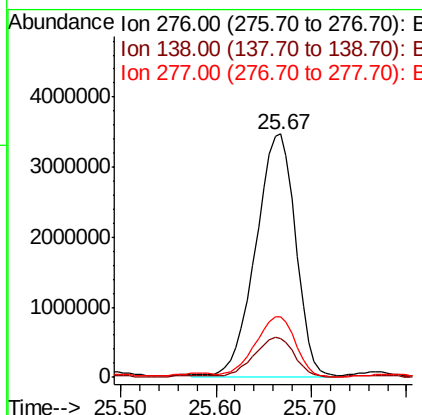
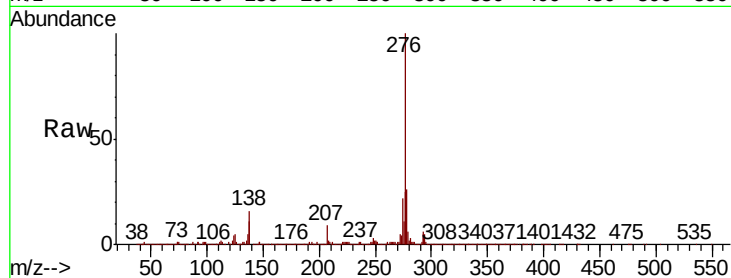
Indeno(1,2,3-cd)pyrene
Concen: 61.549 ng/ul m
RT: 25.67 min Scan# 3856
Delta R.T. 0.03 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Instrument :
BNA_M
ClientSampleId :
ETOJ6MS

Tot Ion:276 Resp:10163544
Ion Ratio Lower Upper
276 100
138 16.1 15.8 23.6
277 24.9 19.8 29.8

Manual Integrations
APPROVED

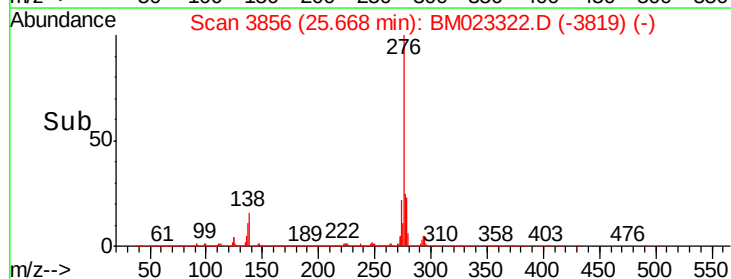
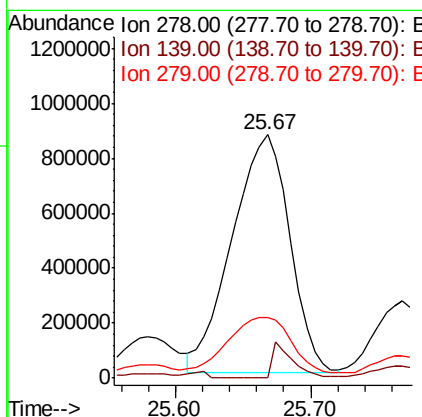
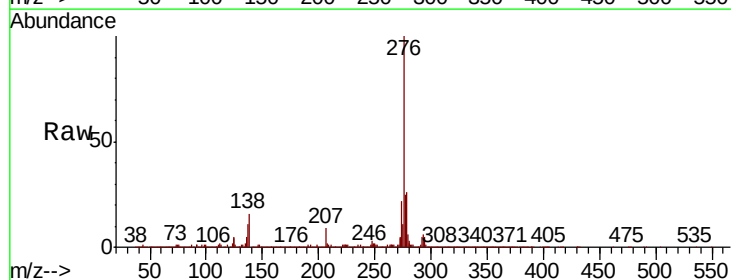
mohammad
10/24/2019 8:08:35 AM

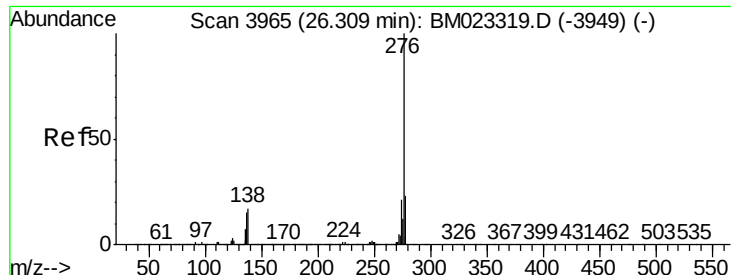


#93

Dibenzo(a,h)anthracene
Concen: 18.554 ng/ul m
RT: 25.67 min Scan# 3856
Delta R.T. 0.02 min
Lab File: BM023322.D
Acq: 22 Oct 2019 17:09

Tgt Ion:278 Resp: 2561732
Ion Ratio Lower Upper
278 100
139 0.0 10.5 15.7#
279 25.0 19.7 29.5





#94

Benzo(a,h,i)perylene

Concen: 68.701 ng/ul m

RT: 26.34 min Scan# 3971

Delta R.T. 0.04 min

Lab File: BM023322.D

Acq: 22 Oct 2019 17:09

Instrument :

BNA_M

ClientSampleId :

ETOJ6MS

Tot Ion: 276 Resp: 9340509

Ion Ratio Lower Upper

276 100

138 16.9 13.9 20.9

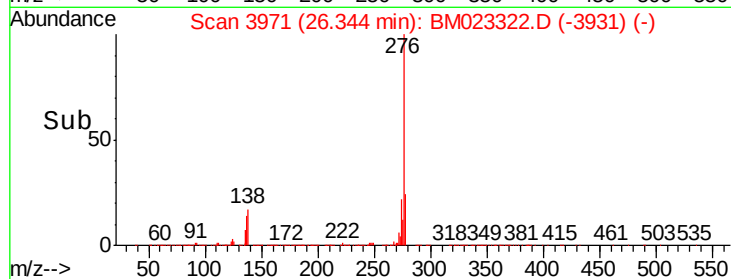
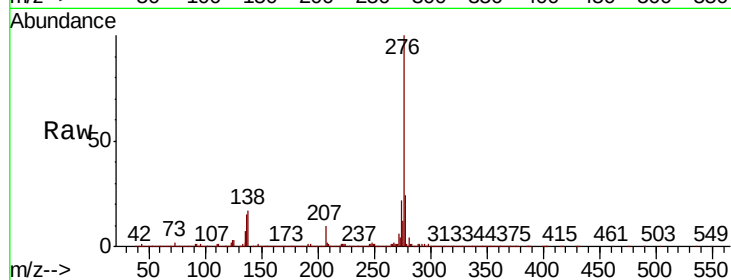
277 24.3 18.7 28.1

Manual Integrations

APPROVED

mohammad

10/24/2019 8:08:35 AM



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

